



LATROBE CITY COUNCIL

MINUTES FOR THE ORDINARY COUNCIL

HELD IN NAMBUR WARIGA MEETING ROOM
CORPORATE HEADQUARTERS, MORWELL
AT 5.30PM ON
03 MARCH 2014

CM431

PRESENT:

Councillors:	Cr Sharon Gibson, Mayor	West Ward
	Cr Dale Harriman, Deputy Mayor	East Ward
	Cr Peter Gibbons	West Ward
	Cr Sandy Kam	East Ward
	Cr Graeme Middlemiss	Central Ward
	Cr Kellie O'Callaghan	East Ward
	Cr Michael Rossiter	East Ward
	Cr Darrell White	South Ward
Officers:	John Mitchell	Acting Chief Executive Officer
	David Elder	Acting General Manager Community Liveability
	Chris Wightman	Acting General Manager Governance
	Allison Jones	General Manager Economic Sustainability
	Grantley Switzer	General Manager Recreation, Culture & Community Infrastructure
	Tom McQualter	Manager Council Operations & Legal Counsel

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1. **OPENING PRAYER**
2. **ACKNOWLEDGEMENT OF THE TRADITIONAL OWNERS OF THE LAND**
3. **APOLOGIES AND LEAVE OF ABSENCE**

Cr Christine Sindt

4. **DECLARATION OF CONFLICT OF INTEREST**
5. **ADOPTION OF MINUTES**

RECOMMENDATION

That the minutes of the Ordinary Council Meeting held on 17 February 2014 be confirmed.

Moved: Cr Harriman
Seconded: Cr White

That the Recommendation be adopted.

CARRIED UNANIMOUSLY

6. **PUBLIC QUESTION TIME**

Suspension Of Standing Orders

Moved: Cr White
Seconded: Cr Middlemiss

That Standing Orders be suspended to allow members of the gallery to address Council in support of their submissions.

CARRIED UNANIMOUSLY

Standing Orders were suspended at 5.34 PM.

Mr Gino Tripodi addressed Council in relation to Item 9.2 - Proposed Public Highway Declaration - Deakin Lane, Traralgon.

Ms Peta Hoppe addressed Council in relation to Item 9.4 - Amendment To A Planning Permit Application 2013/206/A - Two Lot Subdivision At 64-70 Traralgon Maffra Road, Glengarry.

Mr Brad Griffin addressed Council in relation to Item 14.1 - Moe Tennis Courts Needs Assessment

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Mr Bob Browne addressed Council in relation to Item 14.2 - State Government Recreation Funding Opportunities 2014/15.

Mr Jason O'Hara addressed Council in relation to Item 16.2 - Planning Permit Application 2013/182 - Use And Development Of Land For A Dwelling And Ancillary Outbuilding And Two Lot Subdivision, Speargrass Road, Yinnar South.

Mr Graeme O'Hara addressed Council in relation to Item 16.2 - Planning Permit Application 2013/182 - Use And Development Of Land For A Dwelling And Ancillary Outbuilding And Two Lot Subdivision, Speargrass Road, Yinnar South.

Dr Bob. Brownly addressed Council in relation to Item 16.4 - Planning Permit Application 2013/172 - 10 Lot Staged Subdivision At 24 Coopers Road Traralgon.

Moved: Cr Rossiter

Seconded: Cr Kam

That Standing Orders be resumed.

CARRIED UNANIMOUSLY

Standing Orders were resumed at 6:09 PM.

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7. ITEMS HELD OVER FOR REPORT AND/OR CONSIDERATION

Council Meeting Date	Item	Status	Responsible Officer
19/09/11	Traralgon Activity Centre Plan Key Directions Report	That having considered all submissions received in respect to the Stage 2 Key Directions Report September 2011, Council resolves the following: 1. To defer the endorsement of the Stage 2 Key Directions Report September 2011 until: (a) Council has been presented with the Traralgon Growth Area Review (b) Council has received information on the results of the Latrobe Valley Bus Review 2. That Council writes to the State Government asking them what their commitment to Latrobe City in respect to providing an efficient public transport system and that the response be tabled at a Council Meeting. 3. That Council proceeds with the Parking Precinct Plan and investigate integrated public parking solutions. 4. That the Communication Strategy be amended to take into consideration that the November/December timelines are inappropriate to concerned stakeholders and that the revised Communication Strategy be presented to Council for approval. 5. That in recognition of community concern regarding car parking in Traralgon the Chief Executive Officer establish a Traralgon Parking Precinct Plan Working Party comprising key stakeholders and to be chaired by the Dunbar Ward Councillor. Activities of the Traralgon Parking Precinct Plan Working Party to be informed by the Communication Strategy for the Traralgon Activity Centre Plan Stage 2 Final Reports (Attachment 3).	General Manager Planning and Governance
5/12/11	Investigation into Mechanisms Restricting the sale of Hubert Osborne Park Traralgon	That a draft policy be prepared relating to Hubert Osborne Park and be presented to Council for consideration.	General Manager Planning and Governance
19/12/11	Traralgon Greyhound Racing Club – Proposed Development and Request for Alterations to Lease	That a further report be presented to Council following negotiations with the Latrobe Valley Racing Club, Robert Lont and the Traralgon Greyhound Club seeking Council approval to the new lease arrangements at Glenview Park.	General Manager Planning and Governance

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Council Meeting Date	Item	Status	Responsible Officer
3/12/12	Public Highway Declaration – Verey Lane, Morwell	<ol style="list-style-type: none"> 1. That Council write to Jammatt Pty Ltd and Nestlan Pty Ltd requesting that they remove all obstructions from the road reserve contained in Certificate of Title Volume 9732 Folio 422, being part of Verey Lane, Morwell, pursuant to Schedule 11, Clause 5 of the <i>Local Government Act 1989</i>. 2. That Council approach Jammatt Pty Ltd and Nestlan Pty Ltd regarding the possible transfer of the road reserve contained in Certificate of Title Volume 9732 Folio 422, being the road created on LP 33695, being part of Verey Lane, Morwell. 3. That Council obtain an independent valuation of the road reserve contained in Certificate of Title Volume 9732 Folio 422, being the road created on LP 33695, owned by Jammatt Pty Ltd and Nestlan Pty Ltd as a basis for negotiations. 4. That Council seek agreement from the owners of the properties at 24-28 Buckley Street, Morwell, to contribute towards the costs of acquiring the road reserve contained in Certificate of Title Volume 9732 Folio 422, being the road created on LP 33695, from Jammatt Pty Ltd and Nestlan Pty Ltd. 5. That Council write to Simon Parsons & Co. requesting that the temporary access to 24-28 Buckley Street, Morwell, be extended past 31 December 2012. 6. That a further report be presented to Council detailing the outcomes of discussions with Jammatt Pty Ltd and Nestlan Pty Ltd and the owners of the properties at 24-28 Buckley Street, Morwell. 	General Manager Planning and Governance

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Council Meeting Date	Item	Status	Responsible Officer
3/12/12	Geotechnical Investigation and Detailed Design Remediation Treatments of Landslips	<ol style="list-style-type: none"> 1. That Council resolve that the geotechnical investigations and detailed design for the remediation treatment of landslips meets the requirements of Section 186 of the <i>Local Government Act 1989</i> and that the contract must be entered into because of an emergency. 2. That Council resolves to enter into a schedule of rates contract with GHD Pty Ltd for the geotechnical investigations and detailed design for the remediation treatment of landslips due to it being an emergency. 3. That a report be presented to a future Council meeting at the completion of the geotechnical investigations and detailed design for the remediation treatment of landslips outlining the actual costs incurred. 4. That Council authorise the Chief Executive Officer to advise those residents impacted by landslips of Council's process and timelines for remediating landslips throughout the municipality. 	General Manager Recreation, and Community Infrastructure
18/02/13	Affordable Housing Project – Our future our place	<ol style="list-style-type: none"> 1. That Council proceeds to publically call for Expressions of Interest as a mechanism to assess the viability and interest in developing an affordable housing project on land known as the Kingsford Reserve in Moe. 2. That a further report be presented to Council for consideration on the outcome of the Expression of Interest process for the development of an affordable housing project on land known as the Kingsford Reserve in Moe. 	General Manager Recreation, and Community Infrastructure
6/05/13	Latrobe City International Relations Advisory Committee - Amended Terms of Reference	That the item be deferred pending further discussion by Councillors relating to the Terms of Reference.	General Manager Economic Sustainability
6/05/13	Latrobe City International Relations Advisory Committee - Motion Re: Monash University	That the item be deferred until after the amended Terms of Reference for the Latrobe City International Relations Advisory Committee have been considered by Council.	General Manager Economic Sustainability

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Council Meeting Date	Item	Status	Responsible Officer
6/05/13	Former Moe Early Learning Centre	<ol style="list-style-type: none"> 1. That a community engagement process be undertaken to inform a potential Expression of Interest for funding from the State Government's <i>Putting Locals First Program</i> to redevelop the former Moe Early Learning Centre as a centre for community organisations, addressing the stated funding criteria. 2. That subject to the community engagement process identifying a community need meeting the funding criteria, that an Expression of Interest for funding from the State Governments Putting Locals First Program be prepared and submitted. 3. That a further report be presented to Council for consideration outlining the draft design of the former Moe Early Learning Centre based on feedback received during the community engagement process. 	General Manager Community Liveability
01/07/13	Traffic Investigation At Finlayson Crescent Traralgon	<ol style="list-style-type: none"> 1. That Council install temporary traffic calming devices in Finlayson Crescent, Traralgon for a period of six months. 2. That a review of traffic flow during this six month period in Finlayson Crescent and adjoining cross streets be undertaken and reported back to Council. 3. That a final determination be made by Council on review of these figures. 4. That Council write to the head petitioner and all other residents who were invited to express their views informing them of Council's decision. 	General Manager Recreation and Community Infrastructure
16/09/13	2013/20 - Notice Of Motion - Adam View Court, Tanjil South	That a report be provided to Council on options available for the mitigation of flooding at 25 Adam View Court, Tanjil South.	General Manager Recreation and Community Infrastructure

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Council Meeting Date	Item	Status	Responsible Officer
16/09/13	14.3 Hazelwood Pondage Waterway And Caravan Park Lease	<p>1. That Council authorise the Chief Executive Officer to commence negotiations with IPH GDF Suez for the lease of the caravan park, southern boat ramp and surrounds, northern boat ramp and surrounds and management of the waterway for recreational purposes, ensuring the following principals are addressed:</p> <ul style="list-style-type: none"> •GDF SUEZ to retain full accountability for Blue Green Algae and water quality testing; •GDF SUEZ to remain fully accountable for the pondage integrity; •Fair and equitable termination clauses should the power station close earlier than 2025; •Clarify risk, release and indemnity conditions; •Liquidated damages; •Clarify the end of lease conditions; •Clarify the early termination conditions <p>2. That a further report be presented to Council following negotiations with IPH GDF SUEZ seeking Council approval of the new lease arrangements at Hazelwood Pondage.</p> <p>3. That Council write to the Minister for Regional & Rural Development and advise of Council's resolution to commence negotiations with IPH GDF SUEZ .</p>	General Manager Recreation and Community Infrastructure
6/11/13	Latrobe Regional Motorsport Complex	<p>1. That Council requests the members of the Latrobe Regional Motorsports Complex Advisory Committee to investigate potential sites for the motorsports complex and to advise Council of any sites identified so that further investigation can be undertaken by Council officers.</p> <p>2. That Council officers meet with Energy Australia to discuss other possible sites for a motorsports complex on their land.</p> <p>3. That a further report be presented to Council at such time that site options have been investigated.</p>	General Manager Recreation and Community Infrastructure
18/11/13	2013/26 – Notice Of Motion Car Parking At Traralgon, Morwell And Moe Train Stations	<p>1. That the Mayor write to the appropriate authorities and request an update, which includes timelines, on when improved car parking will be provided at the Traralgon, Morwell and Moe train stations</p> <p>2. That the response be tabled at an Ordinary Council meeting</p>	General Manger Planning and Governance

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Council Meeting Date	Item	Status	Responsible Officer
2/12/13	Presentation Of Petition For The Proposed Removal Of 15 Corymbia Maculata Spotted Gum Street Trees Growing In Nature Strips In Fowler Street, Moe	<ol style="list-style-type: none"> 1. That Council lay the petition requesting the removal of gum trees in Fowler Street, Moe on the table. 2. That Council initiate a consultation process with all residents of Fowler Street, Moe and the broader local community to determine public opinion in relation to the proposed removal of the gum trees. 3. That a further report be presented to Council detailing the results of the community consultation. 	General Manager Recreation and Community Infrastructure

NOTICES OF MOTION

8. NOTICES OF MOTION

Nil reports

ITEMS REFERRED BY THE COUNCIL TO THIS MEETING FOR CONSIDERATION

9. ITEMS REFERRED BY THE COUNCIL TO THIS MEETING FOR CONSIDERATION

9.1 WOOD AND FOREST PRODUCT BENEFITS AND OPPORTUNITIES

General Manager

Economic Sustainability

For Decision

PURPOSE

The purpose of this report is to present an assessment of the value of the Wood and Forest Products industry sector to Latrobe City and to provide for the consideration of Council, an overview of opportunities and benefits presented by this sector.

DECLARATION OF INTEREST

No officer declared an interest under the *Local Government Act 1989* in the preparation of this report.

STRATEGIC FRAMEWORK

This report is consistent with Latrobe 2026: The Community Vision for Latrobe Valley and the Latrobe City Council Plan 2013-2017.

Latrobe 2026: The Community Vision for Latrobe Valley

Strategic Objectives - Economy

In 2026, Latrobe Valley has a strong and diverse economy built on innovation and sustainable enterprise. The vibrant business centre of Gippsland contributes to the regional and broader communities, whilst providing opportunities and prosperity for our local community.

Latrobe City Council Plan 2013 - 2017

Theme and Objectives

Theme 1: Job creation and economic sustainability

Objectives:

- *Actively pursue long term economic prosperity for Latrobe City, one of Victoria's four major cities.*
- *Actively pursue further diversification of business and industry in the municipality.*
- *Actively pursue and support long term job security and the creation of new employment opportunities in Latrobe City.*

Strategic Direction – Job Creation and Economic Sustainability

- *Provide incentives and work proactively to attract new businesses and industry to locate in Latrobe City.*
- *Assist existing small and medium enterprises to expand and sustain employment opportunities.*
- *Work in partnership with business, industry and government to create new jobs and investment in Latrobe City.*
- *Enhance community and business confidence in the future of the local economy.*

Strategy & Plans –

Strategy 1- Economic Sustainability Strategy

Strategy 2- Positioning Latrobe City for a Low Carbon Emission Future

BACKGROUND

Council has been proactively supportive of the Wood and Forest Products industry sector over many years as indicated by active membership of both the National Timber Council Victoria and Timbertowns Victoria organisations as well as providing ongoing support for local business within the sector.

At its 3 February 2014 Ordinary Meeting, Council resolved the following:

1. *That Latrobe City Council notes the role of the region's unique and abundant natural resources, particularly plantation timber, which support a productive timber and forestry industry providing softwood, value-added hardwood and paper products sold to domestic and export markets.*
2. *That Council notes the emergence worldwide of the adoption of wood encouragement policies where governments at all levels must consider wood where feasible as the primary building material for all newly constructed, publicly funded buildings within their jurisdiction and that these policies support environmental performance for the buildings as well as the use of responsibly sourced wood.*
3. *That a report be provided to Council on or before 3 March 2014 which:*
 - a) *Quantifies the economic contribution of the forestry, wood and paper sector within Latrobe City; and,*
 - b) *Provides an overview of the opportunities and benefits of Council becoming the first local government area in Australia to adopt a Wood Encouragement Policy.*

4. *That Council write to the Australian Minister for Agriculture requesting that the Australian Government work with Latrobe City Council to support the establishment of research facilities in Latrobe City to enable development of innovative technology for the forestry, wood and paper sector.*

ISSUES

Economic Contribution of the Forestry, Wood and Paper Sector

An Economic Impact Assessment has been prepared (Attachment 1) detailing the contribution of the *Forestry, Wood and Paper* sector to the Latrobe City economy.

Key points from the Assessment include:

- The Sector is the fourth largest contributor to Latrobe City's economic output (9.98% of total output).
- The industry is estimated to generate \$8.6 billion each year to the local economy;
- There is estimated to be currently 1,325 full time direct jobs within the local industry; and
- For every 100 direct jobs within the sector, it can be expected that a further 102 flow-on jobs are generated within the community.

Local employment in the Sector incorporates the following sub-sectors:

- Forestry and Logging;
- Forestry Support Services;
- Sawmill Product Manufacturing;
- Other Wood Product Manufacturing;
- Pulp, Paper and Paperboard Manufacturing;
- Paper Product Manufacturing; and
- Timber Product Wholesaling.

Timber grower and harvester HVP has 80,000 hectares of plantation within the Gippsland region supplying Australia's only manufacturer of fine office paper, Australian Paper and structural timber framing manufacturer Carter Holt Harvey, both located within Latrobe City. Latrobe City is home to a range of additional processing companies including the Fisher Group, manufacturers of wooden pallets, crates and boxes.

As a direct outcome of these forestry, wood and paper sector attributes, Latrobe City has recently been selected to host the Australian timber industry's biggest four yearly event, AUSTimber in 2016, 2020 and 2024. The event is expected to attract over 7,500 attendees to Latrobe City in April 2016.

The primary purpose of AUSTimber is to facilitate industry understanding of the technology that is available to improve productivity while providing

suppliers of such technology the opportunity to demonstrate that technology to prospective users and owners.

The event organisers have advised that the selection was based on:

- The abundance of tree growing in the Gippsland region;
- The strength of the timber industry in the general area;
- A reasonable amount of commercially available accommodation in the area;
- Proximity to Melbourne for further accommodation (particularly for international visitors);
- A regular and reliable passenger train service from Melbourne; and
- Active and engaged support from Latrobe City Council.

Overview of the Opportunities and Benefits of Council becoming the first Local Government Area in Australia to Adopt a Wood Encouragement Policy.

Context

Policies that encourage the choice of wood in building construction can be found in a range of countries across the world including Canada, Japan, France, Finland, Netherlands and United Kingdom. There is to date, no identified Wood Encouragement Policy in operation in Australia.

While specifics differ across the identified policies, all aim to increase the use of wood as a key material in the construction of primarily public and commercial building projects.

The potential benefits of increased use of wood as a construction material are presented as:

- Removal of carbon from the atmosphere and reduction of new carbon emissions which would be generated by the manufacture of alternative construction material;
- Storage of carbon within the timber for the life of the building;
- Incorporating the product's natural insulation properties within the building;
- The potential for faster, more efficient and potentially cheaper construction than using alternative material;
- Aesthetic results; and
- The opportunity to retain and grow local jobs.

Indicative benefits and opportunities for Latrobe City

In common with other policies in place in other countries, it can be expected that a future Latrobe City Wood Encouragement Policy would be limited to public building activity within the City. Importantly, the policy can be expected to be limited to including wood in the consideration of the core manufacturing material.

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In addition to the potential benefits listed above, a number of indicative benefits and opportunities for the Latrobe City community have been identified as follows.

Leaders in Australia

Latrobe City supplies over 90% of Victoria's electricity generation requirements. The low cost electricity generated in the Latrobe Valley from brown coal resources has contributed to Victoria's economic prosperity over the last 90 years.

This role as major electricity producer also results in negative external perceptions as a significant producer of carbon emissions. The benefits and opportunities of being a leading municipality in addressing the carbon emission challenge may offer potential to reduce our municipality "carbon footprint" as well as help address negative external perceptions.

Industry Attraction and Job Creation

The introduction of a Wood Engagement Policy may generate new business investment opportunities. One example could be an increased ability to attract enterprises such as cross-laminated timber and particle board manufacturers to Latrobe City.

The existence of a local source and an increased ability to manufacture timber building material locally, rather than rely on regional imports provides an opportunity to potentially generate sustainable new jobs and support efforts to diversify the economy.

To further develop and maximise this potential, Council has resolved to request support for the establishment of research facilities in Latrobe City to enable development of innovative technology for the forestry, wood and paper sector.

New renewable energy source

Biomass energy is sourced from natural materials like wood and generated into heat or electricity. Its use is recognised as resulting in significantly lower carbon emissions when compared to coal and gas.

While much of existing locally produced wood residue, arising from current wood processing activity is used by local companies such as Australian Paper and Pine-Gro, increased volumes may result in sufficient supply for utilisation for electricity production by our existing companies or a new entrant power generator.

Next Steps

While it is likely to be tangible opportunities and benefits which would result from the introduction of a Wood Encouragement Policy, the matter is complex and potentially involves many stakeholders. Experience from around the world demonstrates that there can be opposition to Wood Encouragement Policies from sectors such as steel and plastic.

To facilitate engagement across all sectors it is proposed that an Industry Round Table be convened by Council to enable a more comprehensive understanding to be developed of the opportunities of adopting a Wood Encouragement Policy. Since the Council resolution of 3 February 2014,

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officers have received a range of emails including from Timber Towns, AusTimber, Australian Forest Products Association and Planet Ark indicating support for Council's decision to investigate this area further.

It is envisaged that an industry roundtable would provide a valuable forum for the sharing of views, ideas and concerns regarding the introduction of a wood encouragement policy within Latrobe City. The forum could gain a valuable insight into the quantum of the opportunity and illuminate any unforeseen issues to be taken into account.

Importantly, an industry round table would provide representatives from the construction sector and existing users of the local resource with an opportunity to share views and concerns regarding the proposal.

It is proposed that invitees to the industry roundtable would include representatives from:

- Wood and forest products businesses operating within Latrobe City and the surrounding region;
- Construction companies and suppliers to the construction industry located within Latrobe City; and
- Relevant Industry Peak Bodies.

It is proposed that the roundtable would be convened prior to the 30 June 2014 by an independent facilitator and address a number of key questions on the proposal. While not exhaustive, questions are likely to include:

- What opportunities could be expected?
- What are the unforeseen impacts?
- What specific areas of construction could be included?

At the conclusion of the roundtable it is proposed that a further report be presented to Council providing a robust assessment and a recommendation for next steps.

Correspondence to the Australian Minister for Agriculture

As required by the resolution of the 3 February 2014, a letter has been prepared to be sent to the Australian Minister for Agriculture requesting that the Australian Government work with Latrobe City Council to support the establishment of research facilities in Latrobe City to enable development of innovative technology for the forestry, wood and paper sector.

FINANCIAL, RISK AND RESOURCES IMPLICATIONS

Risk has been considered as part of this report and it is considered to be consistent with the Risk Management Plan 2011-2014.

The cost of facilitating an industry round table as proposed could be covered within the 2013 – 2014 Economic Sustainability budget.

INTERNAL/EXTERNAL CONSULTATION

Consultation has been held with a range of wood and forest product peak bodies including the National Timber Council, TimberTowns, AusTimber, Australian Forest Products Association and Planet Ark.

The proposed industry roundtable would enable broader consultation to be undertaken.

OPTIONS

1. That Council note the wood and forest products benefits and opportunities and the indicative benefits and opportunities of introducing a wood encouragement policy, facilitate an industry round table to further investigate the potential of adopting a formal Wood Encouragement Policy and report back to Council on outcomes.
2. That Council note the wood and forest products benefits and opportunities and the indicative benefits and opportunities of introducing a Wood Encouragement Policy and seek further information.
3. That Council note the wood and forest products benefits and opportunities and the indicative benefits and opportunities of introducing a Wood Encouragement Policy and take no further action.

CONCLUSION

The introduction of a Wood Encouragement Policy within Latrobe City Council has the potential to generate tangible benefits and opportunities for the Latrobe City community. To fully investigate the proposal it is proposed that an industry roundtable be facilitated and, following its conclusion, a further report on outcomes of the roundtable be presented to Council for its consideration.

Attachments

1. Economic Impact Analysis_Forestry, Wood and Paper Products Industry_Final

RECOMMENDATION

1. **That Council note the assessment of the value of the Wood and Forest Products industry sector to Latrobe City and the indicative benefits and opportunities of introducing a wood encouragement policy.**
2. **That an industry roundtable be undertaken prior to 30 June 2014 to further investigate the potential of introducing a wood encouragement policy in Latrobe City and a report provided to Council on outcomes of the roundtable.**

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Moved: Cr Kam
Seconded: Cr Middlemiss

That the Recommendation be adopted.

CARRIED UNANIMOUSLY

9.1

Wood and Forest Product Benefits and Opportunities

- 1 Economic Impact Analysis_Forestry, Wood and Paper Products Industry_Final..... 23**

**ECONOMIC IMPACT ANALYSIS:
FORESTRY, WOOD AND PAPER
PRODUCTS INDUSTRY**



PROJECT UNDERTAKEN FOR
LATROBE CITY COUNCIL
Feb 2014



Economic Impact Analysis: Forestry, Wood and Paper Products Industry

ECONOMIC IMPACT ANALYSIS

Forestry, Wood and Paper Products Industry

This project has been conducted by REMPLAN

Project Team

Matthew Nichol
Principal Economist

Hui Shi
Economist

November 2013

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DISCLAIMER

All figures and data presented in this document are based on data sourced from the Australia Bureau of Statistics (ABS), and other government agencies. Using ABS datasets, the regional economic modelling software REMPLAN Economy, developed by REMPLAN has been applied to generate industrial economic data estimates. This document is provided in good faith with every effort made to provide accurate data and apply comprehensive knowledge. However, REMPLAN does not guarantee the accuracy of data nor the conclusions drawn from this information. A decision to pursue any suggestions mentioned in the report is wholly the responsibility of the party concerned. REMPLAN advises any party to conduct detailed feasibility studies and seek professional advice before proceeding with any action and accept no responsibility for the consequences of pursuing any of the findings or actions discussed in the document.

RESOURCES

All modelling has been undertaken using REMPLAN™ software that has been authored by Principal Research Fellow (ret.), Ian Pinge, at La Trobe University Bendigo.

Contact us:

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Economic Impact Analysis: Forestry, Wood and Paper Products Industry

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Economic Impact Analysis: Forestry, Wood and Paper Products Industry

1 Introduction

1.1 Purpose and Aim

This report has been undertaken in response to a request by Latrobe City Council to identify the economic contributions of the Forestry, Wood and Paper Products industry (“the Sector”) to the Latrobe City economy in terms of output, employment, wages and salaries and value-added.

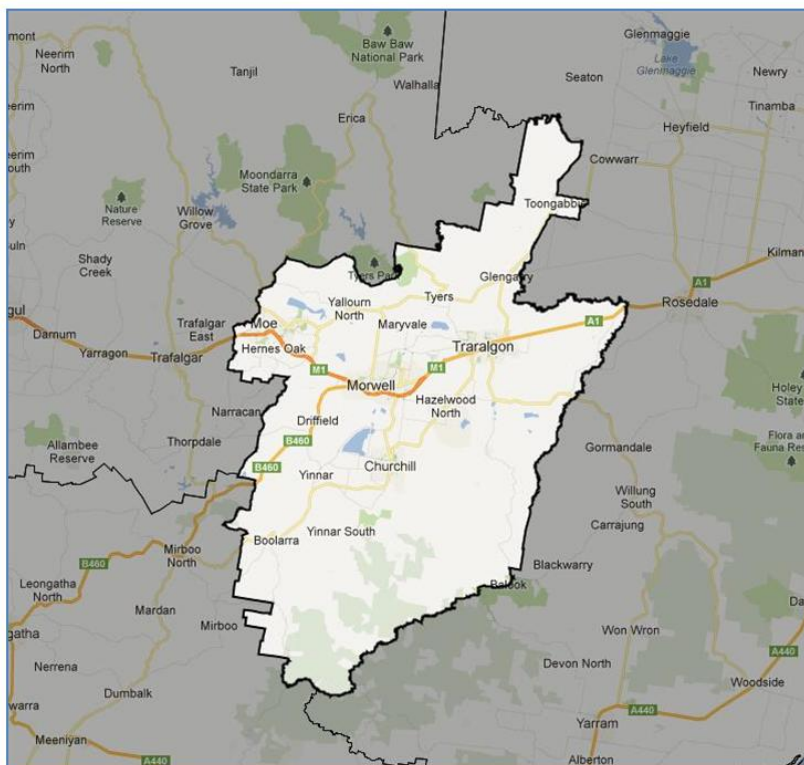
Economic impact analysis in this report was undertaken using REMPLAN – *regional economic modelling and analysis system*¹. This study applies REMPLAN economic data for the defined region of Latrobe City, incorporating data sourced from the ABS 2011 Census, 2008/2009 ABS National Input / Output Tables, and ABS Gross State Product (June 2012).

The report also examines the demographic characteristics of the Sector’s workforce and changes that have occurred across Australian Bureau of Statistics’ Census years.

1.2 Region

The impact analysis will be undertaken in the context of the Latrobe City Local Government Area.

Map 1-1-1 Latrobe (C) Local Government Area



¹ www.rempln.com.au

Economic Impact Analysis: Forestry, Wood and Paper Products Industry

2 Latrobe's Forestry, Wood and Paper Products Industry

According to Victoria State Government Department of Environment And Primary Industries (DPI)², Victoria's State forests are concentrated in the east of the state and cover 3.4 million hectares. Approximately 1.54 million hectares are available for timber harvesting via the Allocation to VicForests (Further Amendment) Order 2012. Victoria's timber plantation estate is around 451, 500 hectares and accounts for more than 20 per cent of Australia's plantation forest estate.

The Gippsland region where Latrobe city is located has large natural advantage in resources. The region's high annual rainfall, temperate climate and highly productive soils make it particularly conducive to agricultural activities and forestry industry.

Gippsland's forestry processing industry supports a diverse range of processors which includes Australia's largest pulp and paper mill (Maryvale mill in Latrobe Valley) and a wide range of small, predominantly hardwood mills. The 4.2 million hectare area of Gippsland has 1.1 million hectares of harvestable forest, with most wood production sourced from over one million hectares of harvestable public native forest and over 100,000 hectares of plantations. The plantation resources in the region are managed as large scale industrial plantations. Wellington Shire contains most of Gippsland's plantations (52%), followed by Latrobe City (30%) and Baw Baw (7%). (Source: Regional Development Victoria³)

In Latrobe the Sector incorporates the following sub-sectors:

- Forestry & Logging
- Forestry Support Services
- Sawmill Product Manufacturing
- Other Wood Product Manufacturing
- Pulp, Paper and Paperboard Manufacturing
- Paper Product Manufacturing
- Timber Product Wholesaling

Employment in the Sector (both native and plantation) is concentrated in the secondary processing sector, which accounts for approximately 62 per cent of the industry's workers.

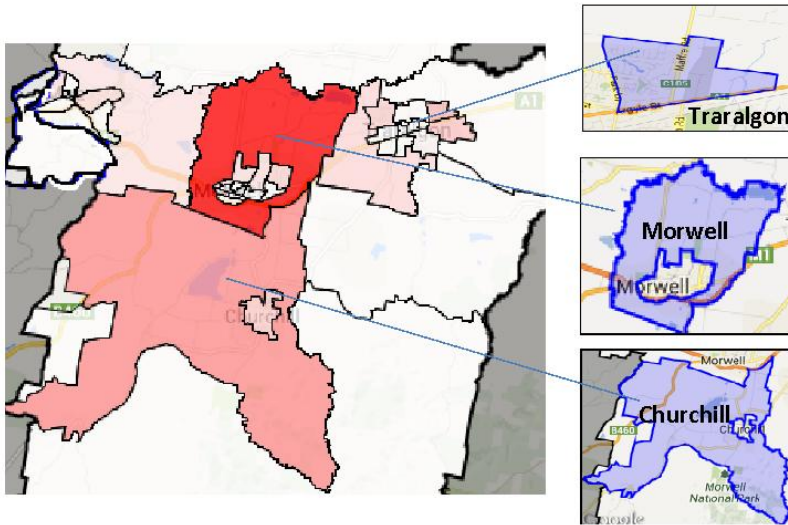
The Sector is mainly concentrated in destination zones of Morwell, Churchill, Traralgon, detailed in the thematic map below. The map highlights concentrations distribution of Sector employment.

² <http://www.dpi.vic.gov.au/forestry/about-forestry/publications/victorias-timber-industry-profiles>

³ http://www.rdv.vic.gov.au/_data/assets/pdf_file/0011/195734/Latrobe-Valley-industry-and-employment-roadmap-WEB_v2.pdf

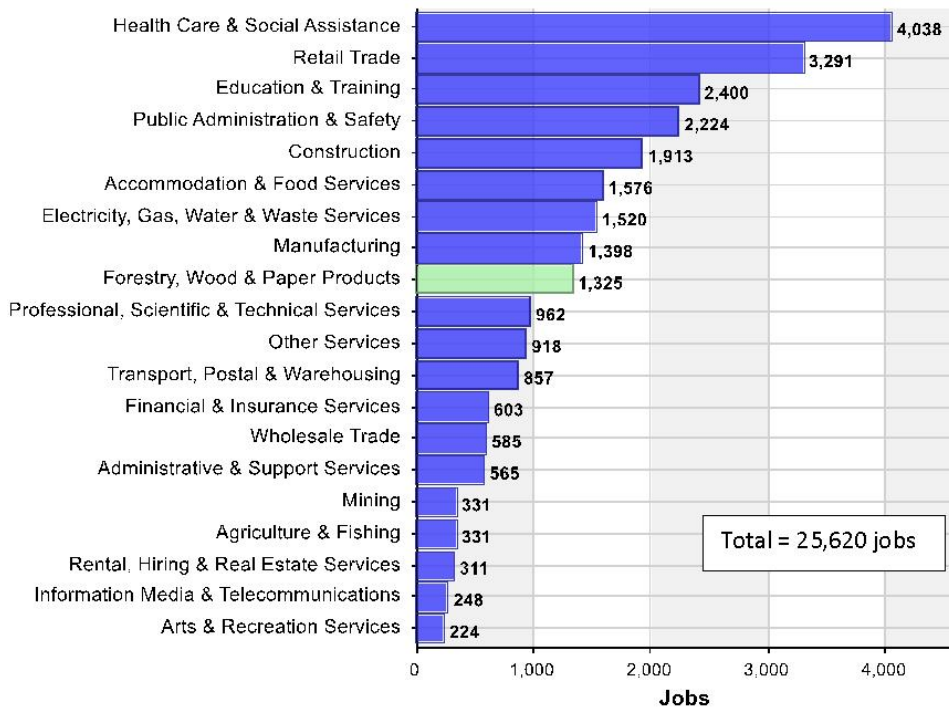
Economic Impact Analysis: Forestry, Wood and Paper Products Industry

Map 2-1 Distribution of Forestry, Wood and Paper Products Industry Employment



The employment in the Sector in Latrobe (C) is 1,325, contributing 5.17% of the region’s total employment.

Figure 2-1 Latrobe’s total employment by industry



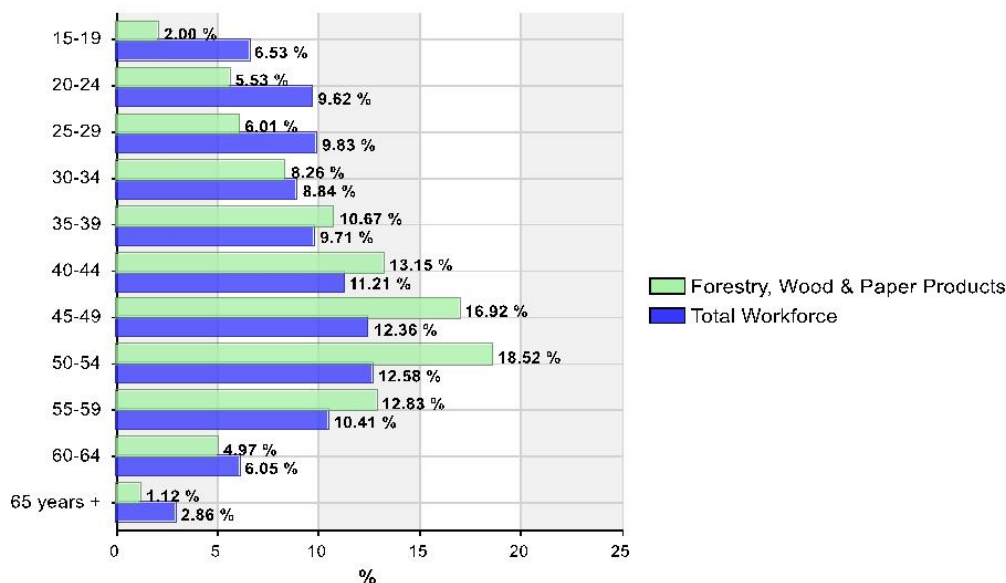
Source: REMPLAN Economy⁴

⁴ Based on ABS 2011 Census Place of Work Employment Data, www.remplan.com.au/products/remplan-economy

Economic Impact Analysis: Forestry, Wood and Paper Products Industry

The workforce characteristics for the Sector are detailed below, in comparison to the workforce in Latrobe across all industries.

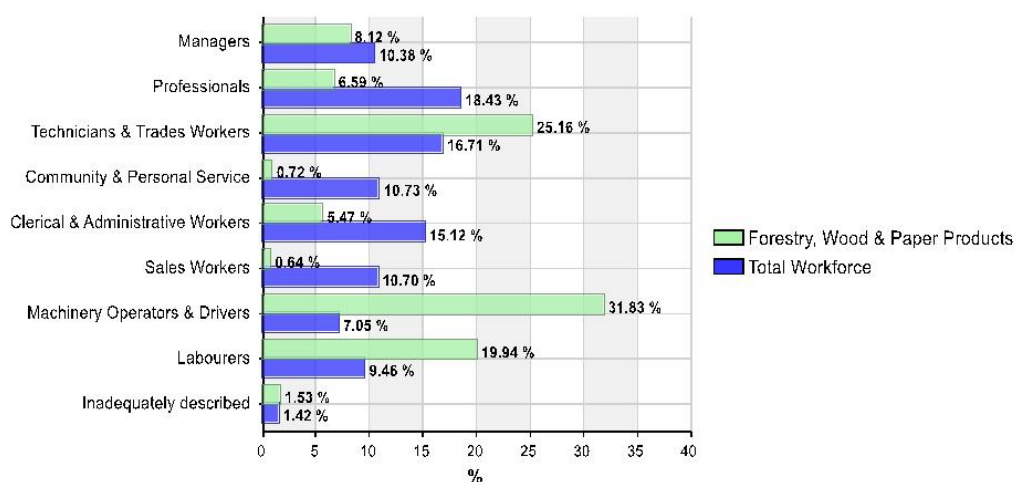
Figure 2-2 Workforce by age



Source: ABS 2011 Census, REMPLAN Community⁵

The workers in the Sector are mainly in the 35-59 years age band. This age cohort accounts for 72% of employed persons in the Sector, compared to 56% in the total workforce. The percentage of young and old workers (15-29 years and over 60 years) in the Sector is smaller relative to the total workforce.

Figure 2-3 Workforce by occupation



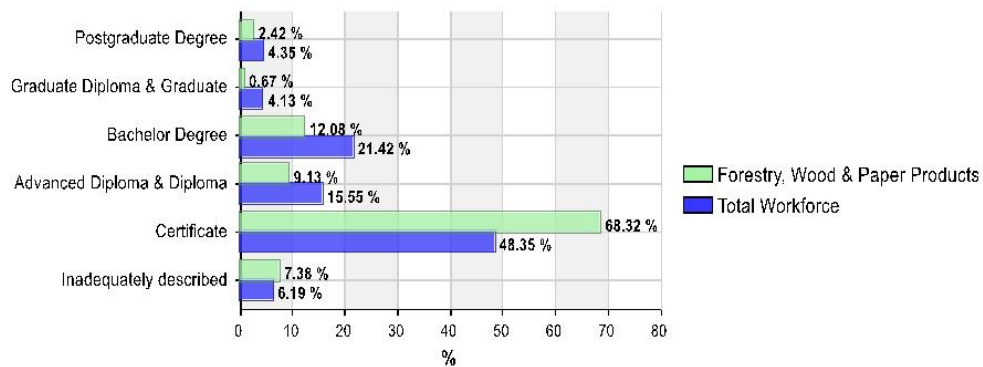
Source: ABS 2011 Census, REMPLAN Community

⁵ Based on data sourced from ABS 2011 Census Place of Work Employment Data; www.remplan.com.au/products/remplan-community

Economic Impact Analysis: Forestry, Wood and Paper Products Industry

In comparison to the overall workforce, the sector is characterised by workers in occupations such as 'Technicians & Trade Workers', 'Machinery Operators & Drivers', and 'Labourers'.

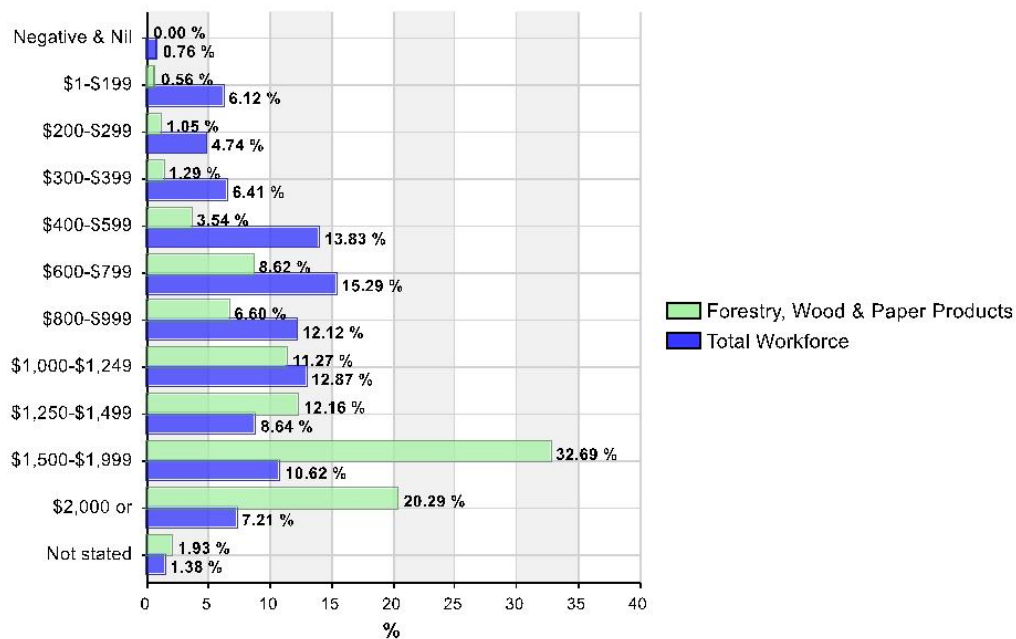
Figure 2-4 Workforce by education



Source: ABS 2011 Census, REMPLAN Community

Education levels in the Sector are relatively low with 15% of workers holding bachelor and postgraduate degrees, which is half the portion of tertiary degree workers in Latrobe overall. In contrast, 68.32% of workers in the Sector hold a Certificate level qualification.

Figure 2-5 Workforce by income



Source: ABS 2011 Census, REMPLAN Community

Compared with the overall workforce in Latrobe city, a relatively high percentage of workers in the Sector earn high incomes with 53% earning more than \$1,500 a week.

Economic Impact Analysis: Forestry, Wood and Paper Products Industry

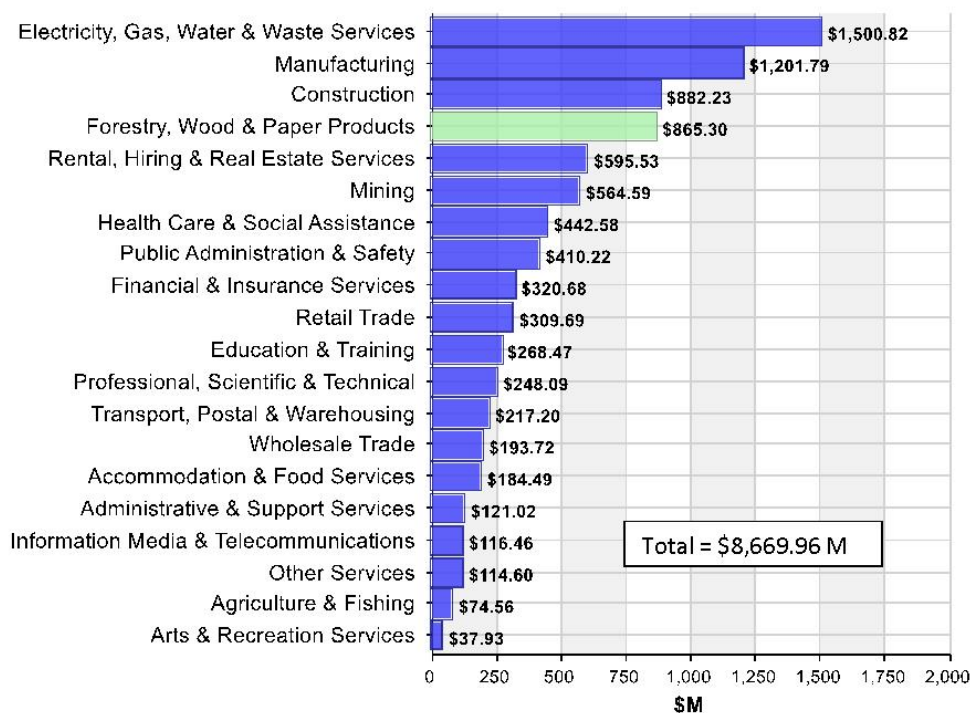
Table 2-1 Workforce's wellbeing and diversity

	Long working hours (49 hrs+)		Female employment		Indigenous employment		Disability employment	
	Forestry, Wood & Paper Products	Total workforce	Forestry, Wood & Paper Products	Total workforce	Forestry, Wood & Paper Products	Total workforce	Forestry, Wood & Paper Products	Total workforce
Latrobe (C)-Moe	11.2%	20.8%	12.7%	47.0%	0.0%	0.7%	0.0%	1.0%
Latrobe (C)-Morwell	15.2%	21.6%	11.4%	46.1%	0.0%	1.1%	1.7%	1.1%
Latrobe (C)-Traralgon	20.3%	24.4%	5.6%	47.1%	0.4%	0.6%	0.4%	0.6%
Latrobe (C)Bal	25.0%	26.7%	10.6%	46.5%	0.0%	0.4%	0.0%	0.3%

Source: AFWPS Socioeconomic tables index, 2011 Statistics⁶.

There is a lower percentage of workers working 49 hours or more a week in the Sector in comparison with the total workforce. Combined with relatively high incomes workers in the Sector enjoy above-average employment conditions. Female, indigenous and disability employment in the Sector is relatively low.

At \$865.30 million per annual, the Sector is the fourth largest contributor to Latrobe's economic output (9.98% of total output). The top three contributors in the region are Electricity, Gas, Water & Waste Services, Manufacturing, and Construction.

Figure 2-6 Output by industry

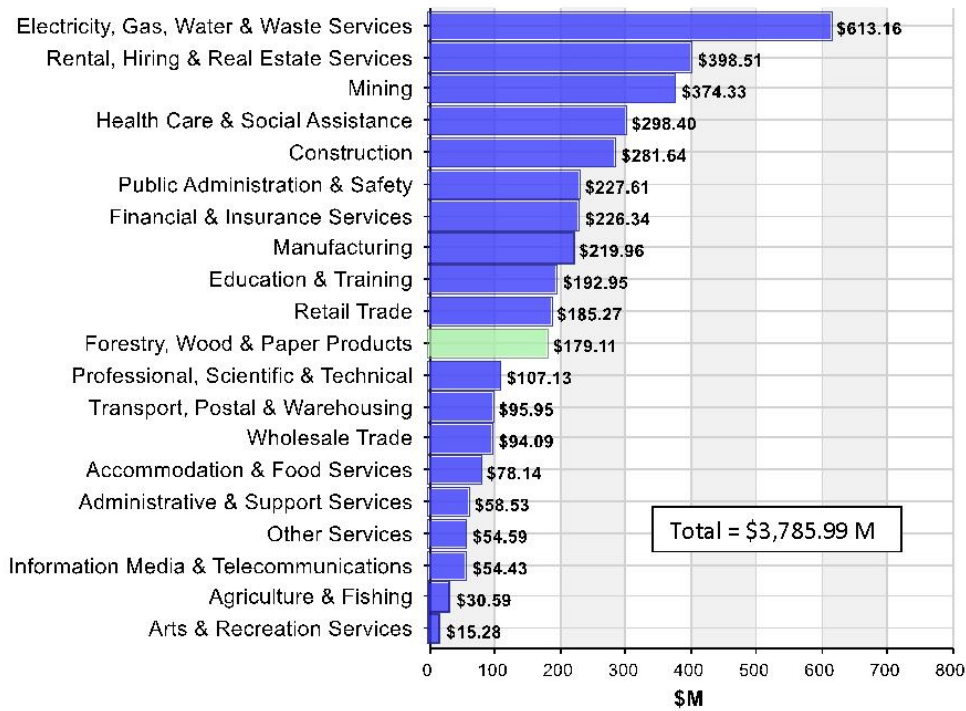
Source: REMPLAN Economy

⁶ Source: Australian forest and wood products statistics (AFWPS): Sep and Dec quarter 2012, Socio-economic tables index, ABARES. Employment numbers include full-time and part-time workers.

Economic Impact Analysis: Forestry, Wood and Paper Products Industry

In terms of value-added⁷, the Sector generates \$179.11 million, which is 4.73% of total value-added in Latrobe. Value added represents the marginal economic value added by economic activity, and it is a measure of the net worth of an industry to the region. Value added by industry sector is the major element in the calculation of Gross Regional Product.

Figure 2-7 Value-added by industry



Source: REMPLAN Economy

⁷ Value-added can be calculated by subtracting expenditure on intermediate goods from output, or alternatively, by adding the wages & salaries paid to local employees, the gross operating surplus and taxes on products and production.

Economic Impact Analysis: Forestry, Wood and Paper Products Industry

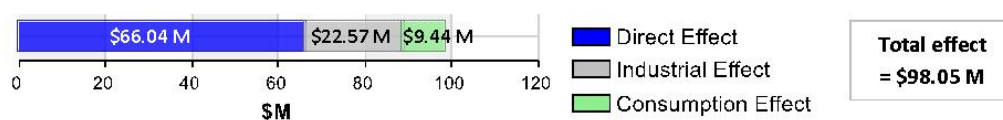
3 Economic Impact Assessment – 100 Jobs

3.1 Output

For every 100 jobs in the Sector in Latrobe it is estimated that a direct output of \$66.04 million is generated. From this direct output, the associated demand for intermediate goods and services sourced from within the local economy is estimated at \$22.57 million. These industrial effects include multiple rounds of flow-on effects, as servicing sectors increase their own output and demand for local goods and services in response to the direct contribution to the economy.

Corresponding to direct and indirect employment support in the Latrobe economy wages and salaries are paid to employees and a proportion of these wages and salaries are typically being spent on local consumption. The consumption effects under this scenario are estimated at \$9.44 million.

Figure 3-1 Impact on Output



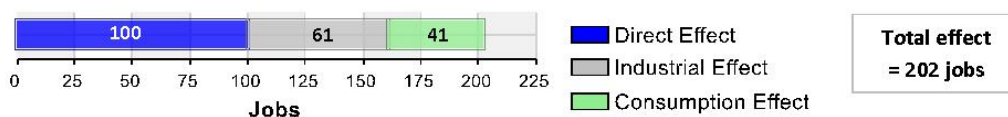
Total output under this scenario, including all direct, industrial and consumption effects is estimated at up to \$98.05 million. This represents a Type 2 Output multiplier⁸ of 1.48. That is, for every direct dollar of output generated by the Sector, the broader Latrobe economy is estimated to be up to a further \$0.48 once flow-on industrial and consumption effects are taken into consideration.

3.2 Employment

From 100 direct jobs⁹ in the Sector it is anticipated that indirect industrial effects in terms of local purchases of goods and services support a further 61 jobs. The consumption effects under this scenario are estimated to contribute a further 41 jobs.

Total employment, including all direct, industrial and consumption effects is estimated at up to 202 jobs. This represents a Type 2 Employment multiplier of 2.02. That is, for every 100 direct jobs generated by the Sector, a further 102 jobs are supported in the broader Latrobe economy once flow-on industrial and consumption effects are taken into consideration.

Figure 3-2 Impact on Employment



⁸ Type 2 multiplier is equal to total effect/direct effect.

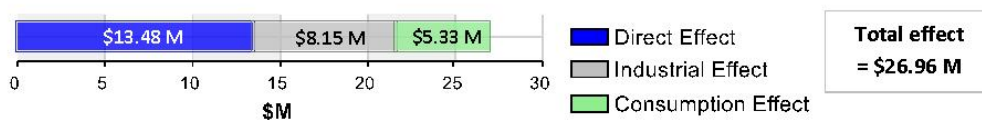
⁹ Jobs represent the number of employed people in industry sectors. Here, the employment represents total number of employees without conversions to full-time equivalence.

Economic Impact Analysis: Forestry, Wood and Paper Products Industry

3.3 Value Added

From 100 jobs in the Sector, the corresponding direct value-added is estimated at \$13.48 million. It is estimated that indirect industrial impacts would result in additional value-added of \$8.15 million.

The consumption effects under this scenario are expected to further contribute to value-added by \$5.33 million. Total value-added, including all direct, industrial and consumption effects is estimated at up to \$26.96 million. This represents a Type 2 Value-added multiplier of 2.

Figure 3-3 Impact on Value-Added**3.4 Economic Impact Summary – 100 Jobs**

Under the above scenario, the total impact of 100 jobs in the Sector are estimated output of \$98.05 million, 202 jobs and \$26.96 million in terms of value-added for the Latrobe economy.

Figure 3-4 Summary

Impact Summary	Direct Effect	Industrial Effect	Consumption Effect	Total Effect	Type 1 Multiplier	Type 2 Multiplier
Output (\$M)	\$66.04	\$22.57	\$9.44	\$98.05	1.34	1.48
Employment (Jobs)	100	61	41	202	1.61	2.02
Value-added (\$M)	\$13.48	\$8.15	\$5.33	\$26.96	1.60	2.00

**9.2 PROPOSED PUBLIC HIGHWAY DECLARATION - DEAKIN LANE,
TRARALGON**

GENERAL MANAGER

Planning and Governance

For Decision

PURPOSE

The purpose of this report is to consider public submissions received relating to Councils intention to consider declaring Deakin Lane Traralgon a public highway and recent developments concerning this matter.

DECLARATION OF INTEREST

No officer declared an interest under the Local Government Act 1989 in the preparation of this report.

STRATEGIC FRAMEWORK

This report is consistent with Latrobe 2026: The Community Vision for Latrobe Valley and the Latrobe City Council Plan 2013-2017.

Latrobe 2026: The Community Vision for Latrobe Valley

Strategic Objectives - Governance

In 2026, Latrobe Valley has a reputation for conscientious leadership and governance, strengthened by an informed and engaged community, committed to enriching local decision making.

Latrobe City Council Plan 2013 - 2017

Theme and Objectives

Theme 3: Efficient, effective and accountable governance

Theme 4: Advocacy for and consultation with our community

Strategic Direction

Ensure Latrobe City Council's infrastructure and assets are maintained and managed sustainably.

Legislation

Local Government Act 1989

Section 204 of the *Local Government Act 1989* gives Council the power to declare a road a public highway or to be open to the public:

- (1) A Council may, by notice published in the Victoria Government Gazette, declare a road in its municipal district to be a public highway for the purposes of this Act.
- (2) A Council may, by resolution, declare a road that is reasonably required for public use to be open to public traffic.

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- (3) A road does not become a public highway by virtue of a Council resolution made under sub-section(2).

This power is subject to Section 223 of the *Local Government Act 1989* which requires Council “publish a public notice stating that submissions in respect of the matter specified in the public notice will be considered in accordance with this section”.

Schedules 10 and 11 of the *Local Government Act 1989* provide Council with the powers to maintain public access to a road. Clause 5 of schedule 11 provides:

“A Council may –

- (a) move any thing that encroaches on or obstructs the free use of a road or that reduces the breadth, or confines the limits, of a road (including any thing placed on a road under clause 9,10 or 11);
- (b) require any person responsible for, or in control of, the thing to move it.”

Road Management Act 2004

The *Road Management Act 2004* defines a public highway as “any area of land that is a highway for the purposes of the common law”.

Schedule 4 Clause 1(5) states that a “public highway vests in the municipal council free of all mortgages, charges, leases and sub-leases”.

Policy

Council does not have an adopted policy relating to the discontinuance of roads or public highway declarations.

BACKGROUND

Council initially received a request from the owners of 2 Deakin Street, Traralgon, for the discontinuance of Deakin Lane as shown on the attached plan (Attachment 1).

Deakin Lane was originally created in 1957 on LP 41285 as *land appropriated or set apart for easements of way and drainage*. The lane is now described on Certificate of Title Volume 10246 Folio 309 as “*Road R1 on Plan of Subdivision 041285*”. The registered proprietors of the road are also the owners of 2 Deakin Street, Traralgon. (Attachment 2)

Deakin Lane is fully constructed being four metres wide on the east/west alignment with a total length of 48 metres terminating at the southern boundary of 5-7 Church Street.

The laneway is listed on the 2013 Register of Public Roads as a ‘Road Not Maintained by Latrobe City Council’. Council also has drainage assets contained with the road reserve.

As the owners of 2 Deakin Street are the registered proprietors of the road reserve they were of the opinion that Council should discontinue the road and transfer the land back to them for a nominal consideration where it would be retained as a private access laneway.

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In examining this request, it was found that there is an expressed entitlement on the respective Certificates of Title for each of the four lots created on LP 41285 to use Deakin Lane. Three of these lots comprise 2 Deakin Street with the fourth lot being 1 Church Street which is owned by Petroleum Property Holdings Pty Ltd.

It was also noted that the laneway provides access to off-street parking at the rear of the office complex at 3 Church Street. This off-street car park was a requirement of Planning Permit 93/745/PO issued by the former City of Traralgon on the 7 September 1993 and an amended plan that was endorsed on the 10 May 1994.

In view of the above mentioned expressed entitlement for the use of Deakin Lane by the tenants of 3 Church Street officers reached agreement with the owners of 2 Deakin Street to amend their request from discontinuance of the road to the placement of permanent barriers, in the form of gates, across the entrance from Deakin Street.

Council initially considered the request to discontinue the laneway at the Ordinary Council Meeting held on Monday 17 December 2012 and resolved the following:

1. *That Council gives public notice of its intention to consider the placement of permanent barriers over Deakin Lane, Traralgon, pursuant to Section 207 and Schedule 11 Clause 9 of the Local Government Act 1989.*
2. *That Council considers any submissions received in relation to the proposed placement of permanent barriers over Deakin Lane, Traralgon, at the Ordinary Council Meeting to be held on Monday 18 February 2013.*

At the Ordinary Council Meeting held on Monday 18 February 2013 Council considered an objection on behalf of two adjoining property owners to this proposal and a request from the owner of 2 Deakin Street that Council defer consideration of this matter for another month pending the provision of additional information. Council subsequently resolved:

That Council defer this item for one month.

Council again considered this matter at the Ordinary Council Meeting held on Monday 18 March 2013 and resolved:

1. *That Council defers consideration of the proposed placement of permanent barriers over Deakin Lane, Traralgon, to the Ordinary Council meeting to be held on Monday 22 April 2013 pending assessment of additional information to be provided by the applicant.*
2. *The Beveridge Williams, acting on behalf of Petroleum Property Holdings Pty Lt and Parody Glade Pty Ltd, and the applicant be advised accordingly.*

At the Ordinary Council meeting held 22 April 2013, Council considered legal advice provided by the owner of 2 Deakin Street in support of their application. The legal advice obtained by the owner of 2 Deakin Street is summarised as follows:

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- Deakin Lane is not a public road as it was privately created and no Council funds have been spent on the laneway.
- Deakin Lane was created as an “easement of way” and was only intended to benefit specified parties being the owners of the titles that abut the easement and have rights to it.
- Deakin Lane is a “private road” defined in the Local Government Act 1958 as “a carriage-way accessible to the public from a public street or forming common access to lands and premises separately occupied, but not being a public highway”.
- No declaration of Deakin Lane as a public highway has been made.

Based upon these points the owner of 2 Deakin Street has concluded that Deakin Lane is not a public road and they are therefore justified in restricting access and placing a fence across the boundary with 3 Church Street.

Receiving this advice Council, at the Ordinary Council meeting held on Monday 22 April 2013, resolved the following:

That this matter be deferred to allow for consideration to be given to information tabled by Mr Tripodi at this Council meeting.

On 31 May 2013 the applicants’ solicitor, John Morrow, wrote to both the Victorian Ombudsman and the Minister for Local Government, a copy of which was provided to Council, seeking their intervention in this matter.

On 2 June 2013 the owner of 2 Deakin Street erected a temporary fence on the boundary of Deakin Lane and 3 Church Street, Traralgon, thereby removing any access to the rear of this property via the laneway. This temporary fence was replaced in July 2013 with a substantial steel and colour bond fence, refer attachment 3.

Maddocks Lawyers have written to John Morrow, representing the owners of 2 Deakin Street, on behalf of Council on 28 June 2013 and 5 July 2013 formally requesting removal of the fence however these requests were not complied with.

At the Ordinary Council meeting held on 3 June 2013 Council considered a report recommending, in part, that it commence the statutory process to declare Deakin Lane a public highway and resolved the following:

That the matter be deferred pending the outcome of the Ombudsman’s investigation of this matter.

Council officers subsequently received confirmation that neither the Victorian Ombudsman nor the Office of Local Government would be taking any action in this matter. The latter advised that it is at Council’s discretion to declare a public highway and it would not intervene in what it considers to be a Council decision.

A further report was considered that the Ordinary Council meeting held on 6 November 2013, again recommending that Council commence the statutory process to declare Deakin Lane a public highway however this recommendation was not adopted.

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Following the 6 November 2013 Council decision, a letter was received from Paul McDonough & Co Solicitors on behalf of Parody Glade Pty Ltd. This letter requested Council either restore access by commencing the statutory process to declare Deakin Lane a public highway or take action to remove the fence to provide access to the parking at the rear of 3 Church Street. Council considered this request at the Ordinary Council Meeting held 16 December 2013 and subsequently resolved:

1. *That Council gives public notice of its intention to declare Deakin Lane, Traralgon, a public highway pursuant to Section 204 of the Local Government Act 1989.*
2. *That Council considers any submissions in relation to the proposed declaration of Deakin Lane, Traralgon, as a public highway at the Ordinary Council Meeting to be held on Monday 17 February 2014.*
3. *That all adjoining property owners be advised of Councils intention to commence the statutory process to declare Deakin Lane, Traralgon, a public highway pursuant to Section 204 of the Local Government Act 1989 and invited to make a submission.*
4. *That McDonough & Co, acting on behalf of Parody Glade Pty Ltd, be advised accordingly.*

In subsequent developments, between Council adopting the above resolution on the 16 December 2013 and prior to Monday 20 January 2014 (the date officer were notified), two substantial steel gates (Attachment 4) have been erected across the entrance of Deakin Lane preventing access. When the photograph was taken the gates were locked closed with a chain and padlock.

ISSUES

Since the erection of the fence across the eastern end of Deakin Lane in June 2013, the occupiers of 3 Church Street have not been able to gain direct access to the rear of the property. As a temporary solution the occupiers have been forced to park in Church Street or access has been gained across the neighbouring property, 5-7 Church Street, as a short term yet impractical solution.

It has previously been noted that the former City of Traralgon issued a Planning Permit, 93/745/PO, on the 8 September 1993, later amended in May 1994, for the office complex at 3 Church Street. This permit recognised that the off street car park at the rear of the property would be accessed via Deakin Lane. A condition of this Planning Permit required that the land owner would transfer a 1.7 metre wide section of land abutting the eastern length of the laneway would be transferred to Council. This requirement was recently brought to the attention of owner of 3 Church Street and officers have been given an undertaking that the land will be transferred to Council.

Deakin Lane is considered a public highway as it satisfies the common law doctrine of dedication and acceptance. The land has been set aside as an easement of way (Dedication) in 1957 on LP 41285, is shown as a road on Certificate of Title Volume 10246 Folio 309, and the laneway has been

used by the public, adjoining property owners and occupiers for a substantial period of time (Acceptance).

The assessment that Deakin Lane is a public highway is supported by legal advice previously obtained from Council's solicitors in relation to two similar matters and more recently relating to this specific lane. Relevant sections of this advice are summarised below:

Right of Access

At common law, an owner or occupier of land adjoining a public highway (road) has a right to access the road from their land.

A Public Highway is vested in Council

A road is a public highway at common law because there has been:

- *Dedication of the road to the public when it was constructed; and*
- *Subsequent acceptance of the Road, by the public, through public use of the Road.*

As Deakin Lane is marked as a "road" on title this is a clear indication that the road is a public highway at common law. In addition, Clause 1 of Schedule 5 of the *Road Management Act 2004 (RMA)* also has the effect of vesting in Council particular roads (including Deakin Lane).

The effect of this public highway classification is that the road remains open for the public to use, regardless of who owns the land underneath, and the road is vested in Council.

Council has responsibility for use and control over a Road

The general public's right to use a road (including a public highway) is confirmed by section 8 of the RMA. The RMA also places Council in control of roads because:

- *By operation of section 37 of the RMA and division 2 of Part 9 of the Local Government Act 1989 (LGA) as well as Schedules 10 and 11 of the LGA; and*
- *The road is on Council's register of public roads.*

In light of the above, only Council is entitled to control access to a road by virtue of the powers conferred in both the RMA and LGA. Therefore, despite holding title to the land over which a road is constructed, the registered proprietor does not enjoy exclusive possession with respect to the road (as opposed to ordinary parcels of land). It follows that Council maintains control and responsibility for a road, regardless of whether Council or another party holds title to the land over which the road is located.

Following Council's decision at the Ordinary Council Meeting held on 22 April 2013 officers sought legal advice from Maddocks Lawyers on the status of Deakin Lane and, in particular, the information provided by the owner of 2 Deakin Street.

Maddocks advice is summarised as follows:

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- Deakin Lane is a public highway at common law and also, therefore, a public highway for the purposes of the Road Management Act 2004;
- Ownership of Deakin Lane is likely to have vested in Council, by virtue of the Road Management Act 2004, even though it is located on privately owned land.
- If Council wishes, it can declare Deakin Lane to be a 'public highway' under the Local Government Act 1989.
- Rights of access to Deakin Lane are secured for the owners of the properties adjoining Deakin Lane, namely 1-3 Church Street, Traralgon, and Lot 4 on LP 41285 fronting Princes Street, under common law and the Road Management Act 2004.; and
- Council is under no obligation to pay compensation to the registered proprietors who own the land traversed by Deakin Lane.

A copy of this confidential legal advice has previously been provided to all Councillors.

Deakin Lane satisfies the criteria of a public highway, a position supported by professional and legal advice that has been obtained. Undertaking the statutory process and formally declaring its status will remove any doubt or confusion in the future.

A recent relevant example of Council exercising this power occurred in 2010 when part of Wilmot Court, Traralgon East, was declared a public highway to preserve public access to 37 properties in Turnbull Drive, Varney Crescent, Kings Way and Tait Court.

The first 400 metres of Wilmot Court from the Princes Highway were created in 1979 as road on LP 130953 however the remaining 300 metres was constructed within an easement of way and drainage over two properties including 49 Turnbull Drive, Traralgon East.

This section of Wilmot Court was declared a public highway via a notice placed in the Victoria Government Gazette thereby vesting the land in Council.

No compensation was payable to the owners of 49 Turnbull Drive as the declaration of the road as a public highway would not have a negative impact financially as neither the current nor preceding owners of the property ever had free use of the land given its long standing and intended use as a road.

Likewise, since the owners of 2 Deakin Street (Tripodi Family) acquired the property in 1995, after the plan of subdivision creating the road reserve and the issue of the planning permit for the development of 3 Church Street, the land that is contained in Certificate of Title Volume 10246 Folio 349 has always been used as a laneway and at no time did they seek to prevent such access, refer photo in attachment 5.

The declaration of the road as a public highway will therefore not change the physical characteristics of the land other than ensuring the public right

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to use the road, an ongoing use that only became an issue following the objection to the proposed gates by Parody Glade Pty Ltd.

For the information of Council, the property owners whilst knowing that Council intended to consider public submissions relating to the declaration of a public highway, erected substantial locked gates across the entrance of the laneway. The concrete works and steel foundation were undertaken on the 16 December 2013 and the gates (refer Attachment 4) were erected on or before Monday 20 January 2014, post Council decision to commence the statutory process and giving public notice of its intention to consider declaring Deakin Lane a public Highway.

Council can use its powers under the *Local Government Act 1989* to remove any obstruction, such as the recently erected gates and the fence erected in June 2013 that encroach on or restricting access to a road.

To do so Council would again need to write to the owners of 2 Deakin Street requesting that the fence and gates be removed within a reasonable time frame.

If the owners of 2 Deakin Street refuse to do so the fence and gates can be removed by Council and impounded. The owners will then be required to pay any costs incurred by Council as part of this process to have the impounded fencing released.

Recent developments

The Acting Chief Executive Officer has had discussions with Mr Gino Tripodi and the Director of Parody Glade Pty Ltd and subject to Council endorsement has proposed as a way forward the following:

- Council, Mr Gino Tripodi and Parody Glade Pty Ltd (the parties) agree to engage an independent barrister in order to obtain a non-binding legal opinion regarding the status of Deakin Lane.
- Costs of the independent barrister up to a total cost of \$10,000 will be split between the parties (Council \$5,000, Tripodi Family \$2,500 and Parody Glade \$2,500) with Council covering all costs greater than \$10,000.
- The legal opinion obtained from the independent barrister is non-binding on the parties and the respective parties may take further legal action or withdraw from the proposal at any time.

A copy of the Acting Chief Executive Officer correspondence confirming the above proposal, a qualified response from John Morrow, legal representative for the Tripodi Family generally agreeing to the proposal and a response from Parody Glade Pty Ltd agreeing to contribute \$2,500 is provided for information, refer attachment 10.

The above information was provided to Council at the Ordinary Council Meeting held 17 February 2014 and Council resolved to defer consideration of this matter until the next Council Meeting.

FINANCIAL, RISK AND RESOURCES IMPLICATIONS

Risk has been considered as part of this report and it is considered to be consistent with the Risk Management Plan 2011-2014.

The cost of undertaking the statutory process to declare Deakin Lane a public highway are minimal being the cost of public notices in the Latrobe Valley Express and a notice in the Victoria Government Gazette.

Council may incur costs associated with physical removal of the gates and fence, and if the matter proceeds to litigation additional legal costs may become payable.

As indicated above, there is no obligation for Council to provide compensation to the owners of 2 Deakin Street as part of this process as was the case with the declaration of part of Wilmot Court as a public highway.

Given that a large majority of the laneways in Traralgon are comprised of pieces of land in private ownership making an exception in the case of Deakin Lane would set a costly precedent for any similar actions in the future.

It is possible that Parody Glade Pty Ltd may take legal action and possibly seek compensation from Council if access to the rear of the property is not restored to the rear car park as required by the former City of Traralgon as part of planning permit 93/745/PO.

INTERNAL/EXTERNAL CONSULTATION

Engagement Method Used:

- Public notices in the Latrobe Valley Express on Monday 23 December 2013, and Thursday 9 January 2014.
- Letters to property owners of 1 Church Street, 3 Church Street, 72 Princes Street and Paul McDonough & Co Solicitors inviting written submissions concerning Council's intention to consider declaring Deakin Lane a public highway.

Details of Community Consultation / Results of Engagement:

In response to the public notices and correspondence, 3 written submissions and 50 form letters were received.

The written submissions are summarised below:

Supporting Submission - Paul McDonough Solicitors on behalf of Parody Glade Pty Ltd, 3 Church Street Traralgon, refer attachment 6.

Deakin Lane has been a public highway for a period in excess of fifty years and provides access to the rear of their client's property at 3 Church Street, Traralgon.

Access via Deakin Lane is in accordance with the planning permit issued by the Traralgon City Council on the 8th September, 1993.

ORDINARY COUNCIL MEETING MINUTES 03 MARCH 2014 (CM431)

“The wrongful installation of barricades on Deakin Lane has caused a disruption to our client, and our client’s tenants at 3 Church Street, Traralgon.”

Objecting Submission - S & C Tripodi, refer attachment 7

Owners of the land in dispute and adjoining building, purchased 19 years ago.

Long term residents of Traralgon having established a business in the town and their sons now run a business in transport.

Their legal advice supports that “we own the title and there is no privileges, rights or special treatments stated on this for the rear title holder. Really this is a disagreement that is better left for those that are part of the dispute to work out between themselves, without council intervention.”

Objecting Submission - Gino Tripodi, refer attachment 8 –

Registered proprietor of Deakin Lane,

Grounds for the submission-

- Council would be confiscating private property without compensation;
- There is no need for Deakin Lane to be declared a public highway, and
- It would be a misuse of Council’s powers under the Local Government Act to do so.”

Extracts from the submission that are highlight in bold type and accompany text are provided for information –

- “a. Deakin Lane was created over private land by private owners in 1957 for private use. ...
- b. Because Deakin Lane is a private road, Council has never spent a cent on making or maintaining the lane. ...
- e. All the neighbouring easement holders, who have private easement rights of access over Deakin Lane, continue to have rights of access to the lane without obstruction or difficulty. ...
- g. All other properties abutting the lane have alternative, perfectly acceptable and usable street access to their properties (from Church Street, Princes Highway or Deakin Street). ...
- h. No public purpose would be served by making a declaration of the lane as a public highway. The only person who would benefit by a declaration is the owner of 3 Church Street. ...
- i. ... However, there is no moral or legal basis for the owner of 3 Church Street to claim assistance of Council: since 1993-1994, the owner has flouted the conditions on which the predecessor Council granted them a planning permit by refusing to transfer land to the Council. Latrobe City Council has no obligation to the owner of 3 Church Street now.”

ORDINARY COUNCIL MEETING MINUTES 03 MARCH 2014 (CM431)

Objecting Form Letters – 50 Objections, refer sample attachment 9 –

... “of the opinion that declaring the lane a public highway would have no benefit to the people of Traralgon and can see no reason why this should change. ...the ‘lane’ is a ‘dead end’ and therefore can see no relevance as to why it should or how it could be of benefit to those require unnecessary access.”

OPTIONS

Council having considered submissions received may now:

1. Form the opinion that Deakin Lane is reasonably required as a road for public use and resolves to declare Deakin Lane, Traralgon, a public highway under section 204 of the *Local Government Act 1989* and publish a notice in the Government Gazette, or
2. Form the opinion that Deakin Lane is not reasonably required as a road for public use and resolve not to take any further action regarding this matter, or
3. Support the proposal put forward by the Acting Chief Executive Officer to engage an independent barrister in order to obtain a non-binding legal opinion regarding the status of Deakin Lane.

CONCLUSION

Council has committed considerable time, finances and staff resources since December 2012 to the deliberation of this matter.

The Acting Chief Executive Officer has negotiated a way forward that may result in a resolution of this matter. Council’s endorsement of this proposal to engage an independent barrister in order to obtain a non-binding legal opinion regarding the status of Deakin Lane is required to allow this matter to proceed.

Attachments

1. Location Plan & Aerial Image - Deakin Lane Traralgon
2. Plan of Subdivision LP 41285 showing Deakin Lane as Road R1
3. Deakin Lane - Photos of Tempory Fence June 2013 & Permanent Fence July 2013
4. Deakin Lane - Photo of Gates Erected January 2014
5. Photo of Deakin Lane date 24 July 1999
6. Supporting Submission - Paul McDonough Solicitors on behalf of Parody Glade Pty Ltd
7. Objecting Submission - S & C Tripodi
8. Objecting Submission - Gino Tripodi & Sample of Form Letter
9. Objection - Sample of 50 Form Letters
10. Independent Barrister Proposes and Responses from the TRipodi Family and Parody Glade Pty Ltd.

RECOMMENDATION

1. That Council notes the written submissions received in relation a proposal to declare Deakin Lane a public highway.
2. That Council resolves to support the proposal that Council, Mr Gino Tripodi and Parody Glade Pty Ltd (the parties) agree to engage an independent barrister in order to obtain a non-binding legal opinion regarding the status of Deakin Lane.
3. That the costs of the independent barrister up to a total cost of \$10,000 be split between the parties on the following basis, Council \$5,000, Tripodi Family \$2,500 and Parody Glade \$2,500 with Council covering all costs greater than \$10,000.
4. Council acknowledges that the legal opinion obtained from the independent barrister is non-binding on the parties and the respective parties may take further legal action or withdraw from the proposal at any time.
5. Those persons who submitted a written submission and property owners adjoining Deakin Lane be advised of the above Council decisions.

Moved: Cr Rossiter

Seconded: Cr White

That the Recommendation be adopted.

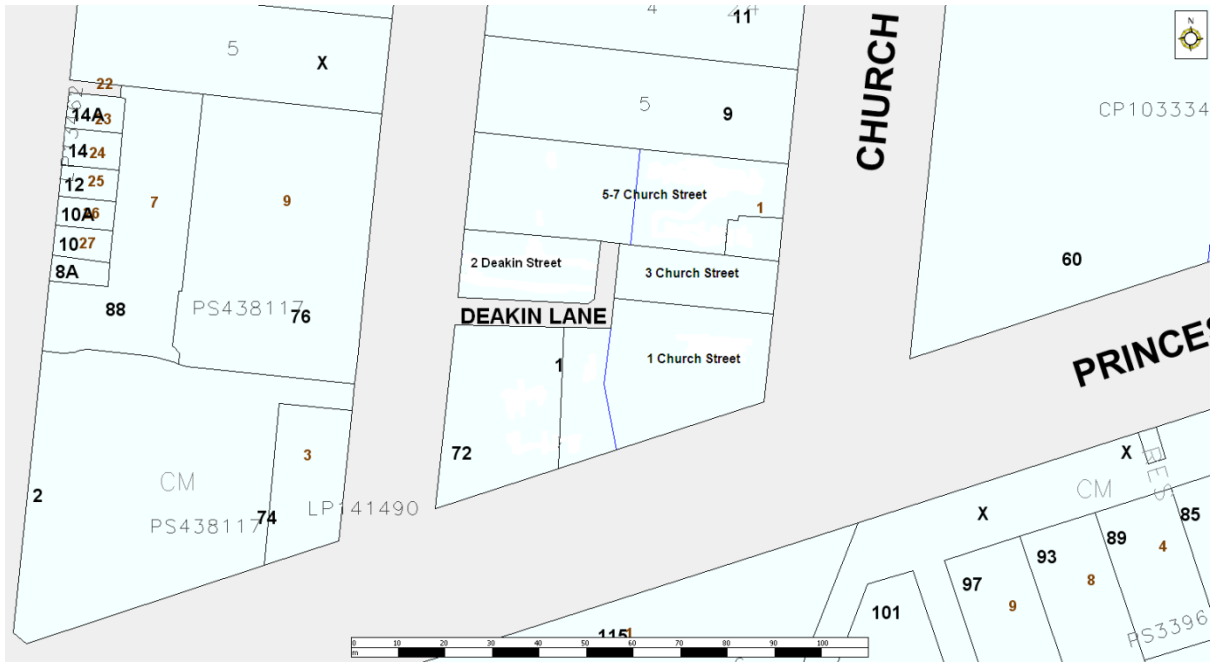
CARRIED UNANIMOUSLY

9.2

PROPOSED PUBLIC HIGHWAY DECLARATION - DEAKIN LANE, TRARALGON

1	Location Plan & Aerial Image - Deakin Lane Traralgon.....	49
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10	Independent Barrister Proposes and Responses from the Tripodi Family and Parody Glade Pty Ltd.	69

Location Plan – Deakin Lane Traralgon



Aerial Image – Deakin Lane Traralgon



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LP 41285

EDITION 1
PLAN MAY BE LODGED 5/9/57

PLAN OF SUBDIVISION OF
PART OF CROWN ALLOTMENTS 7 & 8, SECTION 24
TOWNSHIP OF TRARALGON
PARISH OF TRARALGON
COUNTY OF BULN BULN

Measurements are in Feet & Inches

Conversion Factor
FEET X 0.3048 = METRES

- ✓ 4583 F 536
- ✓ 6343 F 795
- ✓ 7551 F 028

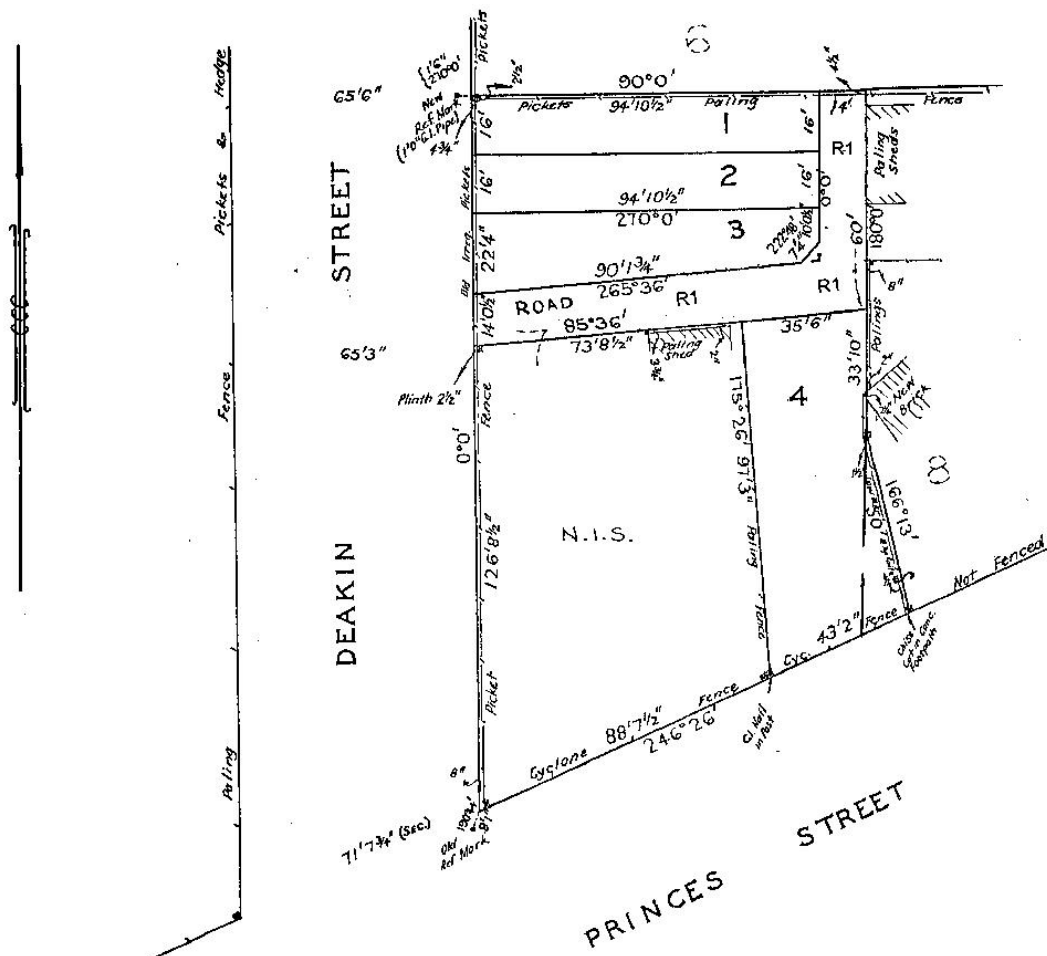
COLOUR CONVERSION

BROWN = R1

APPROPRIATIONS

THE LAND COLOURED BROWN IS APPROPRIATED OR SET APART FOR EASEMENTS OF WAY AND DRAINAGE.

~~PARISH/TOWNSHIP~~



WARNING: THE IMAGE OF THIS DOCUMENT OF THE REGISTER HAS BEEN DIGITALLY AMENDED. NO FURTHER AMENDMENTS ARE TO BE MADE TO THE ORIGINAL DOCUMENT OF THE REGISTER.

Temporary Fence Erected June 2013



Permanent Fence Erected July 2013





**PHOTO AT THE ENTRANCE OF THE UNCONSTRUCTED EAST/WEST SECTION OF DEAKIN LANE.
PHOTO DATED 24 JULY 1999.**





McDonough Legal Pty Ltd
ABN 93 117 567 692

SOLICITORS

Paul McDonough
B. Bus., LL.B.
Accredited Business Law &
Property Law Specialist

Vivienne Petts-Jones
LL.B (Hons)

Our Ref: PMD:FT:27099

Your Ref:

TRARALGON
68 Seymour Street, 3844
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Ph: (03) 5176 1000
Fax: (03) 5176 1020
Email: law@mcDonough.com.au

ROSEDALE
40 Princes Street, 3847
Ph: (03) 5199 2400

16 January 2014

Mr Peter Schulz
Property & Statute Officer
Latrobe City Council
DX 217733
MORWELL

LATROBE CITY COUNCIL	
INFORMATION MANAGEMENT	
RECEIVED	
20 JAN 2014	
R/O:	Doc No:
Comments/Copies Circulated to:	
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Dear Sir

Parody Glade Pty Ltd
Deakin Lane, Traralgon

We refer to our letter of the 21st November, 2013 and Council's reply of the 18th December, 2013.

We note that Council now proposes to declare Deakin Lane, Traralgon as a public highway.

On behalf of Parody Glade Pty Ltd, we write to support the Council's proposed declaration.

As stated in our earlier correspondence:

- (a) Deakin Lane has been a public highway for a period in excess of fifty years and access to the rear of our client's property at 3 Church Street, Traralgon is obtained via Deakin Lane.
- (b) Access via Deakin Lane is in accordance with the planning permit issued by the Traralgon City Council on the 8th September, 1993.

The wrongful installation of barricades on Deakin Lane has caused a disruption to our client, and our client's tenants at 3 Church Street, Traralgon.

Yours faithfully,
McDonough & Co.

Per:

Liability limited by a scheme approved under Professional Standards Legislation

Latrobe City Council
PO Box 264
Morwell VIC 3840

To Mr. John Mitchell

LATROBE CITY COUNCIL INFORMATION MANAGEMENT	
RECEIVED 23 JAN 2014	
R/O:	Doc No:
Comments/Copies Circulated to:	
<input type="checkbox"/> Copy registered in DataWorks	<input type="checkbox"/> Invoice forwarded to account:

Declaration of Deakin lane – Public Highway

As owners of the land in dispute we, Stefano and Concetta Tripodi wish to submit this letter as an objection to the 'declaration of Deakin lane as a Public Highway'

We have been part of the Traralgon community for well over 50 years now and in this time we have worked hard to now have a name and reputation that is high regard too many in the township.

We came to Traralgon with little knowledge of Australia, but worked hard to be part of the community and in time established a business's (S&C Tripodi & Sons) that has been a part of Traralgon for more than 57 years and although we retired recently our boys have continued being part industry.

We started our family in Traralgon, raising two boys that have stayed in Traralgon, who also have developed a reputation that is of good nature, caring and very supportive to those in need. Damian and his wife are now raising their two boys here, while Gino (with Damian) continue to run a business in transport, moving local produce from local farms to Melbourne Fruit Market.

We have never had any trouble within our community, we have kept to ourselves as a family, but have shared many good times and bad with customers that have become lifelong friends.


Now in our retirement we have had to put up the biggest fight of our lives and that is to save what is ours!! We have to watch our boys stand up to people that have now decided that because the title that we brought 19 years ago doesn't suit our rear neighbour. Tell us, How is this fair? We have ran a very successful family business from this building for many years and now we have to protect this with legal advice, from continuous council meetings and demands from people that think they are better than the law itself. Please we have never asked for anything from Latrobe City, but, with all the facts from our Lawyer Mr. John R Morrow and Barrister Mr. Peter G Willis is this a matter that needs to be disputed to such great lengths. As stated time and time again the law is the law and what evidence we have bought to the attention of Latrobe City shows there is no grey area, we own the title and there are no privileges, rights or special treatments stated on this for the rear title holder. Really this is a disagreement that is better left for those that are a part of the dispute to work out between themselves, without council intervention.

So why should we allow the council to come and take our land, when it would serve no purpose to any other persons of the community, there is access for those that may need to attend to the easement, (Gippsland water) but this parcel of land is used for the purpose of a business that runs from the building, built on this title. But more importantly it is what we brought, it is ours and we intend for it to stay that way.

Stefano Tripodi



Concetta Tripodi



LATROBE CITY COUNCIL
INFORMATION MANAGEMENT

RECEIVED

23 JAN 2014

SUBMISSION TO CITY OF LATROBE**AGAINST PROPOSED DECLARATION OF PUBLIC HIGHWAY, DEAKIN LANE, TRARALGON**

BY OWNERS OF DEAKIN LANE

Doc No:	
Comments/Copies Circulated to	
<input type="checkbox"/> Copy registered in DataWorks	<input type="checkbox"/> Invoice forwarded to accounts

1. This submission is lodged in response to a public notice under s 223 of the *Local Government Act 1989* calling for submissions in respect of a proposal to declare Deakin Lane, Traralgon to be a public highway.
2. As registered proprietors of the affected area (Deakin Lane), we respectfully submit Council should not proceed with the declaration.
3. The grounds for this submission are that:
 - Council would be confiscating private property without compensation;
 - there is no need for Deakin Lane to be declared a public highway, and
 - it would be a misuse of Council's powers under the Local Government Act to do so.
4. Relevantly:
 - a. Deakin Lane was **created over private land by private owners in 1957 for the private use** of the adjoining properties (Lots 1 – 4 on Lodged Plan 41285, being 2 Deakin St and 1 Church Street). Rights of access to the lane were granted by an easement only in favour of four specific landowners. This means that the lane is different from other roads and laneways laid out in Crown surveys. Those other roads vest in Council automatically by operation of law. Deakin Lane does not.
 - b. **Because Deakin Lane is a private road, Council has never spent a cent on making or maintaining the lane.** Council will be taking on new financial obligations for the upkeep of the road, whereas historically and at present, it is a private responsibility of the owners.
 - c. Council does not own the land of a private road and will be taking private property. Council will be taking the benefit of the expense laid out by the owners of Deakin Lane in forming and maintaining the lane (for their own use) over many years, with no compensation. This will be a very bad precedent to set and is likely to increase demands on Council's engineering and roads department and budget.

- d. Separately, Council has drainage assets in the lane. These are intact and undisturbed and are not affected by the lane being private property. There is no need to declare a public highway in order to continue to have the benefit of those assets. They are fully protected by legal rights as things stand.
 - e. **All the neighbouring easement holders, who have private easement rights of access over Deakin Lane, continue to have rights of access to the lane without obstruction or difficulty. The private easement gives all the necessary rights of access to the lane.**
 - f. The lane is a cul-de-sac. It leads nowhere and simply provides access to warehouses on the easement-holders' properties. The lane has no official name but has been referred to in Council correspondence as "Deakin Lane".
 - g. **All other properties abutting the lane have alternative, perfectly acceptable and useable street access to their properties (from Church Street, Princes Highway or Deakin Street). The owners on Princes Highway and on Deakin Street (5 - 7 Church St) have never used the lane.**
 - h. **No public purpose would be served by making a declaration of the lane as a public highway. The only person who would benefit by a declaration is the owner of 3 Church Street. This owner is trying to make use of the lane without permission of the owners of the lane. The owner of 3 Church Street relies on an erroneous assumption by the predecessor Council when in 1993 it granted a planning permit for redevelopment of 3 Church Street. As a condition of permitting the use of the back of their property for off street parking, the then Council required that the owner of 3 Church Street transfer land at the back of their property to the Council.**
 - i. The council of 1993 made a mistake in thinking that public access to 3 Church Street could be allowed from the lane, without consulting the owners of Deakin Lane. It would compound this mistake for Council to declare the lane a public highway. **However, there is no moral or legal basis for the owner of 3 Church Street to claim the assistance of Council: since 1993 – 1994, the owner has flouted the conditions on which the predecessor Council granted them a planning permit by refusing to transfer land to the Council. Latrobe City Council has no obligation to the owner of 3 Church Street now.**
5. Council has received conflicting legal opinions about the status of Deakin Lane – advice from our lawyers and advice from Council's solicitors. There is no disagreement about the basic legal principles, but stark differences about the

application of the principle to the facts at hand. Because the facts are different in every case, it is a mistake to rely on advice obtained about different roads in other parts of the City. The registered owners of Deakin Lane have never dedicated the lane as a public road. Our advice is very clear – Deakin Lane is a private road and is not a public highway. The alternative advice assumes, without any proof, that the road has been dedicated to the public by the owners and has been accepted by public use. Victorian Courts and Victorian legislation state that the description of a lane on a private plan of subdivision as a “road” on private land (as in this case) does not amount to a dedication of the lane as a public road.

6. In any case, this dispute about the common law is irrelevant to the proposed exercise by Council of the power in section 204 of the Local Government Act. By proposing to use this power, Council is acknowledging that Deakin Lane is not already a public highway. This confirms that the Council’s powers under the *Road Management Act* and *Local Government Act* do not extend to the lane at present: they only apply to roads on Crown land and roads declared to be public highways.
7. The questions for Council then in this case are:
 - **why** is it proposed to declare this little private lane to be a “public highway”?
 - How will the public benefit??
 - How is it reasonably necessary for the public for the lane to be a public highway?
 - What contribution to the economic development of the City will be added by turning this dead-end private lane into a public highway?
 - How can one person be said to be “the public” for the purpose of exercising Council’s powers
8. The answer is that there is no need in the public interest to make this private road a public highway. The lane leads nowhere; contrary to the bluster of a solicitor’s letter, no business will be affected by it staying as it is. Naturally, these solicitors not mention a major weakness in their clients position, namely his refusal to satisfy the condition upon which the planning permit was granted, namely the requirement to transfer 1.7 meters of land to the Council.
9. Council is simply being asked to become involved in a private disagreement between two neighbours. It is a waste of public resources and unnecessary to exercise public power over private land simply to benefit one other landowner, who has perfectly adequate access to his property from an existing public highway – Church St - as

well as having private rights arranged with its associate, the owner of 5-7 Church St, which has a large car park on the abutting block to the north.

10. Like all statutory powers, the power in section 204 of the Local Government Act may only be used reasonably and for a proper purpose. Otherwise, the declaration would be invalid and ineffective.
11. Council would be acting invalidly if it proceeds with the declaration of Deakin Lane as a public highway.
12. Rather than have the matter litigated in the Supreme Court with Council as the defendant, Council should take no further action and leave Deakin Lane as a private road and the neighbours to sort things out between themselves.
13. For these reasons, we respectfully urge Council to take no further action with respect to the declaration of Deakin Lane as a public highway.



GINO TRIPODI

For 23 January 2013

January 2014

Latrobe City Council
PO Box 264
Morwell VIC 3840

Please find enclosed:- 50 OBJECTION LETTERS.

Written Submission in regard to
Proposed Public Highway Declaration *Deakin Lane, Traralgon*

Addressed to

*Mr. John Mitchell
Chief Executive Officer,
Latrobe City Council.*

Latrobe City Council
PO Box 264,
Morwell VIC 3840

Re; Deakin Lane – Public Highway.

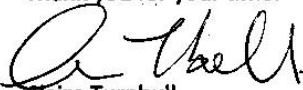
To John Mitchell,

I Claire Turnbull, wish to submit an objection in regards to Latrobe City Council wanting to declare Deakin Lane a public highway.

I feel that as a member of the community who has resided in Traralgon for many years and in those years has shopped at Tripodi's Fruit & Vegetable Market at 2 Deakin Street Traralgon, so I am very aware of the "Lane" in dispute, I am of the opinion that declaring this lane a public highway would have no benefits to the people of Traralgon and can see no reason why this should change. To me the 'lane' is a 'dead end' and therefore can see no relevance as to why it should or how it could be of any benefit to those who require unnecessary access.

I hope this issue can be resolved in a dignified way and businesses and families can get on with their livelihoods without any disruption.

Thank you for your time.


Claire Turnbull

Our Ref:
JM

13 February 2014

Mr G Tripodi
HAND DELIVERED

Dear Mr Tripodi

DISPUTE REGARDING STATUS OF DEAKIN LANE TRARALGON

I refer to our telephone conversation and meeting on 13 February 2014 in relation to the above.

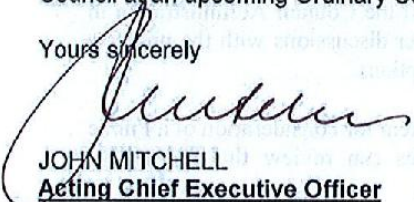
The status of Deakin Lane, Traralgon has been the subject of disagreement between yourself and Latrobe City Council. Subject to the formal approval of Council I propose that we attempt to resolve the dispute regarding the status of Deakin Lane as follows:

- Latrobe City Council and you, representing the owners of the disputed Deakin Lane, Traralgon will jointly brief an independent barrister in order to obtain an independent legal opinion regarding the status of Deakin Lane, Traralgon.
- The independent barrister will be agreed to between Council and yourself.
- Costs of the independent barrister will be split evenly between the parties up to a total cost of \$10,000 (\$5,000 each). Council will cover all costs greater than \$10,000.
- The legal opinion obtained from the independent barrister is non-binding on the parties. Either party may take further legal action should they feel the need to.
- This proposal is non-binding upon the respective parties and either party may withdraw at any time.

I am hopeful that an independent advice obtained from a senior barrister will provide yourself and us with a greater level of certainty as to the status of the road whilst avoiding the need for a drawn out dispute in the Victorian court system.

Please feel free to contact me if you wish to discuss this further or alternately, if you are happy to the above, please sign and return the duplicate copy of this letter and return it to my office. Should this be acceptable to you I will present the proposal to Council at an upcoming Ordinary Council Meeting.

Yours sincerely


JOHN MITCHELL
Acting Chief Executive Officer



Latrobe City ABN 92 472 314 133
Telephone 1300 367 700
Facsimile (03) 5128 5672
TTY (NRS) 133 677
Post to PO Box 264 Morwell 3840
Email Address latrobe@latrobe.vic.gov.au
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AUSDOC DX217733 Morwell


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BARRISTER & SOLICITOR

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AFTER HOURS: (03) 9482 2316
FAX: (03) 9482 1032
Email: jnmorrow@bigpond.com
ADDRESS: 173 QUEENS PARADE,
CLIFTON HILL 3068 AUSTRALIA

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14 February 2014

Latrobe City
34-38 Kay Street
Traralgon VIC 3844

Attention: Mr John Mitchell

Dear Mr Mitchell

Re: Proposed Public Highway Declaration – Deakin Lane, Traralgon

I refer to your letter addressed to Gino Tripodi of 13 February 2014 and Mr Shultz's letter to me of 20 December 2013, which includes an invitation for me to discuss this matter directly with Mr Schultz by telephone or email. In the circumstances, I am writing this letter to you on the assumption that, at this point in time, the Council is not using the services of Maddocks Lawyers, on its behalf, in relation to the above matter. (For the sake of caution I am forwarding a copy of this letter directly to Maddocks Lawyers.)

I am instructed by my clients to inform you that they would be willing to proceed with the proposal to obtain a non binding opinion from independent Senior Counsel, subject to my clients' agreement on the procedure to be adopted for providing instructions to Senior Counsel.

While my clients also agree with the principle of sharing costs, up to an aggregate amount of \$10,000, and Council covering any excess, we consider that a more appropriate split would be for the contending private parties (Tripodi and Parody Glade) each to contribute 25%, and Council 50% of the initial \$10,000.00. I accordingly seek your response to this aspect of the proposal.

My clients further agree to those recommendations of the Council Administration in the current Agenda notes, that the ACEO have further discussions with the property owners including the potential to explore mediation options.

In the meantime my clients propose that the Agenda item for consideration of a Public Road Declaration be withdrawn, so that all parties can review their respective positions after a Senior Counsel's opinion is obtained.

In the circumstances I would be pleased if you would confirm by return email that while the reference to Senior Counsel and the Administration's recommendations are pursued, the current agenda item scheduled for Monday, 17 February 2014 will be withdrawn.

Yours faithfully

A handwritten signature in black ink, appearing to read 'J.R. Morrow', written in a cursive style.

J.R. Morrow
Solicitor

Peter Schulz

From: LEO DIFABRIZIO <ldf2@me.com>
Sent: Monday, 17 February 2014 8:31 AM
To: Peter Schulz
Subject: Parody Glade Pty Ltd

Hi Peter,

I wish to confirm that Parody Glade Pty Ltd as owner of the property known as 3 Church Street, Traralgon is prepared to commit the sum of \$2500. towards the proposed legal assessment of the Deakin Lane ,Traralgon,issue currently before Latrobe City Council.

Regards,

Leo Di Fabrizio
Director
Parody Glade Pty Ltd

Leo DiFabrizio
Director

9.3 REVIEW OF LOCAL LAW NO. 1

General Manager

Organisational Excellence

For Decision

PURPOSE

The purpose of this report is to present Council with the amended version of Local Law No.1 Meeting Procedures for adoption.

DECLARATION OF INTEREST

No officer declared an interest under the Local Government Act 1989 in the preparation of this report.

STRATEGIC FRAMEWORK

This report is consistent with Latrobe 2026: The Community Vision for Latrobe Valley and the Latrobe City Council Plan 2013-2017.

Latrobe 2026: The Community Vision for Latrobe Valley

Strategic Objectives - Governance

In 2026, Latrobe Valley has a reputation for conscientious leadership and governance, strengthened by an informed and engaged community committed to enriching local decision making.

Latrobe City Council Plan 2013 - 2017

Theme and Objectives

Theme 3: Efficient, effective and accountable governance

Strategic Direction – To provide open, transparent and accountable governance.

Legislation

Local Government Act 1989

Council must comply with Part 5 of the Local Government Act 1989 (“the Act”), in regards to the procedure for making a local law. Council’s requirement to make a local law governing the conduct of Council meetings is detailed in section 91 of the Act.

The following legislation sets out the procedure for making a local law.

s111. Power to make local laws

Section 111 of the Local Government Act 1989 provides councils with the authority to make local laws. These local laws are designed to assist councils to balance the needs of the individual against the needs of the broader community. They are limited to areas which local councils have jurisdiction (except those things dealt with under the planning scheme) and cannot be inconsistent with any other laws (either state or federal).

s119. Procedure for making a local law

Before a Council makes a local law it must comply with the procedure contained within section 119. This procedure includes giving a notice in the Government Gazette and a public notice stating the purpose and general purport of the proposed local law, that a copy of the proposed local law can be obtained from the Council office, and that any person affected by the proposed local law may make a submission relating to the proposed local law under section 223.

After a local law has been made the Council must give a notice in the Government Gazette and a public notice specifying the title of the local law; and the purpose and general purport of the local law; and that a copy of the local law may be inspected at the Council office. In addition, Council must send a copy to the Minister.

s223. Right to make a submission

Section 223 of the Local Government Act 1989 details that the submissions received must be heard by Council and that a person making a submission can specify in their submission that they (or representative) wish to appear before Council to be heard in support of the submission. In addition, Council must notify in writing, each person who has made a separate submission, and in the case of a submission made on behalf of a number of persons, one of those persons, of the decision and the reasons for that decision.

BACKGROUND

The purpose of Local Law No.1 is to:

- Provide for the election of the Mayor;
- Regulate the use of the common seal;
- Prohibit unauthorised use of the common seal or any device resembling the common seal;
- Provide for the procedures governing the conduct of Council meetings and Special Committee Meetings;
- To promote and encourage community participation in the system of local government by providing a mechanism for Council to ascertain the community's views and expectations; and
- To revoke Council's Process of Municipal Government (Meetings and Common Seal) Local Law No.1 – 2004.

Local Law No1 is not due to sunset until 2019, subject to section 122 of the Act. However the 2012-2016 Council Plan identified the review of Local Law No1 as a major initiative following the general election. As a result of this Councillors have undertaken a review of this Local Law which commenced as the review of the Councillor Code of Conduct.

ORDINARY COUNCIL MEETING MINUTES 03 MARCH 2014 (CM431)

The draft Local Law No.1 was released for public comment in accordance with s.223 of the Local Government Act 1989 and Council's resolution on 18 November 2013 when Council resolved that:

1. *That Council, pursuant to sections 119 and 223 of the Local Government Act 1989, gives notice in the Government Gazette and a public notice placed in the Latrobe Valley Express of its intention to consider amending Local Law No.1 (09 LLW-3) and invited written submissions in regards to the draft Local Law No.1 [13 LLW-1];*
2. *That Council, in accordance with section 223 of the Local Government Act 1989, considers any submissions received in relation to the draft Local Law No.1 at Ordinary Council Meeting to be held on 3 February 2014.*
3. *That Council considers adoption of the draft Local Law No.1 at the Ordinary Council Meeting to be held on 17 February 2014.*

NOTE – amendment 'order of business include the CEO and Mayor' (division 3 section 23), also include 9.4 – previously removed

Council received one submission in regard to the draft local law and considered this at its previous Ordinary Council meeting on 3 February 2014, whereby Council resolved:

That Council notes the submission received in regard to the draft Local Law No.1.

ISSUES

The draft Local Law No.1 was released for public exhibition on Monday, 25 November 2013 and closed on Friday 10 January 2014.

Prior to this Council has undergone a process of reviewing Local Law No.1 and has identified a need to amend the Local Law with the following changes:

1. Expansion of clause 9 (Election of the Mayor) by inserting a subclause to the effect that immediately following the election, the Mayor is to take the chair.
2. Deletion of clause 9.3 (Candidates addressing the Council on their suitability for the office of Mayor, Deputy Mayor or Chair).
3. Expansion of clause 63 (Petitions) to require each page of a petition to contain the entire wording of the petition.
4. Amending clauses 28.1 and 28.3 (Notice of motion) by allowing for lodgement by 10:00 AM on the Friday before the next Council meeting and deleting the wording "to allow sufficient time for him or her to give each Councillor at least 96 hours' notice of such notice of motion." (Note that clause 28.1 currently allows for lodgement by email).
5. Amending clause 49 (Addressing the meeting) to provide for Councillors to remain seated when addressing the meeting. (Note that prior to this amendment, any person addressing the Chair must stand if the Chair so determines). (Also note that clause 45.2 infers

**ORDINARY COUNCIL MEETING MINUTES
03 MARCH 2014 (CM431)**

that Councillors will stand given the reference to "...the Chair may direct the speaker to be seated.")

6. Expansion of Division 13 (Behaviour) to allow the Chair to adjourn the meeting if it is disrupted by the public, after having warned the meeting of the Chair's intention to do so if further disruption occurs.
7. Amending clause 62 (Question time) to require receipt of questions by 12 noon on the day of the meeting.
8. Amending clause 91 (Criticism of members of Council staff) to prohibit criticism of members of Council staff and despite the prohibition, allow the CEO to respond to any such criticism.
9. Distinct from Question Time, a provision has been inserted to formalise the current practice of allowing the public to address a meeting, including –
 - a. a requirement that persons requesting to speak notify Council in writing by 12 noon on the day of the meeting; and
 - b. provision for the Mayor to exercise discretion on who may speak, the maximum number of speakers, and time limits.
10. Insertion of a clause that allows for a protocol to be incorporated by reference into the local law. The protocol may deal with matters outside the meeting such as –
 - a. Consultation with the Mayor by the CEO about the content of a proposed agenda;
 - b. Electronic confirmation to be sent to Councillors acknowledging receipt of emailed notices of motion;
 - c. The introduction of the term "preliminary agenda" to replace the currently issued agenda and the further term "final agenda" to expand on the contents of the preliminary agenda by including notices of motion;
 - d. Foreshadowing proposed notices of motion at an assembly of Councillors ("I & D" meeting).

In addition to the proposed changes identified above, Councillors have also expressed some interest in the development of a document known as a 'protocol' to work in conjunction with Local Law No1. This is identified as item 10 above, and such a document would be incorporated into the Local Law by reference but would not be subject to the same review process as a Local Law. It would cover more operational matters outside of the meeting procedures and would serve to provide improved administration of Council meetings. This document should be developed following the adoption of the proposed amendment to Local Law No1.

**ORDINARY COUNCIL MEETING MINUTES
03 MARCH 2014 (CM431)****FINANCIAL, RISK AND RESOURCES IMPLICATIONS**

Risk has been considered as part of this report and it is considered to be consistent with the Risk Management Plan 2011-2014.

There are minimal financial implications in the review of Local Law No.1. Costs of approximately \$400 has been incurred for the placing of a notice in the Government Gazette Notice and public notices in the Latrobe Valley Express. Minor consultancy fees were incurred for the review of Local Law No. 1 and the Councillor Code of Conduct

These items were budgeted for in the 2013-2014 budget.

INTERNAL/EXTERNAL CONSULTATION

Details of Community Consultation / Results of Engagement:

The draft Local Law No.1 was released and advertised for public exhibition for 28 days following Council's resolution at its Ordinary Meeting on 18 November 2013. All submissions have been treated in accordance with section 223 of the Local Government Act 1989.

A notice informing the community of the availability of the draft document and inviting written submissions was placed in the Victoria Government Gazette on 9 January 2014 and a public notice was placed in the Latrobe Valley Express on 16 and 19 December and 6 and 9 January 2014.

Copies of the draft Local Law No.1 were made available on the website and hard copies were able to be viewed in all Council Service Centres and libraries.

OPTIONS

The options available to Council are:

- To adopt the amended Local Law No.1
- To defer the adoption of Local Law No.1
- To note the Local Law No.1 and continue to operate under the current version that was adopted in June 2009 although this would negate the work that Council has put into amending the Local Law.

CONCLUSION

The amended Local Law No.1 was released for public comment in accordance with s.223 of the Local Government Act 1989 and Council's resolution on 18 November 2013 and submissions heard at the Ordinary Council meeting on 3 February 2014.

These actions will fulfil the 2012-2016 Council Plan Action 'Review Local Law No.1 and are presented to Council for consideration.

Attachments
1. Local Law No.1

RECOMMENDATION

That Council

- adopts the amended Local Law No.1 as presented
- Writes to the Moe and District Residents Association and thanks them for their submission.
- writes to the Minister for Local Government and provides a copy of the revised Local Law No.1
- makes copies of the amended Local Law No.1 available on Council's website and in Service Centres and libraries for the public.

ALTERNATE MOTION:**1. That Council:**

- **Adopts the amended Local Law No.1 subject to the removal of clause 9.4**
- **Writes to the Moe and District Residents Association and thanks them for their submission.**
- **Writes to the Minister for Local Government and provides a copy of the revised Local Law No.1**
- **Makes copies of the amended Local Law No.1 available on Council's website and in Service Centres and libraries for the public.**

2. That a report comes back to Council regarding the operation of the South Gippsland Shire Council submission briefings.

Moved: Cr Kam
Seconded: Cr Gibbons

That the Motion be adopted.

CARRIED UNANIMOUSLY

9.3

Review of Local Law No. 1

1	Local Law No.1	81
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LATROBE CITY COUNCIL

LOCAL LAW NO.1 [14 LLW-1]

Adopted 17 February 2014

MEETING PROCEDURE LOCAL LAW

Consideration of all rights contained within the *Charter of Human Rights and Responsibilities Act 2006* took place in the preparation of this Local Law; and any reasonable limitation to human rights can be demonstrably justified.

For enquiries please contact
Tom McQualter
Manager Council Operations & Legal Services
Ph. 1300 367 700



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PART A
INTRODUCTION

1. Title

This Local Law will be known as the "Meeting Procedure Local Law".

2. Purpose and objective of this Local Law

The purpose and objective of this Local Law is to:

- 2.1 Provide for the election of the Mayor;
- 2.2 Regulate the use of the common seal;
- 2.3 Prohibit unauthorised use of the common seal or any device resembling the common seal;
- 2.4 Provide for the procedures governing the conduct of Council meetings and Special Committee Meetings;
- 2.5 To promote and encourage community participation in the system of local government by providing a mechanism for Council to ascertain the community's views and expectations; and
- 2.6 To revoke Council's Process of Municipal Government (Meetings and Common Seal) Local Law No. 1 – 2004.

3. Authorising Provision

This Local Law is made under section 111(1) of the *Local Government Act* 1989.

4. Operation and Commencement and End Dates

This Local Law:

- 4.1 commences on the day following the day on which notice of the making of this Local Law is published in the *Victoria Government Gazette*, and operates throughout the municipal district; and
- 4.2 ends on the 10th anniversary of the day on which it commenced operation.

5. Revocation of Local Law No. 1 - 2004

On the commencement of this Local Law, Council's Process of Municipal Government (Meetings and Common Seal) Local Law No. 1 - 2004 is revoked.

6. Definitions and Notes

6.1 In this Local Law:

"Act" means the *Local Government Act* 1989 (Vic);

"agenda" means the notice of a meeting setting out the business to be transacted at the meeting;

"Authorised Officer" means a member of Council staff who is authorised by Council or the Chief Executive Officer under delegation to carry out specific functions under this Local Law;

"Chair" the position of responsibility for conducting the meeting; the Chair usually takes their physical place at the head of the meeting table and includes an acting, a temporary and a substitute Chair;

"Chief Executive Officer" means the Chief Executive Officer of Council;

"common seal" means the common seal of Council;

"Council" means Latrobe City Council;

"Councillor" has the same meaning as the *Local Government Act 1989*.

"Council meeting" means an Ordinary Meeting or a Special Meeting;

"Deputy Mayor" means the Deputy Mayor of Council;

"division" means a formal count and recording in the minute book, of those Councillors for and against a motion;

"Executive Team" means the team or group of senior officers designated as such in Council's organisational chart or, if no such designation exists, which meets regularly to superintend Council's administration;

"Mayor" means the Mayor of Council;

"Minister" means the Minister responsible for administering the *Local Government Act 1989*;

"minute book" means the collective record of proceedings of Council;

"municipal district" means the municipal district of Council;

"notice of motion" means a notice setting out the text of a motion, which it is proposed to move at the next relevant meeting;

"notice of rescission" means a notice of motion to rescind a resolution made by Council;

"offence" means an act or default contrary to this Local Law;

"Ordinary Meeting" means any meeting of Council which is not a Special meeting;

"Penalty units" mean penalty units as prescribed in the *Sentencing Act 1992*;

"senior officer" has the same meaning as in the *Local Government Act 1989*;

"Special Committee" means a special committee established by Council under section 86 of the Act;

"Special Meeting" means a Special Meeting of Council convened and held in accordance with section 84 or 84A of the Act;

“Resolution” means a formal expression of opinion or intention made by Council.

"visitor" means any person (other than a Councillor, member of a Special Committee or member of Council staff) who is in attendance at a Council meeting or a Special Committee meeting; and

"written" includes duplicated, lithographed, photocopied, printed and typed, and extends to both hard copy and soft copy form.

- 6.2 Introductions to Parts, headings and notes are explanatory and do not form part of this Local Law. They are provided to assist understanding.

PART B

ELECTION OF MAYOR

Introduction: This Part is concerned with the election of the Mayor and any Deputy Mayor. It describes how the Mayor and Deputy Mayor are to be elected.

7. Election of Mayor

The Chief Executive Officer or a member of Council staff nominated by the Chief Executive Officer must facilitate the election of the Mayor in accordance with the provisions of the Act.

8. Method of Voting

The election of the Mayor or temporary Chair must be carried out by a show of hands.

9. Determining the Election of the Mayor

9.1 The Chief Executive Officer or a member of Council staff nominated by the Chief Executive Officer must open the meeting at which the Mayor is to be elected, and call for nominations for the election of a Councillor as a temporary Chair.

9.2 Upon the meeting electing a temporary Chair:

9.2.1 The temporary Chair takes the Chair;

9.2.2 The temporary Chair must invite nominations for the office of Mayor; Councillors may nominate themselves but each nomination must be seconded. If there is only one nomination, the candidate nominated is deemed to be elected; and in the event that a Councillor nominates themselves and they are the only Councillor who is nominated, then that Councillor is elected even if the nomination is not seconded;

9.2.3 If there is more than one nomination, the Councillors present at the meeting must vote for one of the candidates;

- 9.2.4 In the event of a candidate receiving an absolute majority of the votes, that candidate is declared to have been elected;
- 9.2.5 In the event that no candidate receives an absolute majority of the votes, the candidate with the fewest number of votes is declared to be a defeated candidate. The Councillors present at the meeting must then vote for one of the remaining candidates;
- 9.2.6 If one of the remaining candidates receives an absolute majority of the votes, he or she is duly elected. If none of the remaining candidates receives an absolute majority of the votes, the process of declaring the candidates with the fewest number of votes a defeated candidate and voting for the remaining candidates must be repeated until one of the candidates receives an absolute majority of the votes. That candidate must then be declared to have been duly elected;
- 9.2.7 In the event of two or more candidates having an equality of votes and one of them having to be declared:
- 9.2.7.1 a defeated candidate; or
- 9.2.7.2 a candidate or candidates being declared a defeated candidate and the other duly elected,
- the declaration will be determined by lot.
- 9.2.8 If a lot is conducted, the Chief Executive Officer or a member of Council staff nominated by the Chief Executive Officer will have the conduct of the lot and the following provisions will apply:
- 9.2.8.1 each candidate will draw one lot;
- 9.2.8.2 the order of drawing lots will be determined by the alphabetical order of the surnames of the Councillors who received an equal number of votes except that if two or more such Councillors' surnames are identical, the order will be determined by the alphabetical order of the Councillors' first names; and
- 9.2.8.3 as many identical pieces of paper as there are Councillors who received an equal number of votes must be placed in a receptacle. If the lot is being conducted to determine which is a defeated candidate, the word "Defeated" shall be written on one of the pieces of paper, and the Councillor who draws the paper with the word "Defeated" written on it must be declared the defeated candidate (in which event a further vote must be taken on the remaining candidates). Where there are only 2 candidates remaining and the lot is being conducted to determine which candidate is to be duly elected, the word "Elected" must be written on one of the pieces of paper, and the Councillor who draws the paper with the word "Elected" written on it must be declared to have been duly elected.
- 9.2.9 The procedure provided for in this clause 9.2 also applies to the election of a temporary Chair and Chair of a Special Committee.

Explanatory Note

As an example, if 4 candidates are nominated and candidate A receives 3 votes and candidates B, C and D each receive 2 votes, a lot must be used to determine which of candidates B, C or D is considered defeated. This is because candidate A did not receive an absolute majority of the votes (having received only 3 of a possible 9 votes).

In this instance, a lot is used to determine which of the 3 candidates is defeated and then the vote is re-taken for all candidates to determine if a candidate receives an absolute majority.

If the vote is taken and 2 candidates each receive equal votes, a lot is used to determine which candidate is elected. In this instance, the word "Elected" is written on the paper and the person who draws that piece of paper is elected.

9.3 Immediately following the election, the Mayor is to take the chair

9.4 Prior to the taking of the vote, any person nominated to the position of Chair, Mayor or Deputy Mayor must be given a reasonable opportunity to address Council as to their suitability for the office for which they have been nominated.

10. Determining the Election of any Deputy Mayor

If Council resolves that there be an office of Deputy Mayor, the Deputy Mayor is to be elected in the manner provided for in clause 9.2 except that any reference in that sub-clause to:

10.1 a temporary Chair is to be taken as a reference to the Mayor; and

10.2 the Mayor is to be taken as a reference to the Deputy Mayor.

PART C

COUNCIL'S COMMON SEAL

Introduction: The common seal is a device which formally and solemnly records the collective will of Council. The provisions in this Part are designed to protect the integrity of the common seal, and describe when it may be affixed to a document.

11. Council's Common Seal

11.1 The Chief Executive Officer must ensure the security of Council's common seal at all times.

11.2 The Council's common seal must only be used on the authority of the Council given either generally or specifically to a matter that is being or has been presented to Council;

11.3 The affixing of Council's common seal to any document must be attested to by the signature of the:

- 11.3.1 Mayor; or
- 11.3.2 the Chief Executive Officer, or any other member of Council staff authorised by Council.
- 11.4 A person must not use the common seal or any device resembling the common seal without the authority of Council.

Penalty: 10 penalty units

Explanatory Note

Council may resolve to authorise the seal to be affixed to a specific document, or may authorise that the seal be affixed to a particular type or class of documents which may or may not be in existence at the time of the Council resolution.

PART D

MEETINGS PROCEDURE

Introduction: This Part is divided into a number of Divisions. Each Division addresses a distinct aspect of the holding of a meeting. Collectively, the Divisions describe how and when a meeting is convened, when and how business may be transacted at a meeting and the particular circumstances of Special Committee meetings.

▪ ***DIVISION 1 - NOTICES OF MEETINGS AND DELIVERY OF AGENDAS***

12. Dates and Times of Meetings

Council must from time to time fix the date, time and place of all Ordinary meetings.

13. Council may alter Ordinary and Special Meeting dates

Council may change the date, time and place of any Ordinary or Special Meeting which has been fixed and must provide reasonable notice of the change to the public.

14. Special Meetings

14.1 Council may by resolution call a Special Meeting.

14.2 The Mayor or at least 3 Councillors may by a written notice call a Special Meeting.

14.3 The written notice described in clause 14.2 must specify the date and time of the Special Meeting and the business to be transacted.

14.4 The Chief Executive Officer must convene the Special Meeting as specified in the notice.

14.5 The notice necessary to call a meeting in accordance with section 84 of the Act must be delivered to the Chief Executive Officer in sufficient time to

enable reasonable notice of the Special Meeting to be given to the Councillors.

- 14.6 In giving such a notice to the Chief Executive Officer under this clause 14, Councillors should have regard to any need for preparatory investigations to enable the business to be undertaken at the Special Meeting.
- 14.7 Unless all Councillors are present and unanimously agree to deal with any other matter, only the business specified in the notice or resolution is to be transacted at the Special Meeting.
- 14.8 Subject to any resolution providing otherwise, the order of business of any Special Meeting must be the order in which such business stands in the agenda for the meeting.

15. Emergencies

- 15.1 In the case of an emergency, the Chief Executive Officer or, in his or her absence, a senior officer appointed as a member of Council's Executive Team may postpone a Council meeting provided reasonable attempts are made to notify every Councillor.
- 15.2 The Chief Executive Officer must submit a full report of the circumstances which required action under clause 15.1 at the next Ordinary Meeting.

16. Notice of Meeting

- 16.1 A notice of meeting, incorporating or accompanied by an agenda of the business to be dealt with, must be delivered to every Councillor for all Ordinary Meetings at least 48 hours before the meeting.
- 16.2 The notice of meeting must state the date, time and place of the meeting and the business to be dealt with and can be sent by post, facsimile, electronic mail, personally delivered or otherwise as specified by the Councillors or Chief Executive Officer from time to time.
- 16.3 A notice of meeting, incorporating or accompanied by an agenda of the business to be dealt with, must be delivered to every Councillor for any Special Meeting within a reasonable time of the Special Meeting being called. Generally, this means that a notice of meeting must be delivered to every Councillor at least 24 hours before the Special Meeting. A period less than 24 hours may, however, be justified if exceptional circumstances exist.
- 16.4 Reasonable notice of each Ordinary and Special Meeting must be provided to the public. Council may do this for Ordinary Meetings by preparing a schedule of meetings annually, twice yearly or from time to time, and arranging publication of such schedule in a newspaper generally circulating within the municipal district and/or on Council's internet website either at various times throughout the year, or just prior to each Ordinary Meeting.
- 16.5 It will not be necessary for a notice of meeting under clause 16 to be served on any Councillor who has been granted a leave of absence, unless the Councillor has requested in writing to the Chief Executive Officer to continue to be given notice of any meeting to be held during the period of his or her absence and must provide details to the Chief Executive Officer how this notice is to be reasonably delivered.

▪ **DIVISION 2 – QUORUMS**

17. Ordinary Meetings

The quorum for Ordinary Meetings is the presence of a majority of the Councillors.

18. Special Meetings

The quorum for Special Meetings is the presence of a majority of the Councillors.

19. Inability to gain a Quorum

If, after 30 minutes from the scheduled starting time of any Ordinary or Special Meeting, a quorum cannot be obtained:

19.1 those Councillors present; or

19.2 if there are no Councillors present, the Chief Executive Officer, or, in the absence of the Chief Executive Officer, a senior officer appointed as a member of Council's Executive Team,

must adjourn the meeting for a period not exceeding seven days from the date of the adjournment.

20. Inability to maintain a Quorum

If, during any Ordinary or Special Meeting or any adjournment of the meeting, a quorum cannot be maintained:

20.1 those Councillors present; or

20.2 if there are no Councillors present, the Chief Executive Officer, or, in the absence of the Chief Executive Officer, a senior officer appointed as a member of Council's Executive Team,

must adjourn the meeting for a period not exceeding seven days from the date of the adjournment.

21. Inability to achieve or maintain a Quorum due to Conflicts of Interest of Councillors

If a quorum cannot be achieved or maintained due to the disclosure of conflicts of interest by the majority of Councillors, the Chief Executive Officer, or, in his or her absence, a senior officer appointed as a member of Council's Executive Team, must adjourn the meeting for a length of time sufficient to enable dispensation for the affected Councillors to be obtained from the Minister.

22. Adjourned Meetings

22.1 Council may adjourn any meeting.

22.2 The Chief Executive Officer must give notice to each Councillor of the date, time and place to which the meeting stands adjourned and of the business remaining to be considered.

- 22.3 The Chief Executive Officer must provide written notice of a meeting adjourned under clause 17, 18, 19, 20 or 21 but where this is not practicable because time does not permit that to occur, then, provided every reasonable attempt is made to contact every Councillor, notice by telephone, facsimile, email, in person or by some other means is sufficient.

▪ **DIVISION 3 – BUSINESS OF MEETINGS**

23. The Order of Business

The order of business for any Ordinary Meeting will be determined by the Chief Executive Officer and the Mayor to facilitate and maintain open, efficient and effective processes of government. Without detracting from this:

- 23.1 although preparation should aim at consistent agendas from meeting to meeting, this should not preclude altering the order of business to enhance the fluent and open process of government of Council, to meet identified needs of Council or to take advantage of opportunities which may arise from time to time; and
- 23.2 the Chief Executive Officer and the Mayor may include any matter in an agenda which he or she thinks should be considered by that meeting.

24. Change to Order of Business

Once an agenda has been sent to Councillors, the order of business for that meeting may be altered with the consent of the Mayor.

25. Conflicts of Interest

- 25.1 A Councillor must disclose any conflict of interest which that Councillor has in an item of business at the time specified in the agenda.
- 25.2 Nothing in clause 25.1 detracts from a Councillor's duty under the Act to disclose the existence, type and, if necessary, nature, of any conflict of interest which that Councillor has in an item of business immediately before the consideration or discussion of that item of business.

Explanatory Note

Section 77A of the Act defines when a Councillor will have a direct and indirect interest. Any Councillor who has a conflict of interest must comply with the requirements of section 79 of the Act.

Among these requirements is the requirement to disclose the existence and type of the conflict of interest. This must be done 'immediately' before the consideration or discussion of the item in which the Councillor has a conflict of interest.

So, even if the Councillor has disclosed the conflict of interest earlier in the meeting, the existence and type (and, if necessary, nature) of the conflict of interest must again be disclosed immediately before any consideration or discussion of the agenda item occurs.

26. Urgent Business

Business cannot be admitted as urgent business other than by resolution of Council and only then if it:

- 26.1 relates to or arises out of a matter which has arisen since distribution of the agenda; and
- 26.2 cannot safely or conveniently be deferred until the next Ordinary Meeting or involves a matter of urgent community concern.

▪ **DIVISION 4 – MOTIONS AND DEBATE**

27. Councillors may propose Notices of Motion

- 27.1 Councillors may ensure that an issue is listed on an agenda by completing a Councillor's Notice of Motion form.
- 27.2 A notice of motion cannot be accepted by the Chair, unless it has been listed on the agenda for the meeting at which it was proposed to be moved or unless it is accepted by Council as urgent business.

28. Notice of Motion

- 28.1 A notice of motion must be in writing. The Councillor must lodge with or email to the Chief Executive Officer a signed notice of motion no later than 10.00 am on the Friday before the next meeting of Council, to allow sufficient time for him or her to give each Councillor notice of such notice of motion.
- 28.2 The full text of any notice of motion accepted by the Chief Executive Officer must be included in the material accompanying the agenda.
- 28.3 If the notice of motion is not sufficiently clear or is not received prior to 10.00 am on the Friday before the next meeting of Council, in time to allow the Chief Executive Officer to distribute the notice to each Councillor before the next Ordinary Meeting, the notice of motion can only be accepted as urgent business by resolution of Council under clause 26 of this Local law.
- 28.4 The Chief Executive Officer must cause all notices of motion to be numbered, dated and entered in the notice of motion book in the order in which they were received.
- 28.5 Except by leave of Council, each notice of motion before any meeting must be considered in the order in which they were entered in the notice of motion book.
- 28.6 If a Councillor who has given a notice of motion is absent from the meeting, any other Councillor may move the motion.
- 28.7 If a notice of motion is not moved at the meeting at which it is listed, it lapses.

29. Rejection of a Notice of Motion

The Chief Executive Officer may reject any proposed notice of motion that in his or her opinion is too vague. In that event, the Chief Executive Officer must:

- 29.1 give the Councillor delivering the rejected notice of motion an opportunity to amend the proposed notice of motion; and
- 29.2 provide the Councillor with reasons for rejecting their notice of motion.

30. Chair's Duty

Any motion or amendment which is determined by the Chair to be:

- 30.1 defamatory;
- 30.2 objectionable in language or nature;
- 30.3 vague or unclear in intention;
- 30.4 outside the powers of Council; or
- 30.5 irrelevant to the item of business on the agenda and has not been admitted as urgent or general business, or purports to be an amendment but is not,

must not be accepted by the Chair.

31. Introducing a Motion or an Amendment

The procedure for moving any motion or amendment is:

- 31.1 the mover must state the motion without speaking to it;
- 31.2 the motion must be seconded and the seconder must be a Councillor other than the mover; if a motion is not seconded, the motion lapses for want of a seconder;
- 31.3 if a motion or an amendment is moved and seconded the Chair must ask:
"Is the motion or amendment opposed?"
- 31.4 if no Councillor indicates opposition, the Chair must ask:
"Does any Councillor wish to speak in favour of the motion?"
- 31.5 if no Councillor indicates that they oppose the motion and if no Councillor wishes to speak in favour of the motion, the Chair must declare the motion or amendment carried without discussion;
- 31.6 if a Councillor indicates opposition under clause 31.3 contained herein, then the Chair must call on the mover to address the meeting; and
- 31.7 after the mover has addressed the meeting, the seconder may address the meeting or reserve their right to address the meeting at a later point in the debate; and

- 31.8 after the seconder has addressed the meeting (or after the mover has addressed the meeting if the seconder does not address the meeting or reserves their right,) the Chair must invite debate by calling on any Councillor who wishes to speak to the motion, providing an opportunity to alternate between those wishing to speak against the motion and those wishing to speak for the motion; and
- 31.9 if, after the mover and seconder have addressed the meeting, or after the mover or seconder has declined to address the meeting, the Chair has invited debate and no Councillor speaks to the motion, then the Chair must put the motion to the vote.
- 31.10 if a Councillor wishes to speak in favour of the motion following a call from the Chair under clause 31.4, then the Chair must call on the mover to address the meeting; and
- 31.11 after the mover has addressed the meeting, the seconder may address the meeting or reserve their right to address the meeting; and
- 31.12 after the seconder has addressed the meeting (or after the mover has addressed the meeting if the seconder does not address the meeting,) the Chair must invite and provide an opportunity for any Councillor to speak in favour of the motion; and
- 31.13 if, the Chair has invited any Councillor to speak in favour of the motion and no further Councillors wish to speak in favour of the motion, then the Chair must put the motion to the vote.

32. Right of Reply

- 32.1 The mover of a motion, including an amendment, has a right of reply to matters raised during debate.
- 32.2 After the right of reply has been exercised but subject to any Councillor exercising his or her right to ask any question concerning or arising out of the motion, the motion must immediately be put to the vote without any further discussion or debate.

33. Moving an Amendment

- 33.1 Subject to clause 33.2, a motion which has been moved and seconded but not put to the vote may be amended by leaving out or adding words. Any added words must be relevant to the subject of the motion. The added words or deletion must not be contradictory to the form or substance of the motion.
- 33.2 A motion to confirm a previous resolution of Council cannot be amended.

34. Who may propose an Amendment

An amendment may be proposed or seconded by any Councillor, except the mover or seconder of the original motion.

35. Who may debate an Amendment

A Councillor may address the meeting once on any amendment, whether or not they have spoken to the original motion, but debate must be confined to the terms of the amendment.

36. How many Amendments may be Proposed

36.1 Any number of amendments may be proposed to a motion but only 1 amendment may be accepted by the Chair at any one time.

36.2 No second or subsequent amendment, whether to the motion or an amendment of it, may be taken into consideration until the previous amendment has been dealt with.

37. An Amendment Once Carried

37.1 If the amendment is carried, the motion as amended then becomes the motion before the meeting and is declared carried and no further vote is taken on the original motion.

37.2 If the amendment is not carried, the amended motion is declared lost.

37.3 If there are no further proposed amendments to the original motion, the original motion is then put to the vote.

38. Withdrawal of Motions and Amendments

38.1 Before any motion or amendment is put to the vote, it may be withdrawn by the mover and seconder with leave of Council.

38.2 If the majority of Councillors object to the withdrawal of the motion or amendment, it may not be withdrawn.

39. Separation of Motions and Amendments

Where a motion or amendment contains more than one part, a Councillor may request the Chair to put the motion to the vote in separate parts.

40. Chair may Separate or Aggregate Motions and Amendments

The Chair may decide to put any motion to the vote in:

40.1 several parts; or

40.2 its aggregate form.

41. Foreshadowing Motions

41.1 At any time during debate a Councillor may foreshadow a motion so as to inform Council of his or her intention to move a motion at a later stage in the meeting, but this does not extend any special right to the foreshadowed motion.

- 41.2 A foreshadowed motion must substantially relate to an item already listed on the agenda of the Ordinary Meeting, otherwise it can only be accepted by Council as urgent business.
- 41.3 A motion foreshadowed may be prefaced with a statement that in the event of a particular motion before the Chair being resolved in a certain way, a Councillor intends to move an alternative or additional motion.
- 41.4 Upon a motion being foreshadowed, the Chair may request the Councillor who foreshadowed it to move that motion immediately or after the business currently before the meeting is disposed of.
- 41.5 The Chief Executive Officer or person taking the minutes of the meeting is not expected to record foreshadowed motions in the minutes until the foreshadowed motion is formally moved.

42. Motions and Amendments in Writing

- 42.1 The Chair must require that a complex or detailed motion or amendment be in writing.
- 42.2 Council may adjourn the meeting while a motion or amendment is being written.
- 42.3 Council may defer a matter until a motion has been written, allowing the meeting to proceed uninterrupted.

43. Repeating Motion and/or Amendment

The Chair may request the Chief Executive Officer or the person taking the minutes to read the motion or amendment to the meeting before the vote is taken.

44. Notice of Motion that is Lost

Unless the Council resolves to re-list the notice of motion at a future meeting of Council, a notice of motion which has been lost must not be put before Council in its substantive or amended form for at least three months from the date it was lost.

45. Debate must be relevant to the Motion

- 45.1 Debate must always be relevant to the motion before the Chair, and, if not, the Chair must request the speaker to confine debate to the motion.
- 45.2 If after being requested to confine debate to the motion before the Chair, the speaker continues to debate irrelevant matters, the Chair may direct the speaker to not speak further in respect of the motion then before the Chair.
- 45.3 A speaker to whom a direction has been given under clause 45.2 contained must comply with that direction. Should the speaker fail to adhere to the direction, the Chair may require the speaker to leave the chamber until the motion has been put to the vote. The speaker must comply with any such requirement.

46. Priority of address

In the case of competition for the right to speak, the Chair must decide the order in which the Councillors concerned will be heard.

47. Speaking Times

A Councillor must not speak longer than the time set out below, unless granted an extension by the Chair:

47.1 the mover of a motion or an amendment which has been opposed or where a Councillor has asked to speak in favour of the motion under clause 31: 3 minutes;

47.2 any other Councillor: 3 minutes; and

47.3 the mover of a motion exercising a right of reply: 3 minutes.

48. Extension of Speaking Times

48.1 An extension of speaking time may be granted by resolution of Council at any time before, during or immediately after debate, but only one extension is permitted for each speaker on any question and the extension cannot be granted for longer than 3 minutes.

48.2 A motion for an extension of speaking time cannot be accepted by the Chair if another speaker has commenced participation in the debate.

49. Addressing the Meeting

If the Chair so determines:

49.1 any person addressing the Chair must refer to the Chair as:

49.1.1 Madam Mayor; or

49.1.2 Mr Mayor; or

49.1.3 Madam Chair; or

49.1.4 Mr Chair

as the case may be;

49.2 any Councillor moving or seconding a motion shall stand to address Council;

49.3 all Councillors, other than the Mayor, must be addressed as Cr

_____ (name).

49.4 all members of Council staff, must be addressed as Mr or Ms

_____ (name) as appropriate or by their official title.

50. Right to Ask Questions

- 50.1 A Councillor may, at any time when no other Councillor is speaking, ask any question concerning or arising out of the motion or amendment before the Chair.
- 50.2 The Chair has the discretion to restrict the number of questions asked and answered to allow for the orderly flow of the meeting.

▪ **DIVISION 5 – PROCEDURAL MOTIONS**

51. Procedural Motions

- 51.1 Unless otherwise prohibited, a procedural motion may be moved at any time and must be dealt with immediately by the Chair.
- 51.2 Procedural motions require a seconder.
- 51.3 Procedural motions do not need to be recorded in the minutes of the meeting, unless requested by the Chair.
- 51.4 Notwithstanding any other provision in this Local Law, procedural motions must be dealt with in accordance with the following table:

PROCEDURAL MOTIONS TABLE

Procedural Motion	Form	Mover and Seconder	When Motion Prohibited	Effect if Carried	Effect if Lost	Debate Permitted on Motion
1. Adjournment of debate to later hour and/or date	That this matter be adjourned to *am/pm and/or *date	Any Councillor who has not moved or seconded the substantive motion or otherwise spoken to the substantive motion	(a) During the election of a Chair; (b) When another Councillor is speaking	Motion and amendment is postponed to the stated time and/or date	Debate continues unaffected	Yes
2. Adjournment of debate indefinitely	That this matter be adjourned until further notice	Any Councillor who has not moved or seconded the substantive motion or otherwise spoken to the substantive motion	(a) During the election of a Chair; (b) When another Councillor is speaking; (c) When the matter is one in respect of which a call of the Council has been made for that meeting in accordance with section 85 of the Act; or (d) When the motion would have the effect of causing Council to be in breach of a legislative requirement	Motion and any amendment postponed but may be resumed at any later meeting if on the agenda	Debate continues unaffected	Yes

Procedural Motion	Form	Mover and Secunder	When Motion Prohibited	Effect if Carried	Effect if Lost	Debate Permitted on Motion
3. The closure	That the motion be now put	Any Councillor who has not moved or seconded the substantive motion or otherwise spoken to the substantive motion	During nominations for Chair	Motion or amendment in respect of which the closure is carried is put to the vote immediately without debate of this motion, subject to any Councillor exercising his or her right to ask any question concerning or arising out of the motion	Debate continues unaffected	No
4. Laying question on the table	That the question lie on the table	Any Councillor who has not moved or seconded the substantive motion or otherwise spoken to the substantive motion	(a) During the election of a Chair; (b) During a meeting which is a call of the Council has been made for that meeting in accordance with section 85 of the Act; or (d) When the motion would have the effect of causing Council to be in breach of a legislative requirement	Motion and amendment is not further discussed or voted on until: (a) Council resolves to take the question from the table at the same meeting; or (b) The matter is placed on a subsequent agenda and Council resolves to take the question from the table	Debate continues unaffected	No

Procedural Motion	Form	Mover and Secunder	When Motion Prohibited	Effect if Carried	Effect if Lost	Debate Permitted on Motion
5. Previous question	That the question be not now put	Any Councillor who has not moved or seconded the substantive motion or otherwise spoken to the substantive motion	<p>(a) During the election of a Chair;</p> <p>(b) When another Councillor is speaking;</p> <p>(c) When the matter is one in respect of which a call of the Council has been made for that meeting in accordance with section 85 of the Act;</p> <p>(d) When an amendment is before Council; or</p> <p>(e) When a motion would have the effect of causing Council to be in breach of a legislative requirement</p>	<p>(a) No vote or further discussion on the motion until it is placed on a subsequent agenda for a later meeting; and</p> <p>(b) Proceed to next business</p>	Motion (as amended up to that time) put immediately without further amendment or debate	Yes

Procedural Motion	Form	Mover and Secunder	When Motion Prohibited	Effect if Carried	Effect if Lost	Debate Permitted on Motion
6. Proceeding to next business	That the meeting proceed to the next business Note: This motion: (a) may not be amended; (b) may not be debated; and (c) must be put to the vote as soon as seconded	Any Councillor who has not moved or seconded the substantive motion or otherwise spoken to the substantive motion	(a) During the election of a Chair; (b) When another Councillor is speaking; (c) When the matter is one in respect of which a call of the Council has been made in accordance with section 88 of the Act; or (d) When a motion would have the effect of causing Council to be in breach of a legislative requirement	If carried in respect of: (a) An amendment, Council considers the motion without reference to the amendment: (b) A motion - no vote or further discussion on the motion until it is placed on an agenda for a later meeting	Debate continues unaffected	No

▪ **DIVISION 6 – RESCISSION MOTIONS**

52. Notice of Rescission

52.1 A Councillor may propose a notice of rescission provided:

52.1.1 the resolution proposed to be rescinded has not been acted on; and

52.1.2 the notice of rescission is lodged with or emailed to the Chief Executive Officer setting out;

52.1.2.1 the resolution to be rescinded; and

52.1.2.2 the meeting and date when the resolution was made.

Explanatory Note

It should be remembered that a notice of rescission is a form of notice of motion.

Accordingly, all provisions in the Local Law regulating notices of motion equally apply to notices of rescission.

When the notice of rescission is before the meeting, it is like any other form of motion. It is referred to as a "rescission motion".

52.2 A resolution will be deemed to have been acted on if:

52.2.1 its contents or substance has been formally communicated to a person whose interests are materially affected by it; or

52.2.2 a statutory process has been commenced,

so as to vest enforceable rights in or obligations on Council or any other person.

52.3 The Chief Executive Officer or an appropriate member of Council staff must defer implementing a resolution which:

52.3.1 has not been acted on; and

52.3.2 is the subject of a notice of rescission which has been delivered to the Chief Executive Officer in accordance with clause 52.1.2,

unless deferring implementation of the resolution would have the effect of depriving the resolution of efficacy.

Explanatory Note

By way of example, assume that, on a Monday evening, Council resolves to have legal representation at a planning appeal to be heard on the following Thursday. Assume also that, immediately after that resolution is made, a Councillor lodges a notice of motion to rescind that resolution. Finally, assume that the notice of rescission would not be dealt with until the next Monday evening (being after the day on which the planning appeal is to be heard).

In these circumstances, deferring implementation of the resolution would have the effect of depriving the resolution of efficacy. This is because the notice of rescission would not be debated until after the very thing contemplated by the resolution had come and gone. In other words, by the time the notice of rescission was dealt with the opportunity for legal representation at the planning appeal would have been lost.

Clause 52.3 would, in such circumstances, justify the Chief Executive Officer or an appropriate member of Council staff actioning the resolution rather than deferring implementation of it.

53. If Lost

53.1 If a rescission motion is lost, a similar motion may not be put before Council for at least 3 months from the date it was last lost, unless Council resolves that the notice of motion be re-listed at a future meeting.

53.2 If a rescission motion is lost, the Chief Executive Officer or an appropriate member of Council staff is not prevented from acting upon the original resolution even if a subsequent notice of rescission has been listed for a Council meeting at least 3 months subsequent to when the motion for rescission was lost.

Explanatory Note

By way of example, assume that Council resolves to write a letter to a Minister relating to a planning matter. Immediately after the resolution is made, a Councillor lodges a notice of motion to rescind that resolution at the next Council meeting. The notice of rescission is subsequently lost. Assume that the Councillor seeks to lodge a further notice of rescission to be heard in not less than 3 months time.

Clause 53.2 would, in such circumstances, justify the Chief Executive Officer or an appropriate member of Council staff actioning the original resolution rather than deferring implementation of it until after the further notice of rescission.

54. If Not Moved

If a rescission motion is not moved at the meeting at which it is listed, it lapses and can not be put before Council for at least 3 months from the date it lapsed.

55. May be Moved by any Councillor

A rescission motion listed on an agenda may be moved by any Councillor present but may not be amended.

56. When Not Required – Changes to Council Policy

56.1 A rescission motion is not required where Council wishes to change policy.

56.2 The following provisions apply if Council wishes to change policy:

- 56.2.1 if the policy has been in force in its original or amended form for less than 12 months, a motion revoking the policy must first be passed; and
- 56.2.2 any intention to change a Council policy which may result in a significant impact on any person should be communicated to those affected. This may entail publication and consultation, either formally or informally.

▪ **DIVISION 7 – POINTS OF ORDER**

57. Chair to Decide

The Chair must decide all points of order by stating the provision, rule, practice or precedent which he or she considers applicable to the point raised without entering into any discussion or comment.

58. Chair may Adjourn to Consider

- 58.1 The Chair may adjourn the meeting to consider a point of order but otherwise must rule on it as soon as it is raised.
- 58.2 All other questions and matters before Council are suspended until the point of order is decided.

59. Dissent from Chair's Ruling

- 59.1 A Councillor may move that the Council disagree with the Chair's ruling on a point of order, by moving:
 - "That the Chair's ruling [setting out that ruling or part of that ruling] be dissented from".
- 59.2 When a motion in accordance with this clause is moved and seconded, the Chair must invite the mover to state the reasons for his or her dissent and the Chair may then reply.
- 59.3 The Chair must put the motion in the following form:
 - "That the Chair's ruling be dissented from."
- 59.4 The Chair must remain in the Chair during the motion of dissent and he or she maintains their right to a second vote.
- 59.5 If the vote is in the negative, the meeting proceeds.
- 59.6 If the vote is in the affirmative, the Chair must reverse or vary (as the case may be) his or her previous ruling and proceed.
- 59.7 The defeat of the Chair's ruling is in no way a motion of censure or non-confidence in the Chair, and should not be so regarded by the meeting.

60. Procedure for Point of Order

60.1 A Councillor raising a point of order must:

60.1.1 state the point of order; and

60.1.2 state any section, clause, paragraph or provision relevant to the point of order;

before resuming his or her seat.

60.2 Any Councillor interrupted by another Councillor calling for a point of order must sit down and remain silent until the Councillor raising the point of order has been heard and the question disposed of by the Chair.

61. Valid Points of Order

A point of order may be raised in relation to:

61.1 a motion, which, under clause 31, or a question which, under clause 62.5, should not be accepted by the Chair;

61.2 a question of procedure; or

61.3 any act of disorder.

Explanatory Note

Rising to express a difference of opinion or to contradict a speaker is not a point of order.

Raising issues irrelevant to the motion before the meeting can be considered a basis of a valid point of order.

Making defamatory remarks or verbally personally attacking another Councillor would be considered a basis for a valid point of order.

▪ ***DIVISION 8 – PUBLIC QUESTION TIME***

62. Question Time

62.1 There will be a public question time at every Ordinary Meeting to enable members of the public to submit questions to Council.

62.2 Public Question Time will have a duration determined by the Chair from time to time.

62.3 Questions submitted to Council no later than 12 noon on the day of the meeting and must be prefaced by the name and address of the person submitting the question and generally be in a form approved or permitted by Council.

62.4 If a person has submitted 2 or more questions to a meeting, the second question and beyond:

- 62.4.1 may, at the discretion of the Chair, be deferred until all other persons who have asked a question have had their first question asked and answered; or
- 62.4.2 may not be asked if the time allotted for public question time has expired.
- 62.5 A question may be disallowed by the Chair if the Chair determines that it:
 - 62.5.1 relates to a matter outside the duties, functions and powers of Council;
 - 62.5.2 is defamatory, indecent, abusive, offensive, irrelevant, trivial or objectionable in language or substance;
 - 62.5.3 deals with a subject matter already answered;
 - 62.5.4 is aimed at embarrassing a Councillor or a member of Council staff;
 - 62.5.5 relates to personnel matters;
 - 62.5.6 relates to the personal hardship of any resident or ratepayer;
 - 62.5.7 relates to industrial matters;
 - 62.5.8 relates to contractual matters;
 - 62.5.9 relates to proposed developments;
 - 62.5.10 relates to legal advice;
 - 62.5.11 relates to matters affecting the security of Council property; or
 - 62.5.12 relates to any other matter which Council considers would prejudice Council or any person.
- 62.6 All questions and answers must be as brief as possible, and no discussion may be allowed other than for the purposes of clarification.
- 62.7 The Chair may nominate a Councillor or the Chief Executive Officer to respond to a question.
- 62.8 A Councillor or the Chief Executive Officer may require a question to be put on notice. If a question is put on notice, the answer to it must be incorporated in the minutes of the meeting at which it was asked and a written copy of the answer sent to the person who asked the question.
- 62.9 A Councillor or the Chief Executive Officer may advise Council that it is his or her opinion that the reply to a question should be given in a meeting closed to members of the public. The Councillor or Chief Executive Officer (as the case may be) must state briefly the reason why the reply should be so given and, unless Council resolves to the contrary, the reply to such question must be so given.

▪ **DIVISION 9 – PETITIONS AND JOINT LETTERS**

63. *Petitions and Joint Letters*

- 63.1 A petition shall be defined as a formal written complaint or request, typed or printed without erasure, requesting Council to take action, from ten or more persons and is signed by all persons whose name and physical address appears on a page of the petition bearing the wording of the whole petition and shall include the name and address of the head petitioner.
- 63.2 A petition must be addressed to the Council, Mayor, Councillor or a Council Officer.
- 63.3 A petition must not be defamatory, indecent, abusive or offensive in language or content.
- 63.4 A petition must not relate to matters beyond the powers of Council or be related to a statutory planning application.
- 63.5 Unless Council determines by resolution to consider it as an item of urgent business, no motion (other than a motion to receive the same and advise the head petitioner of council's decision) may be made on any petition, joint letter, memorial or other like application until the next Ordinary Meeting after that at which it has been presented.
- 63.6 It is incumbent on every Councillor presenting a petition or joint letter to acquaint him or herself with the contents of that petition or joint letter, and to ascertain that it does not contain language disrespectful to Council and that the contents do not violate any Local Law.
- 63.7 Every Councillor presenting a petition or joint letter to Council must write his or her name at the beginning of the petition or joint letter.
- 63.8 Every petition or joint letter presented to Council must be in writing (other than pencil), typing or printing, contain the request of the petitioners or signatories and be signed by at least 10 people.
- 63.9 Each page of a Petition shall bear the whole of the wording of the Petition. Every petition or joint letter must be signed by the persons whose names are appended to it by their names or marks, and, except in cases of incapacity or sickness, by no one else and the address of every petitioner or signatory must be clearly stated.

▪ **DIVISION 10 – MEMBERS OF PUBLIC SPEAKING BEFORE COUNCIL**

64. *Request to speak before Council to be referred to Mayor*

- 64.1 At every Ordinary Meeting, time may be allocated to enable any member of the public who has made a request under clause 64.2 to address Council and answer questions put to them.
- 64.2 A member of the public wishing to be heard by Council at a meeting must make a request no later than 12 noon on the day of the meeting to the Chief Executive Officer who must refer the request to the Mayor.

64.3 Approval to address Council at an Ordinary Meeting will be at the discretion of the Mayor and shall have regard to:

64.3.1 the nature of the matter to be discussed;

64.3.2 the number of speakers;

64.3.3 time limits that may be imposed upon speakers;

64.3.4 priorities in relation to other Council business;

64.3.5 other members of the community present who also wish to address the Council; and

64.3.6 whether such an opportunity has already been provided to the person at this meeting or another meeting.

65. Consideration of Request

If the Mayor permits a member of the public to be heard he or she may direct the Chief Executive Officer as to the meeting at which the member of the public will be heard. Alternatively, the Mayor can ask the Chief Executive Officer to refer the request to Council.

66. Notification of Hearing

If the Mayor permits a member of the public to be heard, the Chief Executive Officer must notify all Councillors of that permission, and also notify the member of the public of the date, time, and place at which they will be heard.

67. Summary of Submissions

67.1 A member of the public may lodge with the Chief Executive Officer a written submission detailing the subject matter of their address prior to the member of the public addressing Council. The submission must be provided to the Chief Executive Officer at least 30 minutes prior to the commencement of the Council Meeting to enable the submission to be distributed to Councillors. A failure to adhere to this requirement may result in the submission not being distributed to Councillors and is at the discretion of the Mayor.

67.2 All material distributed to the Councillors by the member of the public is at the discretion of the Chair, to allow for the orderly conduct of the meeting.

68. Limitations upon Speakers

The Mayor may set time limits on the length and address of each speaker and if appropriate may request the member of public to shorten, summarise or finalise their address to Council or their answers to questions posed by Councillors to allow ordinary business to continue.

69. Questions but no discussion permitted

Councillors and the Chief Executive Officer may question the member of the public on matters raised by it for purposes of clarification but no discussion will be allowed.

70. Matter to be Determined at a subsequent meeting

No motion must be allowed on any address made to Council until the next Ordinary Meeting after the address has been heard, unless Council, by resolution, decides otherwise.

71. When public participation inappropriate

A request to address a meeting of Council may be rejected if Council has resolved to close the meeting in respect of a matter under section 89(2) of the Act.

▪ **DIVISION 11 – VOTING**

72. How Motion Determined

Subject to clause 31, to determine a motion before a meeting the Chair must first call for those in favour of the motion and then those opposed to the motion, and must then declare the result to the meeting.

73. Casting Vote

In the event of a tied vote, the Chair must exercise the casting vote in accordance with the Act.

74. By Show of Hands

A vote will be taken by a show of hands and recorded in the minutes of the meeting.

75. Procedure for a Division

75.1 Immediately after any question is put to a meeting and before the next item of business has commenced, a Councillor may call for a division.

75.2 When a division is called for, the vote already taken must be treated as set aside and the division shall decide the question, motion or amendment, and therefore no Councillor is prevented from changing his or her original vote at the voting on the division and the voting on the division will determine the Council's resolution on the issue.

75.3 When a division is called for, the Chair must:

75.3.1 first ask each Councillor wishing to vote in the affirmative to raise their hand and, upon such request being made, each Councillor wishing to vote in the affirmative must raise their hand. The Chair must then state, and the Chief Executive Officer or any member of Council staff taking the minutes must record in the minutes, the names of those Councillors voting in the affirmative; and

75.3.2 then ask each Councillor wishing to vote in the negative to raise their hand and, upon such request being made, each Councillor wishing to vote in the negative must raise their hand. The Chair must then state, and the Chief Executive Officer or any member of Council staff taking the minutes must record in the minutes, the names of those Councillors voting in the negative; and

75.3.3 the Chair must declare the result to the meeting.

76. No Discussion Once Declared

Once a vote on a question has been taken, no further discussion relating to the question is allowed unless the discussion involves:

- 76.1 a Councillor requesting, before the next item of business is considered, that his or her opposition to a resolution be recorded in the minutes or a register maintained for that purpose; or
- 76.2 foreshadowing a notice of rescission where a resolution has just been made, or a positive motion where a resolution has just been rescinded.

Explanatory Note

For example, clause 76.2 would allow some discussion if, immediately after a resolution was made, a Councillor foreshadowed lodging a notice of rescission to rescind that resolution.

Equally, clause 76.2 would permit discussion about a matter which would otherwise be left in limbo because a notice of rescission had been successful. For instance, assume that Council resolved to refuse a planning permit application. Assume further that this resolution was rescinded.

Without a positive resolution – to the effect that a planning permit now be granted – the planning permit application will be left in limbo; hence the reference in clause 76.2 to discussion about a positive motion where a resolution has just been rescinded.

▪ **DIVISION 12 – MINUTES**

77. Confirmation of Minutes

At every meeting of Council the minutes of the preceding meeting(s) must be dealt with as follows:

- 77.1 A copy of the minutes must be delivered to each Councillor no later than 48 hours before the next meeting;
- 77.2 If no Councillor indicates opposition, the minutes must be declared to be confirmed;
- 77.3 If a Councillor indicates opposition to the minutes:
 - 77.3.1 He or she must specify the item(s) to which he or she objects;
 - 77.3.2 The objected item(s) must be considered separately and in the order in which they appear in the minutes;
 - 77.3.3 The Councillor objecting must move accordingly without speaking to the motion;
 - 77.3.4 The motion must be seconded;

77.3.5 The Chair must ask;

“Is the motion opposed?”

If no Councillor indicates opposition, then the Chair must declare the motion carried without discussion and then ask the second of the questions described in clause 77.3.9;

If a Councillor indicates opposition, then the Chair must call on the mover to address the meeting;

77.3.6 After the mover has addressed the meeting, the seconder may address the meeting;

77.3.7 After the seconder has addressed the meeting (or after the mover has addressed the meeting if the seconder does not address the meeting), the Chair must invite debate by calling on any Councillor who wishes to speak to the motion, providing an opportunity to alternate between those wishing to speak against the motion and those wishing to speak for the motion;

77.3.8 If, after the mover has addressed the meeting, the Chair invites debate and no Councillor speaks to the motion, the Chair must put the motion; and

77.3.9 The Chair must, after all objections have been dealt with, ultimately ask:

"The question is that the minutes be confirmed" or

"The question is that the minutes, as amended, be confirmed",

and he or she must put the question to the vote accordingly;

77.4 A resolution of Council must confirm the minutes and the minutes must, if practicable, be signed by the Chair of the meeting at which they have been confirmed as soon as practicable after the minutes have been confirmed;

77.5 The minutes must be entered in the minute book and each item in the minute book must be entered consecutively;

77.6 Unless otherwise resolved or required by law, minutes of a Special Committee requiring confirmation by Council must not be available to the public until confirmed by Council; and

77.7 The Chief Executive Officer (or other member of Council staff taking the minutes of such meeting) must keep minutes of each Council meeting, and those minutes must record:

77.7.1 The date, place, time and nature of the meeting;

77.7.2 The names of the Councillors present and the names of any Councillors who apologised in advance for their non-attendance;

77.7.3 The names of the members of Council staff present;

- 77.7.4 Any disclosure of the existence and type (and, where appropriate, nature) of a conflict of interest made by a Councillor, and when such disclosure occurred;
- 77.7.5 Arrivals and departures (including temporary departures) of Councillors during the course of the meeting;
- 77.7.6 Each motion and amendment moved (including motions and amendments that lapse for the want of a seconder);
- 77.7.7 The vote cast by each Councillor in accordance as described in clause 74;
- 77.7.8 The vote cast by each Councillor upon a division;
- 77.7.9 The vote cast by any Councillor who has requested that his or her vote be recorded in the minutes;
- 77.7.10 Questions upon notice;
- 77.7.11 The failure of a quorum;
- 77.7.12 The date and time the meeting was commenced, adjourned, resumed and concluded;
- 77.7.13 Any adjournment of the meeting and the reasons for that adjournment; and
- 77.7.14 The time at which standing orders were suspended and resumed; and
- 77.7.15 Any other matter that the Chief Executive Officer thinks should be recorded to clarify the intention of the meeting or the reading of the minutes.

78. No Debate on Confirmation of Minutes

No discussion or debate on the confirmation of minutes is permitted except where their accuracy as a record of the proceedings of the meeting to which they relate is questioned.

79. Deferral of Confirmation of Minutes

Council may defer the confirmation of minutes until later in the meeting or until the next meeting if considered appropriate.

80. Recording of Meetings

A person must not operate audiotape or other recording equipment at any Council meeting without first obtaining the consent of Council or the Chair (as the case may be). Such consent may at any time during the course of such meeting be revoked by Council or the Chair (as the case may be).

Penalty: 5 penalty units.

▪ **DIVISION 13 – BEHAVIOUR**

81. Public Addressing the Meeting

Any member of the public addressing Council must extend due courtesy and respect to Council and the processes under which it operates and must take direction from the Chair whenever called on to do so.

82. Chair May Remove

The Chair may order and cause the removal of any person, including a Councillor, who disrupts any meeting or fails to comply with a direction.

83. Suspensions

Council may by resolution suspend from a portion of the meeting, or for the balance of the meeting, any Councillor whose actions have disrupted the business of Council at that meeting, and have impeded its orderly conduct.

84. Offences

It is an offence for:

- 84.1 a Councillor to not withdraw an expression considered by the Chair to be offensive or disorderly, and apologise when called on twice by the Chair to do so;

Penalty: 2 penalty units

- 84.2 any person, not being a Councillor, who is guilty of any improper or disorderly conduct, to not leave the Chamber when requested by the Chair to do so;

Penalty: 5 penalty units

- 84.3 any person to fail to comply with a lawful direction of the Chair in relation to the conduct of the meeting and the maintenance of order;

Penalty: 2 penalty units

- 84.4 a Councillor to not leave the Chamber on suspension;

Penalty: 5 penalty units

- 84.5 any person to fraudulently sign a petition or joint letter which is presented to Council or has the intention of being presented to Council.

Penalty: 10 penalty units

Explanatory Note

Some (but not all) breaches of this Local Law result in an offence being committed. Those breaches which result in an offence being committed are to be found in clause 84 and those clauses where a penalty and 'penalty units' appear below the text.

The penalty units shown are the maximum penalty units which a Court can impose. It is always open to a Court to impose no penalty unit or a lesser number of penalty units than are shown.

If an offence has been committed, the person who committed the offence can be prosecuted in a Court.

85. Chair may adjourn disorderly meeting

If the Chair is of the opinion that disorder at the Council table or in the gallery makes it desirable to adjourn the meeting, he or she may adjourn the meeting to a later time on the same day or to some later day as he or she thinks proper. In that event, the provisions of clause 22.2 and 22.3 apply.

86. Removal from Chamber

The Chair, or Council in the case of a suspension, may ask the Chief Executive Officer or a member of the Victoria Police to remove from the Chamber any person who acts in breach of this Local Law and whom the Chair has ordered to be removed from the gallery under clause 83 of this Local Law or whom Council has suspended under clause 83.

87. Infringement Notices

- 87.1 An authorised officer may issue an infringement notice in the form of the notice in Schedule 1 of this Local law.
- 87.2 A person issued with an infringement notice may pay the penalty indicated to the Chief Executive Officer, Latrobe City Council, PO Box 264, Morwell 3840.
- 87.3 To avoid prosecution, the penalty indicated must be paid within 28 days after the day on which the infringement notice is issued.
- 87.4 A person issued with an infringement notice is entitled to defend the prosecution in Court.

▪

▪ **DIVISION 14 – MISCELLANEOUS**

88. The Chair's Duties and Discretions

In addition to the duties and discretions provided in this Local Law, the Chair must:

- 88.1 not accept any motion, question or statement which is derogatory, or defamatory of any Councillor, or member of the community; and
- 88.2 call to order any person who is disruptive or unruly during any meeting.

89. Acting Chair

If the Mayor is unable to attend a Council meeting for any reason;

- 89.1 the Deputy Mayor will be Acting Chair; and
- 89.2 if a Deputy Mayor has not been elected, the Acting Chair is to be elected at the commencement of the meeting in accordance with clause 9.

90. Matters Not Provided For

Where a situation has not been provided for under this Local Law, the Council may determine the matter by resolution.

▪ **DIVISION 15 – SUSPENSION OF STANDING ORDERS**

91. Suspension of Standing Orders

- 91.1 To expedite the business of a meeting, Council may suspend standing orders.

Explanatory Note

The suspension of standing orders should be used to enable full discussion of any issue without the constraints of formal meeting procedure.

Its purpose is to enable the formalities of meeting procedures to be temporarily disposed of while an issue is discussed.

- 91.2 The suspension of standing orders should not be used purely to dispense with the processes and protocol of the governance of Council. An appropriate motion would be:

"That standing orders be suspended to enable discussion on....."

- 91.3 Once the discussion has taken place and before any motions can be put, the resumption of standing orders will be necessary. An appropriate motion would be:

"That standing orders be resumed."

▪ **DIVISION 16 – SPECIAL COMMITTEES**

92. Application Generally

- 92.1 If Council establishes a Special Committee, all of the provisions of Divisions 1-15 of this Local Law apply to the conduct of the Special Committee.
- 92.2 For the purposes of clause 93.1, a reference in Division 1-15 of this Local Law to:
 - 92.2.1 A Council meeting is to be read as a reference to a meeting of the Special Committee;

92.2.2 A Councillor is to be read as a reference to a member of the Special Committee; and

92.2.3 The Mayor is to be read as a reference to the Chair of the Special Committee.

93. Application Specifically

Notwithstanding clause 93, if Council establishes a Special Committee:

93.1 Council may; or

93.2 the Special Committee may, with the approval of Council,

resolve that any provision(s) of Divisions 1-15 is or are (as appropriate) not to apply, whereupon that provision or those provisions shall not apply until Council resolves, or the Special Committee with the approval of Council resolves, otherwise.

94. Meeting Procedures Protocol

The following document is incorporated by reference into this Local Law –

a) Latrobe City Council Meetings Procedure Protocol;

▪ **SCHEDULE 1 – INFRINGEMENT NOTICE**

**LATROBE CITY COUNCIL
INFRINGEMENT NOTICE**

Date of Notice: _____ No. of Notice: _____

To: Surname of: _____ Reg. No. of any vehicle: _____

Organisation Name: _____ State: _____

Other Names: _____ Type: _____

Address: _____ Postcode: _____

I, _____ (full name of authorised officer) being a duly authorised officer of the above Council have reason to believe that you have committed an offence against the Local Laws of Council. The nature of the alleged offence and the amount of penalty is indicated by the ticked box below:

Your offence:

Local Law Number	<input type="checkbox"/>	Clause Number	<input type="checkbox"/>
Nature of Infringement Code	<input type="checkbox"/>	Applicable Penalty Units	<input type="checkbox"/>
	<input type="checkbox"/>		

Other _____ offences:

Other particulars of alleged offence: _____

How to pay:

If you pay the penalty indicated within 28 days from the date of this notice to the Latrobe City Council, by CHEQUE or MONEY ORDER for the FULL AMOUNT POSTED to PO Box 264 Morwell, 3840, Victoria, by CHEQUE or MONEY ORDER or CASH to Municipal Offices at _____, Victoria _____. (CHEQUES SHOULD BE CROSSED "NOT NEGOTIABLE" AND MADE OUT TO THE LATROBE CITY COUNCIL), this matter will not be brought to Court and no conviction will be recorded.

IF YOU DON'T PAY WITHIN 28 DAYS, COSTS WILL BE ADDED AND THE MATTER WILL BE TAKEN TO COURT.

You are entitled to disregard this infringement notice and defend the prosecution for the offence in Court. Should you wish to make any submission concerning this infringement notice, contact should be made with the Chief Executive Officer.

(Signed by authorised officer)

CERTIFICATION OF LOCAL LAW NO. 1

This is to certify that the writing above contained on 36 pages of paper is a true copy of the Local Law of the Latrobe City Council and that I have informed Council of the legislative requirements necessary to giving validity to such Local Law and as to Council's observance and belief that such requirements have been fulfilled. And I further certify that such Local Law came into force on 17 February 2014.

The Common Seal of the **Latrobe City Council**)
was hereunto affixed this 18th day of February 2014)
in the presence of:)

JOHN MITCHELL
Acting Chief Executive Officer

**9.4 AMENDMENT TO A PLANNING PERMIT APPLICATION
2013/206/A - TWO LOT SUBDIVISION AT 64-70 TRARALGON
MAFFRA ROAD, GLENGARRY**

General Manager

Planning and Governance

For Decision

PURPOSE

The purpose of this report is to determine an Amendment to a Planning Permit Application 2013/206/A for a two (2) Lot Subdivision at 64-70 Traralgon Maffra Road, Glengarry (Lot 1 on Title Plan 217511).

DECLARATION OF INTERESTS

No officer declared an interest under the Local Government Act 1989 in the preparation of this report.

STRATEGIC FRAMEWORK

This report is consistent with Latrobe 2026: The Community Vision for Latrobe Valley and the Latrobe City Council Plan 2013-2017.

Latrobe 2026: The Community Vision for Latrobe Valley

Strategic Objectives – Built Environment

In 2026, Latrobe Valley benefits from a well-planned built environment that is complimentary to its surroundings and which provides for a connected and inclusive community.

Latrobe City Council Plan 2013 - 2017

Theme and Objectives

Theme 5: Planning for the future

Strategic Direction – Built Environment

Provide efficient and effective planning services and decision making to encourage development and new investment opportunities.

Legislation

The discussions and recommendations of this report are consistent with the provisions of the Planning and Environment Act 1987 (the Act) and the Latrobe Planning Scheme (the Scheme), which apply to this application.

BACKGROUND

SUMMARY

Land:	64-70 Traralgon Maffra Road, Glengarry, known as Lot 1 on TP 217511
Proponent:	M A Hoppe & P J Hoppe c/- Beveridge Williams & Co Pty Ltd
Zoning:	Residential 1 Zone (R1Z) Abuts a Road Zone Category 1 (RDZ1)
Overlay	N/a

A Planning Permit is required for subdivision of land in a Residential 1 Zone in accordance with Clause 32.01-2 of the Scheme.

PROPOSAL

It is proposed to amend condition 1 of planning permit 2013/206 which states:

Prior to the commencement of works, a revised plan of the proposed subdivision must be submitted to and approved by the Responsible Authority. The plans must be consistent with those provided but modified to show:

- a) *Lot 1 reduced in size, to be consistent with Lot 1 as shown on the Indicative Future Subdivision Layout submitted with this application, and the remainder of the subject site as Lot 2;*

When approved, the plan will be endorsed and will then form part of the permit. The plans must be drawn to scale with dimensions and three copies provided.

The applicant proposes not to amend the size of Lot 1 as requested by Council and to leave the arrangement of the lots as shown on the proposed plan of subdivision.

A copy of the proposed plan of subdivision and indicative future subdivision layout are included as *Attachments 1 and 2* of this report.

The current planning permit allows for a two lot subdivision with the following features:

Proposed Lot 1 will contain the existing dwelling, the timber outbuilding and existing landscaped gardens. The allotment will be almost rectangular in shape, with its long axis skewed to the south west; with a frontage to Traralgon-Maffra Service Road measuring 49.30 metres and a total area of approximately 2,400 square metres. Vehicular access will be provided from the Traralgon-Maffra Service Road via the existing access.

Proposed Lot 2 will be vacant, as condition 2 of planning permit 2013/206 requires that all outbuildings on this lot are to be removed before the issue of Statement of Compliance. The allotment will be a 'battle-axe' shape, with a frontage to Traralgon-Maffra Service Road measuring 42.84 metres and a total area of approximately 1.27 hectares, with an existing access gate from the Traralgon-Maffra Service Road.

Subject Land:

The site is located at 64-70 Traralgon-Maffra Road, Glengarry. It is more particularly described as Lot 1 on Title Plan 217511, formerly known as part of Crown Allotment 133 Parish of Toongabbie South.

The site is almost rectangular in shape, with its long axis skewed to the south west, has an area of 1.51 hectares and an abuttal to Traralgon-Maffra Service Road along the full length of its western boundary. The dimensions of the site are as follows:

- A frontage (western boundary) measuring approximately 92.14 metres;
- A southern side boundary measuring approximately 244.10 metres;
- A northern side boundary measuring approximately 192.52 metres; and
- A rear (eastern) boundary measuring 60.35 metres.

The land is used for residential purposes and is developed with a single storey weatherboard dwelling on site with several ancillary out-buildings. There is an existing crossover and driveway on the north west corner of the site serving the existing dwelling and an existing gate approximately 49.3 metres from the north west corner of the site with an open drain to the south of this gate along the Traralgon-Maffra Service Road frontage.

Surrounding Land Use:

The site is located within an established residential precinct approximately 0.7 kilometres north-west, Glengarry's primary activity centre.

Surrounding the site to the north, east and south west are residential allotments generally ranging between approximately 900 square metres and 0.55 hectares in area. The majority of these lots are developed with single dwelling and associated outbuildings. The land located to the south of the site is a recreational reserve. Traralgon-Maffra Service Road is a bitumen sealed road with kerb and channel and open drains on both sides. The service road extends generally from the north-west to south east of the Glengarry Township along the Traralgon-Maffra Road.

A site context plan is included in *Attachment 3*.

HISTORY OF APPLICATION

A history of this application is set out in *Attachment 4*.

The provisions of the Scheme that are relevant to the subject application are included in *Attachment 5*.

This matter was considered at the Ordinary Council Meeting held on 17 February 2014 and was deferred to the following meeting.

ISSUES

ASSESSMENT AGAINST THE RELEVANT PLANNING POLICIES

The proposal has been considered against the relevant clause under State and Local Planning Policy Frameworks.

Within the State Planning Policy Framework, the following Clauses are relevant for this application:

Clause 11.02-1 - Supply of urban land

The objective of this Clause is *'to ensure a sufficient supply of land is available for residential, commercial, retail, industrial, recreational, institutional and other community uses.'*

It is considered that the proposal is not consistent with this Clause as it does not facilitate the most efficient use of land. The proposal seeks to retain a 3,800 square metres Lot with the existing dwelling with several ancillary outbuildings within Residential 1 Zone in close proximity to the Glengarry's primary activity centre.

The Lot 1 arrangement as approved in planning permit 2013/206 and shown on the Indicative Future Subdivision Layout, Attachment 2, provides for a more efficient use of land consistent with this Clause by following the strategy in that it *'ensure(s) that sufficient land is available to meet forecast demand'*.

Furthermore, it is considered that the Indicative Subdivision Layout Lot 1 arrangements, Attachment 2, provides *'for the consolidation, redevelopment and intensification of existing urban areas'* within close proximity to the Glengarry Township and would assist in *'support(ing) sustainable urban development'* consistent with the strategies of this Clause.

Clause 11.05-1 - Regional planning strategies and principles

The objective of this Clause is *'to develop regions and settlements which have a strong identity, are prosperous and are environmental sustainable'*.

It is considered that the proposal is not consistent with this Clause and will facilitate an inappropriate low density residential subdivision on land within the Residential 1 Zone.

Furthermore, it is considered that the proposed lot configuration will not provide for:

- the most *'positive land-use'* outcome in regards to a future development of the proposed Lot 2;
- the best outcome for *'ensure(ing) effective utilisation of land'*; and
- the best outcome for *'capitalising on opportunities for urban renewal and redevelopment'*.

The proposal is considered not to be consistent with all the directions discussed above and therefore not aligned with all of the relevant clauses of the State and Local Planning Policy Frameworks as it is not consistent with these it is considered that it is not compliant with Clause 65 (Decision Guidelines) either.

Zone

Residential 1 Zone

The proposal is not considered to be consistent with the Zone 'Purpose':

- *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.*

Furthermore, it is considered that the proposal is not consistent with Clause 32.01-2 (Decision Guidelines):

- *The State Planning Policy Framework and the Local Planning Policy Framework, including the Municipal Strategic Statement and local planning policies.*
- *The objectives and standards of Clause 56.*

As discussed above it is considered that the proposal is not aligned with all the relevant clauses of the State and Local Planning Policy Frameworks, therefore it is not compliant with the 'Purpose' and Decision Guidelines of the Zone.

Furthermore, the planning permit was assessed against the relevant provisions of Clause 56 of the Scheme and it is considered that it was not consistent with Clause 56.03-5 Neighbourhood Character Objective as the proposed layout does not '*respect the existing neighbourhood character or achieve a preferred neighbourhood character consistent with any relevant neighbourhood character objective, policy or statement set out in this scheme*' and does not '*respond to and integrate with the surrounding urban environment*'. The site is located within close proximity to the Glengarry Township and the proposed layout does not respond to the existing neighbourhood character in regards to the surrounding lot sizes and the preferred neighbourhood character in regards to lot sizes as discussed above.

FINANCIAL, RISK AND RESOURCES IMPLICATIONS

Additional resources or financial cost will only be incurred should the planning permit application require determination at the Victorian Civil and Administrative Tribunal (VCAT).

ORDINARY COUNCIL MEETING MINUTES 03 MARCH 2014 (CM431)

Risk has been considered as part of this report and it is considered to be consistent with the Risk Management Plan 2011-2014.

INTERNAL / EXTERNAL CONSULTATION

Engagement Method Used:

Notification:

An application to subdivide land into lots each containing an existing dwelling or car parking space is exempt from the notice requirements of Section 52(1)(a), (b) and (d), the decision requirements of Section 64(1), (2) and (3) and the review rights of Section 82(1) of the Act.

External:

There were no referral requirements pursuant to Section 55 of the Act.

Internal:

There were no internal referrals completed as part of the assessment of the application.

OPTIONS

Council has the following options in regard to this application:

- 1 Issue a Notice of Decision to Grant an Amendment to a Planning Permit; or
- 2 Issue a Refusal to Grant an Amendment to a Planning Permit

Council's decision must be based on planning grounds, having regard to the provisions of the Latrobe Planning Scheme.

CONCLUSION

The proposal is considered to be generally inconsistent with State and Local Planning Policy Framework and purpose and decision guidelines of the Residential 1 Zone.

- Inconsistent with the strategic direction of the State and Local Planning Policy Frameworks.
- Inconsistent with the 'Purpose' and 'Decision Guidelines' of the Residential 1 Zone; and
- Inconsistent with Clause 65 (Decision Guidelines).

Attachments

1. ATTACHMENT 1 - Proposed Plan of Subdivision
2. ATTACHMENT 2 - Indicative Future Subdivision Layout
3. ATTACHMENT 3 - Site Context
4. ATTACHMENT 4 - History of the Application
5. ATTACHMENT 5 - Latrobe Planning Scheme

RECOMMENDATION

- 1 That Council issues a notice of refusal to grant an Amendment to Planning Permit 2013/206 for the 2 Lot Subdivision at 64-70 Traralgon-Maffra Road, Glengarry being Lot 1 on TP 217511 on/with the following grounds:
 - Inconsistent with the strategic direction of the State and Local Planning Policy Frameworks;
 - Inconsistent with the 'Purpose' and 'Decision Guidelines' of the Residential 1 Zone; and
 - Inconsistent with Clause 65 (Decision Guidelines).

ALTERNATE MOTION

That Council issues an Amendment to Planning Permit 2013/206 for the 2 Lot Subdivision at 64-70 Traralgon-Maffra Road, Glengarry being Lot 1 on TP 217511 with the following conditions

1. The layout of the subdivision as shown on the endorsed plan must not be altered without the permission of the Responsible Authority.
2. Prior to the issue of Statement of Compliance the existing sheds located on proposed Lot 2 must be removed from the land to the satisfaction of the Responsible Authority.

Standard Conditions:

3. The owner of the land must enter into an agreement with:
 - a) a telecommunications network or service provider for the provision of telecommunication services to each lot shown on the endorsed plan in accordance with the provider's requirements and relevant legislation at the time; and
 - b) a suitably qualified person for the provision of fibre ready telecommunication facilities to each lot shown on the endorsed plan in accordance with any industry specifications or any standards set by the Australian Communications and Media Authority, unless the applicant can demonstrate that the land is in an area where the National Broadband Network will not be provided by optical fibre.
4. The owner of the land must enter into agreements with the relevant authorities for the provision of water supply, drainage, sewerage facilities, electricity, gas and telecommunication services to each lot shown on the endorsed plan in accordance with the authority's requirements and relevant legislation at the time.
5. All existing and proposed easements and sites for existing or required utility services and roads on the land must be set aside in the plan of subdivision submitted for certification in favour of the relevant authority for which the easement or site is to be created.
6. The plan of subdivision submitted for certification under the Subdivision Act 1988 must be referred to the relevant authority in accordance with section 8 of that Act.

Engineering Conditions:

- 7. A Latrobe City Vehicle Crossing Permit must be obtained prior to the commencement of the construction of all new vehicle crossings and for the upgrading, alteration or removal of existing vehicle crossings. The relevant fees, charges and conditions of the Vehicle Crossing Permit will apply to all vehicle crossing works. It is a requirement that all vehicle crossing works be inspected by Latrobe City Council's Asset Protection Officer.**
- 8. Prior to the certification of the plan of subdivision under the Subdivision Act 1988 a site drainage plan including levels or contours of the land and all hydraulic computations must be submitted to and approved by the Responsible Authority. When approved, the plan will be endorsed and will then form part of the permit. The drainage plan must be prepared in accordance with the requirements of Latrobe City Council's Design Guidelines and must provide for the following:**
 - a) How the land including all buildings, open space, access lanes and paved areas will be drained for a 1 in 5 year ARI storm event.**
 - b) How stormwater is to be conveyed to the legal point of discharge for all storm events up to and including the 1 in 100 year ARI storm event including providing over-land stormwater surcharge routes and cut-off drains for the safe and effective passage of stormwater flows arising from the subject land and from areas upstream of the subject land.**
 - c) An underground pipe drainage system conveying stormwater discharge from the legal point of discharge of each lot separately to Latrobe City Council's stormwater drainage system.**
- 9. Prior to the issue of a Statement of Compliance for this subdivision under the Subdivision Act 1988, the operator of this permit must complete the following works to the satisfaction of the Responsible Authority:**
 - a) The construction of all new property stormwater drainage connections in accordance with the approved site drainage plan, so that each lot is separately drained from its legal point of discharge to Latrobe City Council's stormwater drainage system.**

Expiry of Permit:

- 10. This permit will expire if:**
 - a) the plan of subdivision is not certified within 2 years of the date of this permit; or**

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b) the registration of the subdivision is not completed within 5 years of certification.

The Responsible Authority may extend the time if a request is made in writing before the permit expires or within six months of expiry of permit.

Note: The commencement of the subdivision is regarded by Section 68(3A) of the Planning and Environment Act 1987 as the certification of the plan, and completion is regarded as the registration of the plan.

Moved: Cr Harriman
Seconded: Cr O'Callaghan

That the Motion be adopted.

CARRIED UNANIMOUSLY

9.4


AMENDMENT TO A PLANNING PERMIT APPLICATION 2013/206/A - TWO LOT SUBDIVISION AT 64-70 TRARALGON MAFFRA ROAD, GLENGARRY

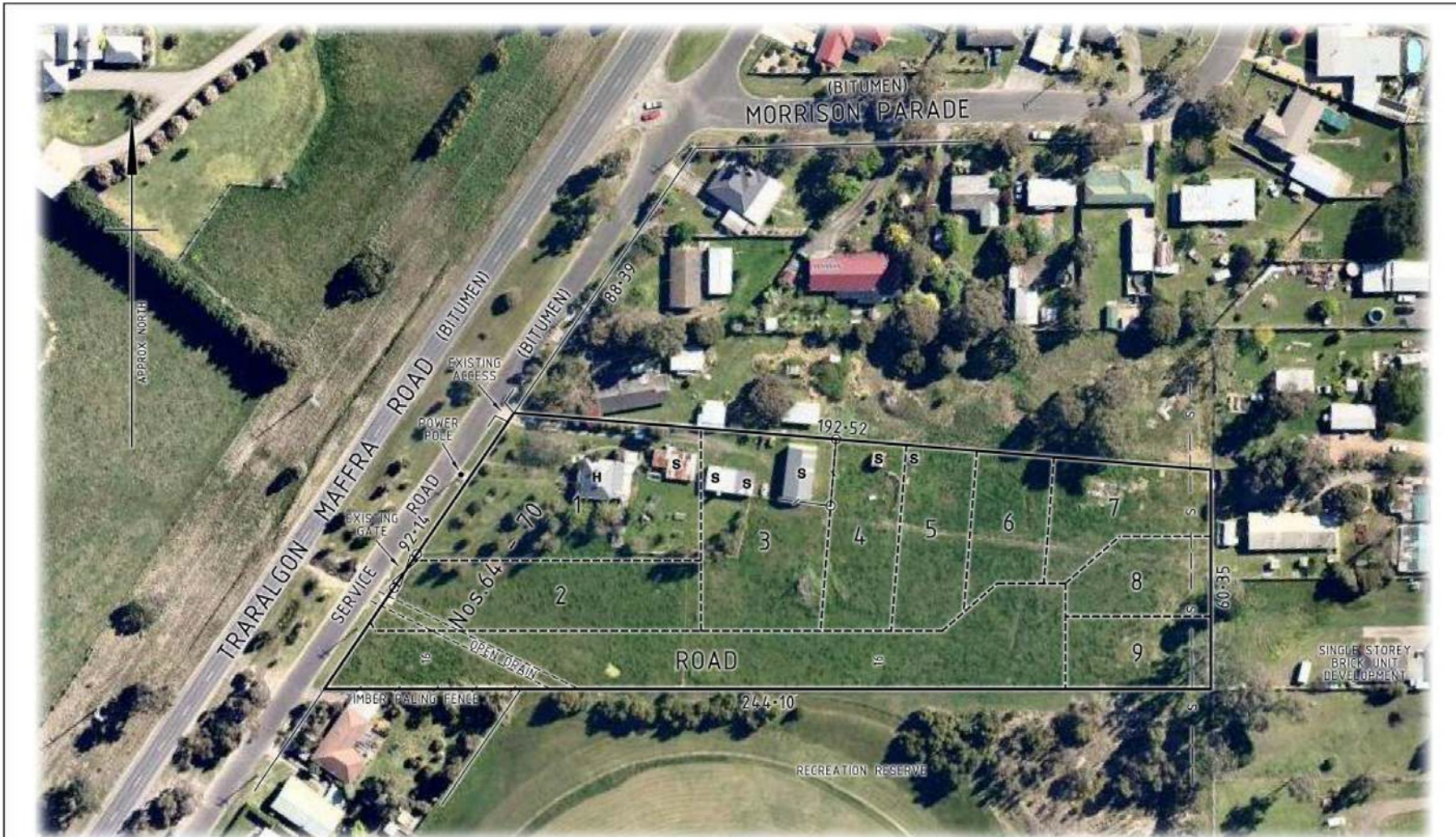
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NOTE:
 ALL DIMENSIONS AND AREAS ARE SUBJECT TO SURVEY AND FINAL COMPUTATIONS.
 PHOTO SOURCE: NEARMAP

H EXISTING HOUSE
 S EXISTING SHED

 <p>Beveridge Williams development & environment consultants Traralgon ph : 03 5176 0374 www.beveridgewilliams.com.au</p>	ORIGINAL		<p>PLAN OF PROPOSED SUBDIVISION CROWN ALLOTMENT 133 (PART) PARISH TOONGABBIE SOUTH</p>	PREPARED A. SPEIR	<p>MA & PJ HOPPE 64-70 TRARALGON-MAFFRA ROAD, GLENGARRY TP217511C LOT 1 C/T VOL 5033 FOL 474 LATROBE CITY COUNCIL</p>
	Scale 1:1000	Sheet Size A3		SURVEY	
	Dwg No 1200493PPS DGN	Sheet 1 of 1		CHECKED I.G. KEITH DATE 5/09/2013	
				AUTHORIZED FOR ISSUE Proj No 1200493	



NOTE:
 ALL DIMENSIONS AND AREAS ARE SUBJECT TO SURVEY AND FINAL COMPUTATIONS.
 PHOTO SOURCE: NEARMAP

H EXISTING HOUSE
 S EXISTING SHED

 <p>Beveridge Williams development & environment consultants Traralgon ph : 03 5176 0374 www.beveridgewilliams.com.au</p>	<p>ORIGINAL</p> <p>Scale 1:1000 Sheet Size A3</p> <p>Dwg No 1200493PPS DGN Sheet 1 of 1</p>	<p>INDICATIVE FUTURE SUBDIVISION LAYOUT</p> <p>CROWN ALLOTMENT 133 (PART)</p> <p>PARISH TOONGABBIE SOUTH</p>	<p>PREPARED A. SPEIR</p> <p>SURVEY</p> <p>CHECKED I.G. KEITH</p> <p>DATE 7/10/2013</p> <p>AUTHORISED FOR ISSUE</p> <p>Proj No 1200493</p>	<p>MA & PJ HOPPE</p> <p>64-70 TRARALGON-MAFFRA ROAD,</p> <p>GLENGARRY</p> <p>TP217511C LOT 1</p> <p>C/T VOL 5033 FOL 474</p> <p>LATROBE CITY COUNCIL</p>
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64-70 Traralgon-Maffra Road, Glengarry.



History of the Application

20 December 2013	Application lodged on SPEAR
10 January 2014	An initial assessment was completed by the Planner.
16 January 2014	Site Visit with Planner, Nicole Stow of Beveridge Williams and applicant Peta Hoppe.

●
LATROBE PLANNING SCHEME

State Planning Policy Framework

Clause 11.02-1 Supply of urban land

Clause 11.05-1 Regional planning strategies and principles

Zoning – Residential 1 Zone

The subject land is located within a Residential 1 Zone

Overlay

There are no overlays that affect this property.

General Provisions

Before deciding on an application, the Responsible Authority must also consider the 'Decision Guidelines' of Clause 65 as appropriate.

CORRESPONDENCE

10. CORRESPONDENCE

Nil reports

PRESENTATION OF PETITIONS

11. PRESENTATION OF PETITIONS

Nil reports

CHIEF EXECUTIVE OFFICER

12. CHIEF EXECUTIVE OFFICER

Nil reports

ECONOMIC SUSTAINABILITY

13. ECONOMIC SUSTAINABILITY

Nil reports

RECREATION AND COMMUNITY INFRASTRUCTURE

14. RECREATION AND COMMUNITY INFRASTRUCTURE

14.1 MOE TENNIS COURTS NEEDS ASSESSMENT

General Manager

**Recreation and Community
Infrastructure**

For Decision

PURPOSE

The purpose of this report is to present the outcomes from the Moe Tennis Courts Needs Assessment and seek Councils endorsement of the proposed recommendations.

DECLARATION OF INTEREST

No officer declared an interest under the Local Government Act 1989 in the preparation of this report.

STRATEGIC FRAMEWORK

This report is consistent with Latrobe 2026: The Community Vision for Latrobe Valley and the Latrobe City Council Plan 2013-2017.

Latrobe 2026: The Community Vision for Latrobe Valley

Strategic Objectives - Recreation

In 2026, Latrobe Valley encourages a healthy and vibrant lifestyle, with diversity in passive and active recreational opportunities and facilities that connect people with their community.

Latrobe City Council Plan 2013 - 2017

Theme and Objectives

Theme 2: Appropriate, affordable and sustainable facilities, services and recreation.

Objective - To promote and support a healthy, active and connected community.

Objective - To provide facilities and services that are accessible and meet the needs of our diverse community.

Objective - To enhance the visual attractiveness and liveability of Latrobe City.

Strategic Directions:

- 1.2.1 Promote and support more involvement of children in active recreation and sport.
- 1.2.2 Develop and maintain community infrastructure that meets the needs of our community.
- 1.2.3 Promote and support opportunities for people to enhance their health and wellbeing.
- 1.2.4 Encourage and create opportunities for more community participation in sports, recreation, arts, culture and community activities.
- 1.2.8 Enhance and develop the physical amenity and visual appearance of Latrobe City.
- 1.2.9 Continue to maintain and improve access to Latrobe City's parks , reserves and open spaces.
- 1.2.10 Work collaboratively with our partners to engage and support volunteers in providing services to the community.

Strategy & Plans – Recreation

Recreation and Leisure Strategy 2006

Moe Outdoor Recreation Plan 2007

Public Open Space Strategy 2013

Municipal Health and Wellbeing Plan

BACKGROUND

The Moe Tennis Complex, comprising 15 plexi-pave tennis courts, is situated in the Moe Botanic Gardens adjacent to Narracan Drive in Moe (attachment 1).

The courts are home of the Moe Tennis Club, which currently has 58 current members, including junior and senior players. The complex contains a small clubroom, constructed in 1983 which provides a basic social room, toilets and kitchen facilities.

In early 2011, the Moe Tennis Club first raised concerns regarding the condition of the tennis courts.

At the Ordinary Council meeting held 23 May 2011, the following Notice of Motion was presented:

1. *That a report be prepared and presented to Council as soon as practicable outlining:*
 - *The condition of all courts at the Moe Tennis Complex;*

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- *The condition of the perimeter fencing at the Moe Tennis Complex;*
- *What modifications are required to ensure that the Moe Tennis Complex provides Access for all Abilities;*
- *The associated costs required to rectify any non-compliance identified with the above issues.*

2. That a master plan be developed for the Moe Botanic Gardens precinct.

Latrobe City Council officers subsequently arranged for an external audit of the facility to be completed by STI Sports who specialise in tennis courts, to report on the condition of the courts and perimeter fencing. This report identified a number of priority works as well as additional works.

A further report was presented to Council at the Ordinary Council Meeting held on 7 November 2011. The conditions of the tennis courts was highlighted, as were the below issues from the Moe Tennis Club. These issues addressed eight areas that the club believed required attention and included:

- Concerns regarding the perimeter fencing
- Concerns over cracking of the courts
- Lack of storage in existing clubrooms
- No disabled access
- Damage to small fence around the clubrooms
- Damage to footpaths and spectator seating
- Car parking and drainage problems
- Building compliance with fire exits

A range of solutions to the above issues were identified and Council resolved the following:

- 1. That Council refer the total works valued at \$170,700 to the 2012/13 Capital Works program for consideration.*
- 2. That the Master Plan for the Moe Botanic Gardens be referred to the Public Open Space Strategy project 2011/12 for consideration and prioritisation with other master plans.*
- 3. That the Moe Tennis Club be advised of the above resolution of Council in writing.*

Note: Although the resolution states \$170,700, this figure was based on a potential grant that was not received. As such, \$132,000 was included in the 2012/13 Capital Works program.

ISSUES

In late 2011, the Moe Tennis Club engaged 2MH Consulting to conduct an inspection of the fifteen courts at the facility. In a report provided to Council officers in February 2012, information was provided that all fifteen courts had significant damage (attachment 2).

The pavement was found to be cracking, plating and there were serious collapsed pavement issues. The fencing was aged, curling at the bottom, slack and damaged in numerous areas.

In addition, it was noted that all of the courts are non-compliant in regards to run off standards.

Earthquake

On the 21 June 2012 the, Moe and its surrounds was significantly affected by a 5.4 magnitude earthquake. The earthquake and subsequent aftershocks caused additional cracking and damage to the Moe Tennis Complex courts.

Latrobe City Council lodged an insurance claim for the earthquake damage and in May 2013, Latrobe City Council was awarded a settlement of \$199,000 for the Moe Tennis Complex.

In August 2012 a detailed engineering assessment was undertaken of the Moe Tennis Facility by BCS Consulting Engineers Pty Ltd. The engineering assessment concluded the following (attachment 3)

- The site requires significant reconstruction works.
- The site is suitable for reconstruction, with an emphasis on the following infrastructure items:
 - Concrete spoon drains in lieu of the existing formed asphaltic spoon drains.
 - Subsurface agricultural drains
 - Root barriers.
 - Underground drainage with the court precinct.
 - Deepened and or underground drainage to replace the existing shallow drains.
- The composition of the courts can be asphaltic construction or concrete construction. The land is not prone to flooding therefore concrete construction is not mandatory. Nevertheless, some further investigation is recommended to ascertain the cause of the extensive fungal growth on the courts.

Following discussions with the Moe Tennis Club, it was agreed that a holistic permanent solution to the issues at the Moe Tennis Complex was required and that a planning project would be undertaken to provide recommendations to solve the court conditions issues.

In early 2013, a draft project brief for the Moe Tennis Courts Needs Assessment was developed in consultation with the Moe Tennis Club.

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Both the Moe Tennis Club and Tennis Victoria provided feedback about the project brief, prior to it being advertised to suitably qualified consultants.

The project brief objectives were:

1. Evaluate the current usage and capacity of the Moe Tennis Courts
2. Identify a range of court surfaces suitable for the site.
3. Determine the number of tennis courts required for the facility.
4. Provide a recommendation on what court surface would be feasible for this site.
5. Provide a staging or implementation plan for the construction of the tennis courts.
6. Provide a funding model for the reconstruction of the tennis courts.
7. Provide a detailed design for the reconstruction of the tennis courts.
8. Provide a detailed cost estimate based on the staging/implementation plan.

SGL consultants were appointed in July 2013 and community consultation for the project commenced in August 2013. Meetings and phone conversations were held with the following key stakeholders:

- Latrobe City Councillors
- Moe Tennis Club Committee, members and players
- Newborough Tennis Club Committee, members and players
- Local Tennis coaches
- Local community members
- Latrobe Valley Tennis Association Inc.
- Loy Yang Yinnar & District Tennis Association
- Local tennis players
- Tennis Victoria
- Tennis Australia

In addition, a community meeting was held on 20 August 2013 at the Moe Tennis Clubrooms which was attended by approximately 30 community members.

Statistics

Membership numbers at the Moe Tennis Club has been in decline. The Club currently has 58 registered members compared to 134 in 2008/09.

The club have recognised that this is a worrying trend and have been very open about the situation. It should be noted that these figures do not include casual play numbers, which is occurring at the club.

Participation trends and memberships nationally have been trending down and over a similar period have decreased by 24% and recent years have seen a decline in the participation numbers in the Gippsland region.

The Traralgon Tennis Association has seen a decline in their junior teams from 44 teams 4 years ago to 24 teams presently; however they have experienced an increase in casual participation and night tennis.

In addition, there are now only two remaining local tennis associations after recent closures and amalgamations.

There are a number of reasons that can be attributed to the decline in membership at the Moe Tennis Club such as the court conditions, a general decline in tennis membership across Australia and the cultural shift away from the commitment to membership structures that a number of sports are experiencing.

The Moe Tennis Club believes that a recovery of sorts will occur with a change of surface that is 'softer' to play on and therefore will be more attractive to the older population. This contributes to the statement by the Moe Tennis Club to seek a change in the surface to clay.

Needs Assessment

The initial consultation with stakeholders expressed a preparedness to investigate the option of rebuilding the courts using the new clay surface (Conipur Pro) that is endorsed by Tennis Australia as a way of attracting events to Moe Tennis Club as well as providing a 'softer' surface to encourage older players to return to participating.

A detailed plan including costs was produced for the clay option but proved to be prohibitive in terms of the total cost and potential benefits it would provide for the small membership base at Moe Tennis Club.

Council officers instructed the consultants to investigate a number of options for the rehabilitation of the Moe tennis Complex including basic resurfacing of the existing courts as well as the option of the total replacement with hard court surfaces similar to the current ones.

The Moe Tennis Needs Assessment report and full reports prepared by the tennis court construction experts (2MH) are attached (attachments 4&5).

Both reports provide the following information in relation to the options for the rehabilitation of the Moe tennis complex:

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Option	Description	Estimated Costs	Summary
1. Provision of clay courts	<ul style="list-style-type: none"> Construct 8 new Conipur pro clay courts and resurface the remaining 7 courts with a basic acrylic coating 	<ul style="list-style-type: none"> Total \$1,784,564 	<ul style="list-style-type: none"> Considered too expensive Limited opportunity for events Council recommended not to pursue
2A. Basic crack repair and re-coating with acrylic	<ul style="list-style-type: none"> Cut out and fill existing cracks with flexible material Resurface with a 2-coat acrylic 	<ul style="list-style-type: none"> \$10,000 per court 	<ul style="list-style-type: none"> Not considered a viable solution that would not provide any longevity
2B. Resheeting with asphalt and geofabric	<ul style="list-style-type: none"> Apply a geofabric layer covered by a coat of asphalt and then 3-coat acrylic paint 	<ul style="list-style-type: none"> \$35,000 per court 	<ul style="list-style-type: none"> Not considered a viable solution that would not provide any longevity
2C. Rubberised sports surface installed over existing courts	<ul style="list-style-type: none"> Apply a rubberised layer then painted with five coats of acrylic 	<ul style="list-style-type: none"> \$37,000 per court 	<ul style="list-style-type: none"> Not considered a viable solution that would not provide any longevity
3. Staged replacement as new hardcourts	<ul style="list-style-type: none"> Replacement of 6 acrylic courts as stage one then 4 additional courts as stage 2 	<ul style="list-style-type: none"> Stage 1 = \$575,000 Stage 2 = \$350,000 	<ul style="list-style-type: none"> Would provide a long term solution with the minimal level of required maintenance

Option 1 – Provision of Clay Courts

Prior to the appointment of the consultants to this project the Moe Tennis Club had sought advice from Tennis Victoria as to the preferred surface options that were approved or recommended and would best fit the needs of the club as well as provide the potential to attract events and elite training camps to Moe.

The new clay surface (Conipur Pro) was suggested because of its likeness to European clay but also because of its lower use of water for maintenance. As an endorsed clay surface it attracted the potential for meeting the criteria for the rebate scheme of \$18,000 per court for assistance in the construction cost.

As this is a new product on the market there are only a couple of courts already constructed in Australia and it was felt by the club that this would provide the point of difference to allow them to attract events and other activities.

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The potential levels of funding and discussions with stakeholders inclusive of council officers and councillors supported the direction to explore the potential options for installing Conipur Pro clay courts at Moe Tennis Club.

The stakeholders expressed a desire to retain all fifteen courts at Moe Tennis Club however it was felt that the cost to replace all courts at once would be cost prohibitive. Therefore it was decided that the following plan be explored and costed:

- Construct 8 new clay courts over the existing western courts while relocating courts 11 and 12 (8 courts would provide an initial number of courts that may allow for events to be hosted)
- Repair and resurface the remaining 7 courts as hard courts with the intention that would be re-addressed in the future in terms of the surface type

The cost as provided in detail in the attached 2MH report (Appendix 2) showed a total cost of:

- 8 new clay courts \$1,645,119.00
- 7 repaired courts \$ 139,445.00
- TOTAL \$1,784,564.00

This cost was inclusive of all works including design and management provisions, new lighting towers, fencing and drainage.

For the purpose of comparison, 2MH also provided the alternative of provided the 8 new courts as hard court or plexipave surfaces.

The cost to construct the 8 hard courts was estimated at \$1,220,431 inclusive of all costs.

These cost estimates were provided to Council officers and the direction was given to investigate alternative options due to the cost of the potential installation of the clay courts given the low membership numbers at the club and the uncertainty of being able to attract events.

Option 2 – Basic Repair of all courts

As a baseline, tennis expert consultants 2MH were instructed to provide a plan and cost estimate for the basic repair and resurfacing of the courts.

In order to provide the best possible advice, 2MH conducted a site visit in January 2014 as a follow-up to their previous visits and reports in 2011 and 2012. They found that the earthquake had created more damage than they had first observed and that there was likely more damage to the subsurface than was previously estimated.

For the sake of providing a full suite of alternatives for consideration by Council, 2MH have explored three options for the basic repair and resurfacing of the courts but as can be seen from the reports they do not

encourage or endorse any of them for Moe Tennis Club given the potential damage that has been done to the subsurface by the earthquake and poor initial construction.

In summary the following three options for basic repair were provided. All options have been used on other facilities with mixed results.

Option 2A – Basic crack repair and re-coating with acrylic

This option looks at grinding and sanding of the existing sports surface and cutting out and filling all cracks with a flexible material followed by a surface treatment (2 coat acrylic).

The estimated cost to perform this work is \$10,000 per court with a total cost of \$80,000 for 8 courts.

The advice is that this approach does not address the non-compliance issues of runoff and drainage along with pavement collapses. It also does not resolve the potential issues with the subsurface and therefore it is felt that the cracks will re-appear within a 12-month period. It is not considered to be even a viable short to medium term solution.

Option 2B – Resheeting with asphalt and geofabric

This option requires the laying of a geofabric material over the entire courts and applying a 300mm thick layer of asphalt. The surface will then be covered with a 3 coat sports surface system.

The estimated cost to perform this treatment on one court is \$35,000 with a total cost of \$252,000 (with savings for multiples) for 8 courts.

The advice is that this approach does not address the non-compliance issues of runoff and drainage issues along with pavement collapses. It also does not resolve the potential issues with the subsurface and therefore it is felt that the cracks will re-appear over time. It is not considered by the consultants to be a viable long term solution.

Option 3C – Rubberised sports surface installed over existing courts

This option lays a 7mm thick floating rubber system over the existing courts and then paint with a sports surfacing product - with a minimum of 5 coats.

The estimated cost for this treatment is \$37,000 per court or \$296,000 for 8 courts.

This approach does not address the non-compliance issues with short rear run-offs. It fails to rectify on-going drainage issues, pavement collapses or major problems such as base problems. It is also highly unlikely to last more than 12 months without considerable failures occurring. It is not

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considered viable, as the existing court damage and cracking will overtime reflect through.

Option 3 – Staged replacement as new hard courts

As part of the thorough review of possibilities for the Moe Tennis courts the following option was discussed and marked as the preferred solution that would provide the club with a number of new courts immediately, and the opportunity to have further courts rebuilt as a second stage of the process.

Whilst it does not meet the desire of the club to have softer clay courts it potentially provides the new courts that would be an attractive option to new and returning players at a cost that is possible to fund.

The option is to conduct reconstruction works over a two-stage process as follows:

- **Stage 1**
 - Permanent removal of courts 11 and 12
 - Total rebuild of the 6 western courts as acrylic hard-court with new subsurface works
 - Replace all fences, equipment and pathways
 - Maintain the existing lights where possible
 - Realign the courts within the existing footprints to meet compliance needs

- **Stage 2**
 - Total rebuild of the 4 eastern courts as acrylic hard-court with new subsurface works
 - Replace all fences, equipment and pathways
 - Maintain the existing lights where possible
 - Realign the courts within the existing footprints to meet compliance needs

No works would be undertaken on the current courts 13, 14, 15 as these would be used as the public courts that are open at all times for casual use. The facility would ultimately be a 13 court venue with 10 new courts.

The detailed analysis and cost plan is provided in attachment 4. A summary of those costs is as follows:

Stage 1A – Site master plan and design

Works will include full electrical and lighting design, civil design and drainage design – and tennis specific design allowing for total site master planning. Cost Estimate = \$40,000.00 plus GST

Stage 1 – Demolition of 2 existing courts and reconstruction of 6 new tennis courts

Works are to include demolition of 2 existing courts (Courts 11 and 12)

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and the reinstatement back to Botanical Gardens – lawn only.
Estimate \$15,000.00 plus GST

Light towers to the west of the site may be able to be relocated and reused. Exact pricing for this is unknown until lighting and electrical works have been undertaken. Cost Estimate = \$40,000.00 plus GST

The construction of 6 new tennis courts with asphalt pavement, new drainage, new fencing and tennis infrastructure. Costs based on “best guess” off current industry pricing and basic acrylic surfacing. Cost Estimate = \$480,000.00

Stage 2 – Construction of 4 new tennis courts

The construction of 4 new tennis courts with asphalt pavement, new drainage, new fencing and tennis infrastructure. Costs based on “best guess” based on current industry pricing and basic acrylic surfacing. Cost Estimate = \$320,000.00

Efficiencies can be made through undertaking all design works at the beginning for Stage 1A, tendering all construction works a package for Stage 1 and Stage 2 – even if spread over 2 financial years so as to get the best pricing overall. Project Management for 2 stages of construction works will be greater than constructing as 1 stage, therefore cost estimates for professional project management over 2 stages of construction will be - \$30,000.00 plus GST

Stages 1 and 1A total estimated costs = \$575,000.00 plus GST

Stage 2 (with professional tennis specific project management) = \$350,000.00 plus GST

Total combined works Stage 1A, 1 and 2 = \$925,000.00 plus GST

These estimates need to be considered as indicative costs and may vary depending on the final design. To meet the funding that may be available for the stages it may also be possible to reduce the number of courts supplied in stage 1.

Funding options

Council has approximately \$300,000 from remaining capital works allocations and from the insurance claim following the earthquake to provide for the restoration of the courts at Moe Tennis Club.

Additional funding could be sought from the capital works budget at the appropriate time and depending upon which option is preferred, potentially look to secure further major facilities funding for the State Government (available to a maximum of \$650,000 to successful applicants) and Tennis Australia’s National Court Rebate Scheme. Assuming all of this funding was available through the various sources this would provide in excess of \$1,000,000 to the project.

Tennis Australia

The National Courts Rebate Scheme (NCRS) provided through Tennis Australia, provides for a range of funding options for different projects and different surfaces. The amount of court funding provided is based on the size of the facility, surface type and number of courts being constructed or resurfaced.

Any new clay courts are to include water saving measures e.g. tanks, bores and subsurface irrigation systems. To be eligible for any Tier 1 clay court surface, consultation must be had with the Tennis Australia Clay Court and Development Manager prior to the commencement of the project.

For a Tier 1 Clay surface (such as Conipur clay) the maximum rebate could be up to \$18,000. For the reconstruction of 10 courts the total rebate from Tennis Australia would be \$180,000.

For an Acrylic surface (such as plexi-pave) the maximum rebate could be up to \$6,000. For the reconstruction of 10 courts, the total rebate from Tennis Australia would be \$60,000.

Victorian Government

The Victorian Government provides sport and recreation funding by of the annual Community Facility Funding program. There are a number of possibilities, depending on the scope and costings for the project:

Community Facility Funding Program – Major Facilities

Funding under the Major Facilities program encourages the development of community sports and recreation facilities that are innovative, effectively managed, accessible, environmentally sustainable and well used.

Council can submit one application and the total cost must be greater than \$500,000.

The maximum grant of \$650,000 per project is available under this program. The funding ratio for this program is \$1 State Government funding to \$1 Council funding.

Community Facility Funding Program – Minor Facilities

Applications under the Minor Facilities program are available for community groups, working in partnership with Council to develop or upgrade community sport and recreation facilities. The program is also designed to strengthen communities through the development of sustainable sport and recreational facilities where the total project cost does not exceed \$500,000 (GST exclusive).

Council can apply for a maximum of \$200,000 total funding under this grant, with a maximum of three applications per Council. Any single funding application cannot exceed \$100,000 in funding. The funding ratio for this program is \$2 State Government funding to \$1 Council funding.

FINANCIAL, RISK AND RESOURCES IMPLICATIONS

Risk has been considered as part of this report and it is considered to be consistent with the Risk Management Plan 2011-2014.

The Moe Tennis Facility is a significant community asset. The current state of the courts requires it to be reconstructed to meet both community expectations and address safety guidelines.

This report identifies a number of options in regards to the rehabilitation of the Moe Tennis Complex, with each having cost implications.

Council has approximately \$300,000 from remaining capital works allocations and from the insurance claim following the earthquake to provide for the restoration of the courts at Moe Tennis Club.

Depending on which option is preferred, funds may need to be allocated through Council's capital works program as well as sourcing potential funding from Tennis Australia and the State Government.

INTERNAL/EXTERNAL CONSULTATION*Engagement Method Used:*

Extensive community consultation was undertaken as part of the Moe Tennis Courts Needs Assessment and an initial meeting was held with Latrobe City Councillors, Sharon Gibson and Peter Gibbons.

Interested community members and identified stakeholders were able to provide submissions and feedback in writing to Latrobe City Council, as well as attending a community workshop.

Community workshops held on 20 August 2013 held at the Moe Tennis Clubrooms and were advertised in the Latrobe City Council Noticeboard in the Latrobe Valley Express on the following dates:

- Thursday 1 August 2013
- Monday 5 August 2013
- Thursday 8 August 2013
- Monday 12 August 2013
- Thursday 15 August 2013
- Monday 19 August 2013

In addition to this advertising, Brad Griffin President of the Moe Tennis Club spoke with ABC Radio Gippsland to promote the community workshop.

Meetings and phone conversations were held with the following key stakeholders:

- Latrobe City Councillors
- Moe Tennis Club Committee, members and players
- Newborough Tennis Club Committee, members and players

- Local Tennis coaches
- Local community members
- Latrobe Valley Tennis Association Inc.
- Loy Yang Yinnar & District Tennis Association
- Local tennis players
- Tennis Victoria
- Tennis Australia

As part of the consultation activities, Latrobe City Council officers engaged with the Newborough Tennis Club. The Newborough Tennis Club is situated in Monash Road in Newborough. The club has eight plexi-pave courts. The Newborough Tennis Club currently has approximately four members.

The club was asked to consider a number of options, including relocating the Newborough Tennis Club to the Moe Tennis Club facility or a merger of both clubs. The Newborough Tennis Club Committee considered the options, however eventually declined either moving or a merger option.

Council officers have met with the Moe Tennis Club to provide them with an update on the Moe Tennis Courts Needs Assessment and the recommendations contained in the report.

Details of Community Consultation / Results of Engagement:

The community workshop held at the Moe Tennis Clubrooms on 20 August 2013 was well attended, with approximately 30 community members and club members attending.

OPTIONS

Council has the following options in respect to the rehabilitation of the Moe Tennis Complex:

1. Adopt one of the options as outlined in the Moe Tennis Needs Assessment Report to rehabilitate the Moe Tennis Complex.
2. Not adopt any of the options outlined in the Moe Tennis Needs Assessment Report and request further investigation.

CONCLUSION

The Moe Tennis Complex is a 15-court acrylic hard court facility that is in poor condition and requires a significant upgrade.

The complex is home to the Moe Tennis Club which has a declining membership base. Only 58 members are currently registered.

The conditions of the court were first identified in 2011 and initial investigations were undertaken by both Latrobe City Council and the Moe Tennis Club which indicated significant works were required to improve the facility.

**ORDINARY COUNCIL MEETING MINUTES
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The standard of the courts were further compromised in June 2012 when an earthquake in the region caused additional cracking and damage to the courts.

Council were awarded an insurance claim of \$199,000 in relation to the earthquake and combined with approximately \$100,000 left in Council's capital account for this project, a total of \$299,000 is currently allocated.

Following discussions with the Moe Tennis Club and Council officers, it was agreed that a holistic permanent solution to the issues at the Moe Tennis Complex was required and that a planning project would be undertaken to provide recommendations to solve the court conditions issues.

In 2013, SGL consultants were engaged to prepare a Moe Tennis Needs Assessment and after significant consultation with key stakeholders and further investigation into the court conditions, a report was presented.

The options that have been presented provide details about the works to be undertaken and the approximate costs that would be incurred. Options 2, 2A, 2B, 2C provide only a temporary solution to the issues being experienced at the complex and in all likelihood would require significant ongoing works and maintenance.

Option 1 and Option 3 provide a permanent solution to the current issues. Option 1, costed at \$1.7 million is cost prohibitive and would require significant Council and external government funding for the project to be fully realised. Option 3 provides for a full reconstruction of 10 courts at the facility (2 courts permanently removed and 3 courts left for community use) within an achievable budget, and will provide for a fully reconstructed, compliant and low maintenance solution.

Attachments

1. Moe Tennis Complex (Aerial View)
2. 2MH Moe Tennis Audit and Inspection Report November 2011
3. BCS Moe Tennis Report 2012
4. 2MH Moe Tennis Updated Advice February 2014
5. SGL Moe Tennis Needs Assessment Report February 2014

RECOMMENDATION

1. That Council adopt Option 3 as detailed in the Issues section of this report as the preferred option for the reconstruction of the Moe Tennis Complex.

Staged replacement of new hard courts:

- *Stage 1A – Site master plan and design*
 - *Stage 1 – Demolition of 2 existing courts and reconstruction of 6 new tennis courts*
 - *Stage 2 – Construction of 4 new tennis courts*
2. That Council proceed with the detailed design and cost planning.
 3. That Council refer the following additional costs associated with Option 3 to the 2014/15 and 2015/16 capital works program:

2014/15 Stage 1 works – \$275,000

2015/16 Stage 2 works – \$350,000

Moved: Cr Gibbons

Seconded: Cr Gibson

That the Recommendation be adopted.

CARRIED UNANIMOUSLY

14.1

Moe Tennis Courts Needs Assessment

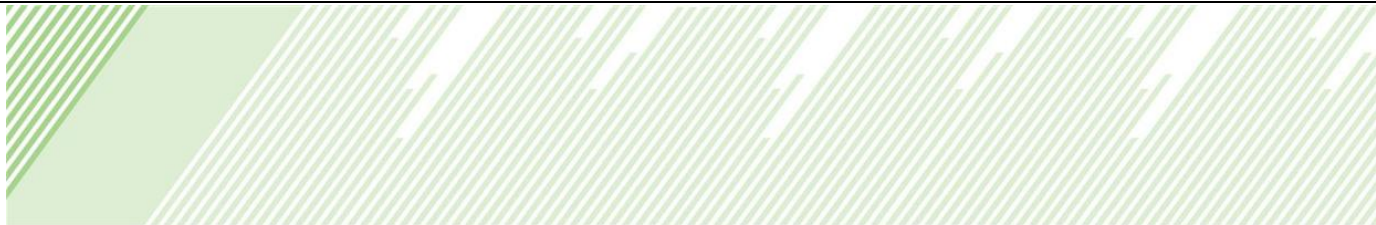
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Tennis Facility Audit and Inspection

Moe Tennis Club,
Moe



TENNIS FACILITY INSPECTION CHECKLIST

Site Name: **Moe Tennis Club**

Date: **16/11/2011**

Site Address: Botanic Drive, Moe

Contact Name: Brad Griffin/Lesa Domagala Phone No: 0418 524 413/0409 232 263

Club / Association (or Management):

1. SURFACE TYPE	Number of Courts and Comments:
Hardcourt	15 Acrylic
Porous	
Synthetic	
Asphalt	
2. GENERAL COURT CONDITION	
For each court located on the site, comment on the following detail:	<p>Surface condition should comment on; surface imperfections including: cracking (hairline to severe), gravel, undulations, fittings for other sports (i.e. netball hole caps), water retention (filled with water indentations which cover 20c piece), mould, mildew, leaves or sticks</p> <p>Court Line Marking should comments on whether it is clear and well marked, multi-lined (i.e. for other sports) and if the run off distances meet minimum standards.</p>
Courts 1-3 in the one bank	
<p>North ↑ To courts 8-12</p> <p style="text-align: center;">The Spoon drain along this boundary is 1370mm wide inside the fence line, making the distance between the court baselines and the fence 6250mm.</p> <div style="border: 1px solid black; padding: 10px; text-align: center;"> </div>	



<p>Courts 1-3: Acrylic Hardcourt</p> 	<p>Surface type/ condition: These courts are positioned in front of the clubrooms and it would be assumed that these are highly utilised. All three courts have an Acrylic Hardcourt surface with an asphalt base; they were resurfaced four years ago. The repaired/resurfaced cracks are reflecting through the new surface, in addition there are many cracks along the Western boundary as a direct result of the large trees in close proximity. These large cracks are heaving and will continue to increase in size as the tree roots do. Repairs to these will be required to prevent further damage to the pavements base. There are numerous other cracked areas mainly along the Southern end that will also need repairing before any resurfacing is attempted. There are some sections of the courts which are plating within the playing areas (Northern end of Court 1 and the Southern ends of Courts 2 & 3). This type of damage is usually associated with water inundation either by surface flooding or a rising water table under the court base.</p> <p>There are lower lying areas across these courts that allow water to sit on the pavement surface for long periods of time. This would decrease the longevity of the courts surface and increase the risk to player safety as the buildup of silty & black sooty material within the ponding areas would become quite slippery when moist. This will need to be monitored as this may pose a serious risk to player safety if it continues to deteriorate. If resurfacing in the future a self-leveling compound may be needed to lessen the depth of these areas.</p> <p>There is an electrical conduit in galvanised tubing along the Eastern and Western boundary within the enclosure; it is recommended that this be buried outside of the enclosure if redeveloping this pavement to ensure minimum run-off distances are maintained for compliant courts.</p> <p>The courts have formed drainage with a spoon drain along the entire Northern boundary; this is formed as part of the asphalt pavement. It empties, without a pit, into the large swale drain surrounding the courts. However at the time of inspection there was water sitting in the spoon drain as it does not fall adequately. There was also debris and leaf litter in the North West corner of the spoon drain preventing the drain from operating efficiently in heavy downpours.</p> <p>There is significant debris across all of the courts, the Western side of the enclosure is the worst affected, this would be attributed to the large trees along this boundary. It would be advisable to trim the branches away from the fencing to minimise the impact. The courts should also be regularly maintained ensuring leaf litter, weeds and dirt have been removed from the acrylic surface on a regular basis.</p> <p>The type of damage to the pavement and acrylic surface of these courts would suggest that the pavement has been affected by a combination of age, lack of routine maintenance, tree damage, reflective cracking and water inundation from either the surface or rising water table as this facility has a creek running adjacent to the Western boundary. This pavement could be repaired, re-leveled/re-sheeted and then resurfaced however it is important to note that this may not offer long term results for the club, it is possible that cracking may reflect through the new surface. A soil test is recommended for this pavement area prior to any works due to the close proximity to the creek and to ensure sufficient works are being carried out given the soil conditions under the pavement (i.e.: is the rising water table pushing silty material up through the base material contaminating and undermining the base). Tree root barriers are also recommended along the Western boundary if a long term budget allows the redevelopment of these courts.</p> <p>Net Posts & Nets: The posts are old style with fixed rusty winders and are installed directly into the pavement. They are slightly bent. The nets on both are in good condition and tethered to the posts. They have centre net straps and they are in good condition.</p> <p>Court run-off: Both courts fail to meet minimum run-offs for club competition. They are non-compliant in the following areas;</p>
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Boundary Position	Existing	Required
	Min / max.	
All Northern Baselines	4880 / 4910mm	5480mm
b/w all courts	3600 / 3620mm	3660mm
West and East sidelines	2840 / 2920mm	3050mm

It is important to note that although there is sufficient space to the fence on the Northern ends of the courts for compliance the spoon drain is a change in gradient and cannot be utilised as run-off area.

The Current Standards requires the court surface and the run-offs to be of the same surface type and without change of level.

Current Court layout Pavement 34990mm (N/S) x 46010mm (E/W)

Minimum Pavement required for compliance 34730mm (N/S) x 46330mm (E/W)

Available space within enclosure 36360mm (N/S) x 46010mm (E/W)

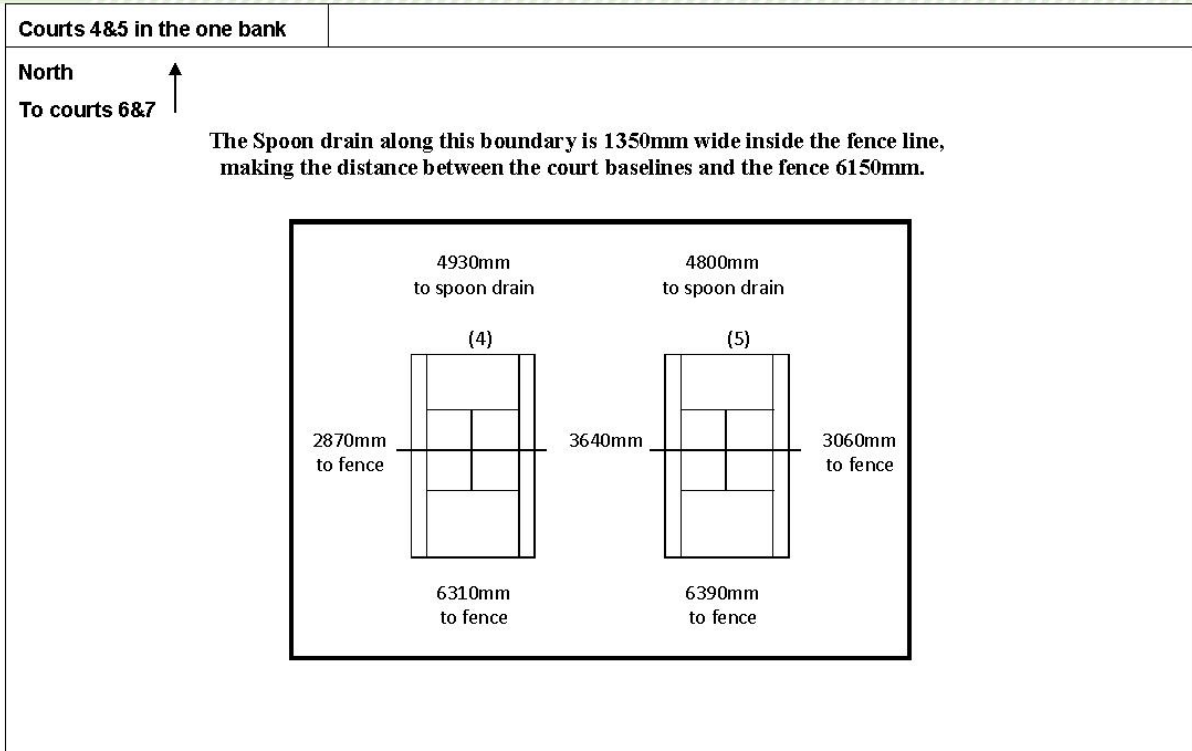
The pavement will need to grow at least 320mm East/West to be compliant to the current Standards for court dimensions and minimum run-offs. There is ample room within the enclosure for compliant North/South run-offs if the courts were shuffled to the South to take advantage of the excess run-off at that end.

Court line marking: Line marking is cracked, chipped and dirty reflecting the deteriorated state of the courts.

Floodlights: There are 4 high steel light towers positioned outside of the enclosure. 2 light towers have several light fittings mounted to them due to their multiuse with the surrounding courts. A lux level test is recommended if redeveloping to ensure competition standard lux levels are met.

Maintenance / capital works recommendations:

- Regular court grooming is required (weed, debris and dirt removal within court enclosure a priority).
- Investigate the pavement, base and the soil conditions under the court to determine if remedial works would be successful long term.
- If the base has been undermined considerably, reconstruct all 3 courts, extending the enclosure East/West and ensuring the spoon drain and electrical conduits are placed outside of the required run-off areas.
- Install root barriers.
- Net posts should be replaced when re-shuffling or reconstructing the courts; these should be replaced with black powder coated posts with collapsible winders and new ¾ length high quality nets with centre net straps.
- When reconstructing, ensure all dimensions and run-offs are compliant with the current Standards for Club competition.

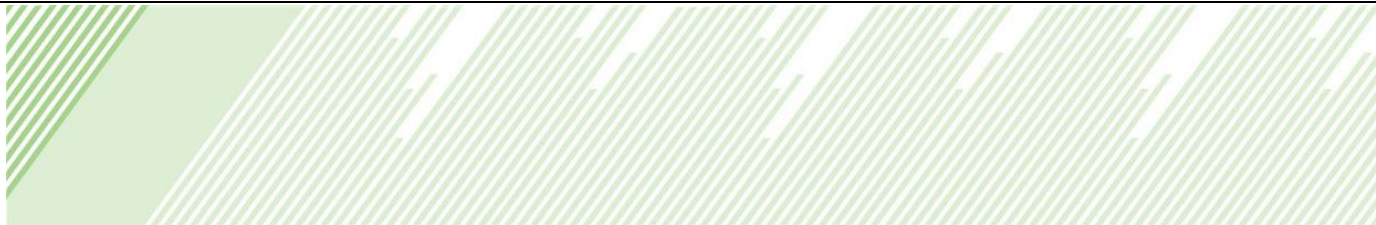


Surface type/ condition: Both courts are within the one enclosure. They have an Acrylic Hardcourt surface with an asphalt base, they are aged and in rapid decline due to the poor drainage and nearby trees on site. The playing surface has a number of hairline cracks throughout the court area, these are mainly in line with the courts playing lines, and they have weeds growing from them that require spraying out. There are numerous large, open & heaving cracks along the Southern and Eastern run-off areas; these appear to be a direct result of poor drainage and trees along these boundaries. There is an open swale drain that wraps around these boundaries and they had water sitting in them at the time of inspection. The pavement is not supported by a concrete plinth and is therefore more susceptible to collapsing; this is currently evident with heavy cracking along these boundaries. These courts would offer a variable ball bounce on the run-off surface and possible trip & slip hazards. This will need to be monitored as this may pose a serious risk to player safety if it continues to deteriorate and is not cleaned.

The courts have formed drainage with a spoon drain along the entire Northern boundary; this is formed as part of the asphalt pavement. It empties, without a pit, into the shallow swale drain surrounding the courts to the East. However at the time of inspection this outlet area was built up at the fence line with dirt and weed growth, preventing the water from getting away efficiently. This suggests that there is often a backlog of water sitting in the surrounding areas. Cleaning out the outlet area would dramatically increase the efficiency of this drain.

The courts should also be regularly maintained ensuring all dirt and silty material has been removed from the acrylic surface.

The type of damage to the pavement and acrylic surface of these courts would suggest that the pavement has been severely affected by a combination of age, poor drainage, tree root invasion and no form of pavement retention around the edges. It would be possible to patch repair the small cracks and cut out the affected run-off areas on the Southern and Eastern sides of the courts and replace with retained pavement. It would be advisable to have a full drainage assessment and remedial works conducted at this time to prevent the continuing of moisture in these areas and minimise the likelihood of damage re-occurring.



Net Posts & Nets: The posts are old style without winders and are installed directly into the pavement. They are slightly bent. The nets are in good condition and tethered to the posts. There are no centre net straps however there are anchors in place.

Court run-off: All courts do not meet minimum run-offs for club competition. They are non-compliant in the following areas;

Boundary Position	Existing	Required
	Min / max.	
All Northern Baselines	4800 / 4930mm	5480mm
b/w courts	3640mm	3660mm
West and East sidelines	2870mm	3050mm

It is important to note that although there is sufficient space to the fence on the Northern ends of the courts for compliance the spoon drain is a change in gradient and cannot be utilised as run-off area.

The Current Standards require the court surface and the run-offs to be of the same surface type and without change of level.

Current Court layout Pavement	34890mm (N/S) x 31530mm (E/W)
Minimum Pavement required for compliance	34730mm (N/S) x 31700mm (E/W)
Available space within enclosure	36240mm (N/S) x 31530mm (E/W)

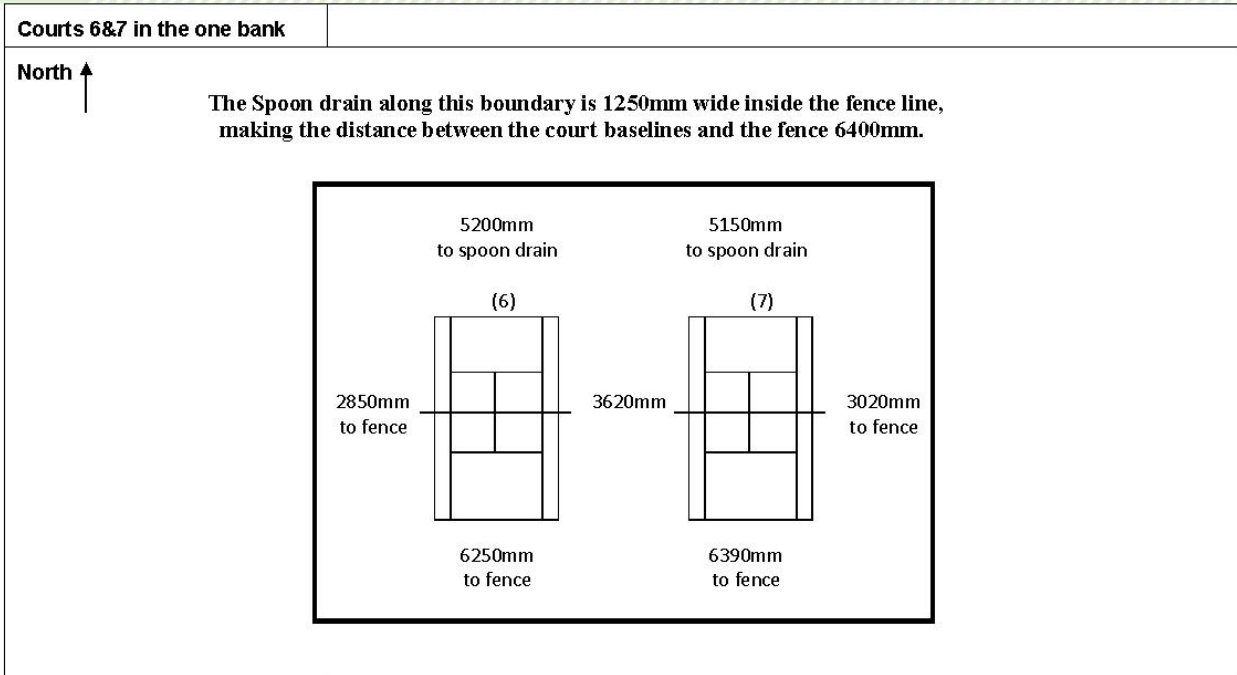
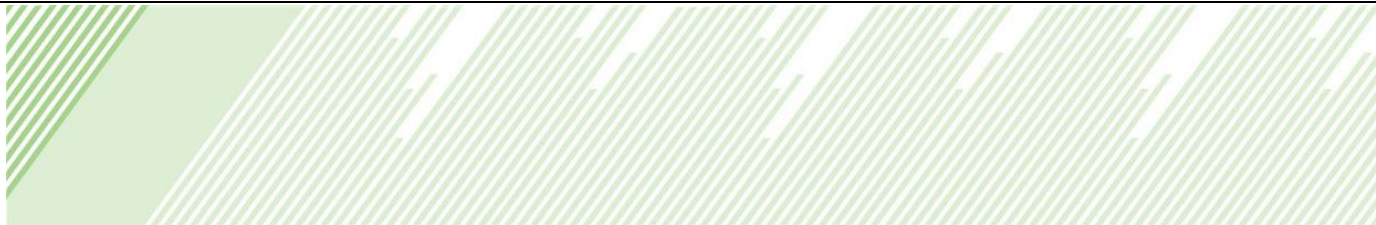
The pavement will need to grow at least 170mm East/West to be compliant to the current Standards for court dimensions and minimum run-offs. There is ample room within the enclosure for compliant North/South run-offs if the courts were shuffled to the South to take advantage of the excess run-off at that end.

Court line marking: Line marking is cracked and dirty reflecting the current state of the courts.

Floodlights: There are 4 high steel light towers positioned outside of the enclosure. Some of the light towers have several light fittings mounted to them due to the multiuse with the surrounding courts. A lux level test is recommended when redeveloping to ensure competition standard lux levels are met.

Maintenance / capital works recommendations:

- Regular court grooming is required (weed, debris and dirt removal within court enclosure a priority).
- Look to repair cracks, cut and repair the run-off areas on the South and Eastern sides re-sheet and resurface. Extend pavement on the Eastern boundary and reshuffle the courts at this time to ensure compliant run-offs are achieved.
- Install root barriers.
- Investigate soil type to ensure adequate pavement design for soil type/condition.
- Net posts should be replaced when remedial works are carried out on these courts; these should be replaced with black powder coated posts with collapsible winders and new ¾ length high quality nets with centre net straps.
- When reconstructing, ensure all dimensions and run-offs are compliant with the current Standards for Club competition.



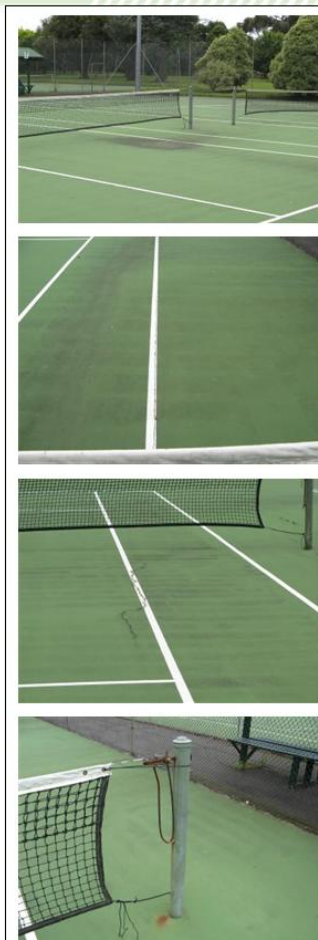
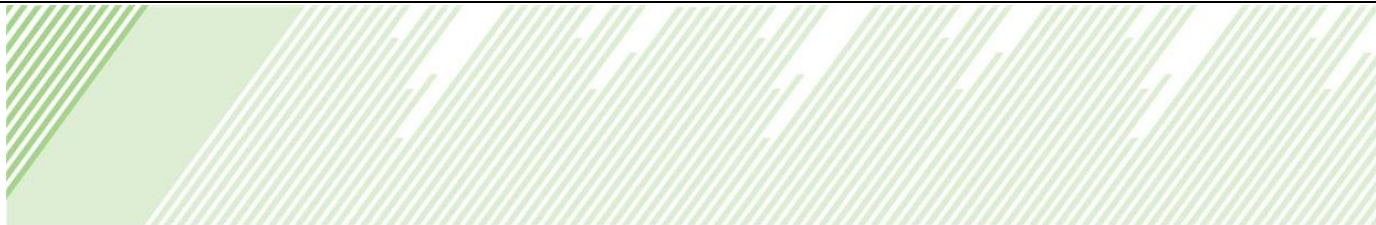
Surface type/ condition: Both courts are within the one enclosure. They have an Acrylic Hardcourt surface with an asphalt base, they are aged and in decline due to the poor drainage on site. The playing surface has a number of hairline cracks throughout the court area, these are mainly in line with the courts playing lines and they have weeds growing from them that require spraying out. There are numerous cracks along the Southern and Eastern run-off areas; these appear to be a direct result of poor drainage along these boundaries. There is an open swale drain that runs along the Eastern boundary which had water sitting in it at the time of inspection. The pavement is not supported by a concrete plinth and is therefore more susceptible to the collapsing; this is currently evident with heavy cracking along this boundary. There are several large ponding areas and a large collapsed area in the North East corner of the enclosure. These have a build-up of silt & a black sooty material which would become quite slippery when moist. These courts would offer a variable ball bounce on the Eastern run-off surface and possible slip hazards. This will need to be monitored as this may pose a serious risk to player safety if it continues to deteriorate and is not cleaned.

The courts have formed drainage with a spoon drain along the entire Northern boundary; this is formed as part of the asphalt pavement. It empties, without a pit, into the swale drain to the East. However at the time of inspection there was water sitting in the spoon drain with a large amount of dirt and black silty material along the entire length and for a large area surrounding the outlet area. This suggests that there is often a backlog of water sitting in these areas. Cleaning out the outlet area would dramatically increase the efficiency of this drain.

The courts should also be regularly maintained ensuring all dirt and silty material has been removed from the acrylic surface.

The type of damage to the pavement and acrylic surface of these courts would suggest that the pavement has been severely affected by a combination of age, poor drainage and no pavement retention. It would be possible to patch repair the small cracks within the playing surface and cut out the affected run-off areas on the Eastern side of the court enclosure and replace with a retained pavement, then resurface the entire court enclosure. It would be advisable to have a full drainage assessment and remedial works conducted at this time to prevent the holding of moisture in these areas and minimise the likelihood of damage re-occurring.

Net Posts & Nets: The posts are old style with fixed winders and are installed directly into the pavement. They are slightly bent. The nets are in good condition and tethered to the posts. They have centre net straps installed.



Court run-off: All courts do not meet minimum run-offs for club competition. They are non-compliant in the following areas;

Boundary Position	Existing	Required
	Min / max.	
All Northern Baselines	5150 / 5200mm	5480mm
b/w courts	3620mm	3660mm
West and East sidelines	2850 / 3020mm	3050mm

It is important to note that although there is sufficient space to the fence on the Northern ends of the courts for compliance the spoon drain is a change in gradient and cannot be utilised as run-off area.

The Current Standards require the court surface and the run-offs to be of the same surface type and without change of level.

Current Court layout Pavement	35140mm (N/S) x 31460mm (E/W)
Minimum Pavement required for compliance	34730mm (N/S) x 31700mm (E/W)
Available space within enclosure	36390mm (N/S) x 31460mm (E/W)

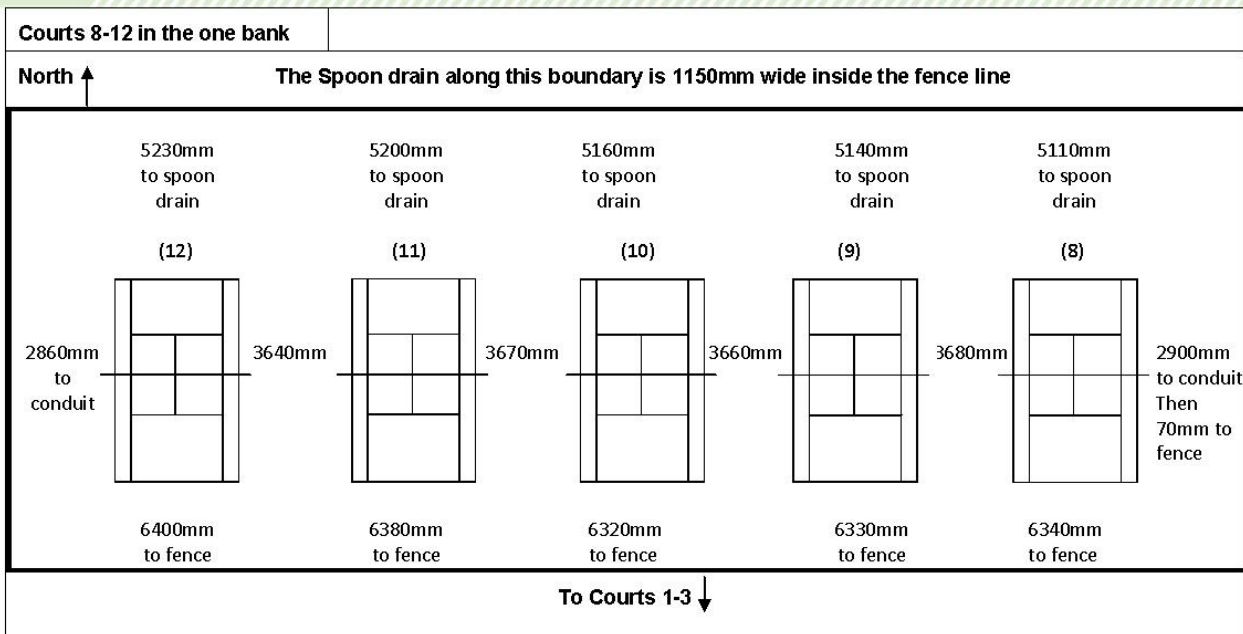
The pavement will need to grow at least 240mm East/West to be compliant to the current Standards for court dimensions and minimum run-offs. There is ample room within the enclosure for compliant North/South run-offs if the courts were shuffled to the South to take advantage of the excess run-off at that end.

Court line marking: Line marking is cracked and dirty reflecting the current state of the courts.

Floodlights: There are 4 high steel light towers positioned outside of the enclosure. They all have several light fittings mounted to them due to the multiuse with the surrounding courts. A lux level test is recommended when redeveloping to ensure competition standard lux levels are met.

Maintenance / capital works recommendations:

- Regular court grooming is required (weed, debris and dirt removal within court enclosure a priority).
- Look to repair cracks, cut and repair the run-off area on the Eastern side of the enclosure and resurface. Extend pavement on the Eastern boundary and reshuffle the courts at this time to ensure compliant run-offs are achieved.
- Install root barriers where trees are likely to impact.
- Investigate soil type to ensure adequate pavement design for soil type/condition.
- Net posts should be replaced when remedial works are carried out on these courts; these should be replaced with black powder coated posts with collapsible winders and new ¾ length high quality nets with centre net straps.
- When reconstructing, ensure all dimensions and run-offs are compliant to the current Standards for Club competition.



**Courts 8-12:
Acrylic Hardcourt**



Surface type/ condition: All five courts have an Acrylic Hardcourt surface with an asphalt base, they are aged and in need of urgent attention. The playing surface has numerous cracks consistently across all courts this is particularly evident on Courts 10, 11 & 12 and the Northern end of all courts. There are many areas where plating has occurred, this type of damage is usually associated with water inundation either by surface flooding or rising water table under the court base. There are several large ponding areas created by the collapsing of pavement on the Southern end of the courts and an old net post foundation patch with cracking surrounding it on Court 9. These areas are surrounded by surface cracking and are likely to continue to deteriorate with the holding of water in these areas. There is also a large mounded area in the South West corner of the enclosure that may be attributed to the large trees heaving the pavement in this area. There are also numerous cracks in the playing surface consistent across all courts; these are particularly evident in line with North/South lines of the courts with weeds growing from these.

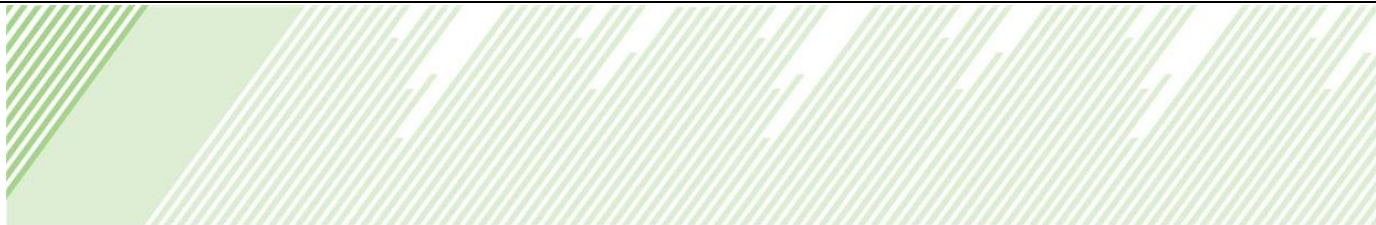
There is a build-up of silty & black sooty material within the plated and ponding areas which would become quite slippery when moist. These courts would offer a variable ball bounce on the playing surface and possible trip & slip hazards. This will need to be monitored as this may pose a serious risk to player safety if it continues to deteriorate.

There is an electrical conduit in galvanised tubing along the Eastern boundary within the enclosure; it is recommended that this be buried outside of the enclosure if redeveloping this pavement to ensure minimum run-off distances are maintained for compliant courts.

The courts have formed drainage with a spoon drain along the entire Northern boundary; this is formed as part of the asphalt pavement. It empties, without a pit, into the large swale drain surrounding the courts. However at the time of inspection there was water sitting in the spoon drain with a large amount of debris and leaf litter in the North West corner of the spoon drain preventing the drain from operating efficiently.

There is significant debris across all of the courts, the Western side of the enclosure is the worst affected, this would be attributed to the large gum trees along this boundary. It would be advisable to trim the branches away from the fencing to minimise the impact. The courts should also be regularly maintained ensuring leaf litter, weeds and dirt have been removed from the acrylic surface.

The type of damage to the pavement and acrylic surface of these courts would suggest that the pavement has been severely affected by a combination of age, lack of routine maintenance, tree damage and water inundation. This pavement is beyond patch repairs and will require a full reconstruction. A soil test is recommended for this area given the close proximity to the creek and to ensure a sufficient pavement is built preventing a re-occurrence of the existing issues.










Tree root barriers are also recommended.

Net Posts & Nets: The posts are old style with fixed rusty winders and are installed directly into the pavement. They are slightly bent. The nets on courts 8 & 9 are in good condition and tethered to the posts, courts 10 & 11 are in need of repair and there is no net on court 12. The fitted nets have centre net straps and they are in good condition.

Court run-off: All courts do not meet minimum run-offs for club competition. They are non-compliant in the following areas;

<u>Boundary Position</u>	<u>Existing</u>	<u>Required</u>
All Northern Baselines		5480mm
b/w courts 11&12		3660mm
West and East sidelines		3050mm

It is important to note that although there is sufficient space to the fence on the Northern ends of the courts for compliance the spoon drain is a change in gradient and cannot be utilised as run-off area.

The Current Standard requires the court surface and the run-offs to be of the same surface type and without change of level.

Current Court layout Pavement 35230mm (N/S) x 75240mm (E/W)
Minimum Pavement required for compliance 34730mm (N/S) x 75590mm (E/W)
Available space within enclosure 36380mm (N/S) x 75380mm (E/W)

The pavement will need to grow at least 210mm East/West to be compliant to the current Standards for court dimensions and minimum run-offs. There is ample room within the enclosure for compliant North/South run-offs if the spoon drain is constructed closer to the fence line only taking up 600mm of the enclosures space.

Court line marking: Line marking is cracked, chipped and dirty reflecting the deteriorated state of the courts.

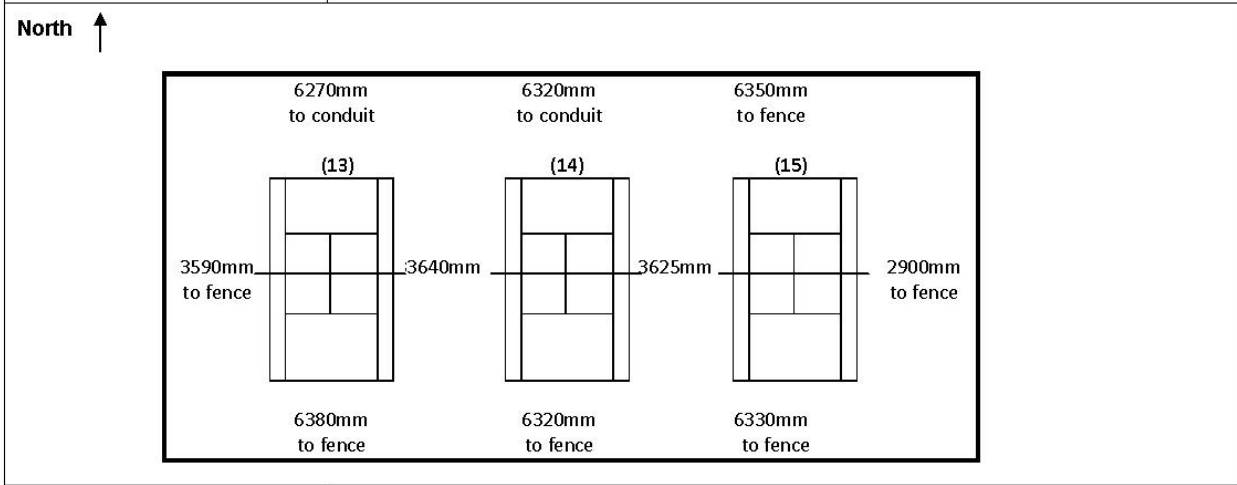
Floodlights: There are 6 high steel light towers positioned outside of the enclosure. 4 light towers have several light fittings mounted to them due to the multiuse with the surrounding courts. A lux level test is recommended when redeveloping to ensure competition standard lux levels are met.

Maintenance / capital works recommendations:

- Regular court grooming is required (weed, debris and dirt removal within court enclosure a priority).
- Reconstruct all 5 courts, extending the enclosure East/West and ensuring the spoon drain and electrical conduits are placed outside of the required run-off areas.
- Install root barriers where trees are likely to impact.
- Investigate soil type to ensure adequate pavement design for soil type/condition.
- Net posts should be replaced when reconstructing the courts; these should be replaced with black powder coated posts with collapsible winders and new ¾ length high quality nets with centre net straps.
- When reconstructing, ensure all dimensions and run-offs are compliant with the current Standards for Club competition.



Courts 13-15 in the one bank



Courts 13-15:
Acrylic Hardcourt



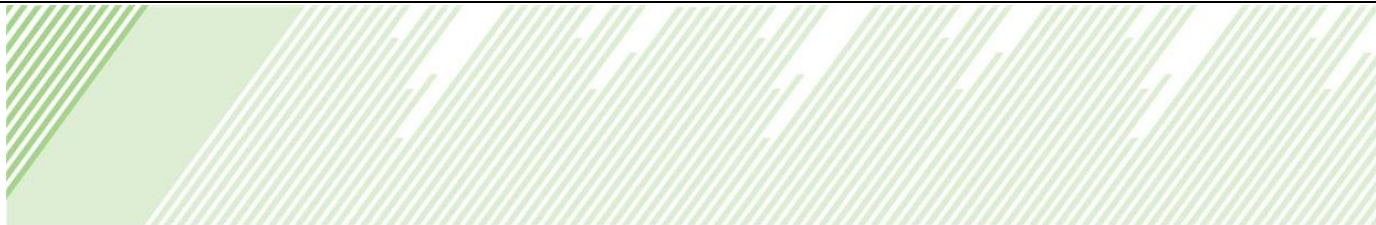
Surface type/ condition: These courts are positioned the furthest away from the clubrooms. All three courts have an Acrylic Hardcourt surface with an asphalt base. There are numerous cracks consistently over all three courts. Court 13 is in the worst condition with multiple cracks, large ponding areas and a mounded area in the middle of the Northern end. The Western flank of this court has collapsed creating large cracks that have opened up and are now heaving. The uneven surface and degree of damage to the court make this court a risk to player safety. The Eastern side of Court 15 is also badly affected by poor drainage with cracking of the pavement and collapsed fence footings. These areas will continue to deteriorate rapidly as the base has been undermined with the penetration of moisture through the large cracks. Repairs to these will be required to prevent further damage to the pavements base. There are numerous other cracked areas mainly within the playing surface of Court 15 that will also need repairing before any resurfacing is attempted.

There are large ponding areas at the Northern end of Court 13 and in the North East corner of the enclosure. This has decreased the longevity of the courts surface and increased the risk to player safety as the build-up silty & black sooty material within the ponding areas would become quite slippery when moist. This will need to be monitored as this may pose a serious risk to player safety if it continues to deteriorate. These areas are substantial and would require reconstructing as the base and pavement has failed.

There is an electrical conduit in galvanised tubing along the Western boundary within the enclosure; it is recommended that this be buried outside of the enclosure if redeveloping this pavement to ensure minimum run-off distances are maintained for compliant courts, this run-off is currently non-compliant.

These courts have no formed drainage. They fall to the North East corner of the enclosure and empty out through the fence line to the open swale drain. This was wet and holding water at the time of inspection. This does not appear to work efficiently with evidence of water being held on and around the North East corner, resulting in the collapsed pavement.

The courts should also be regularly maintained ensuring leaf litter, weeds and dirt have been removed from the acrylic surface on a regular basis.



The type of damage to the pavement and acrylic surface of these courts would suggest that the pavement has been affected by a combination of age, lack of routine maintenance, poor drainage and water inundation from either the surface or rising water table as this facility has a creek running adjacent to the Western boundary. This pavement appears to be beyond patch repairs and a total reconstruction may be necessary. A soil test is recommended during the design process to ensure sufficient works are being carried out given the soil conditions in this immediate area.



Net Posts & Nets: The posts are old style with fixed rusty winders and are installed directly into the pavement. They are leaning. The nets on are in good condition however Courts 13 & 15 need theirs tethered to the posts. They have centre net straps however Court 13's is the only one in good condition.



Court run-off: All three courts fail to meet minimum run-offs for club competition. They are non-compliant in the following areas;

Boundary Position	Existing	Required
	Min / max.	
b/w all courts	3625 / 3640mm	3660mm
Western sideline	2900mm	3050mm



The Current Standards requires the court surface and the run-offs to be of the same surface type and without change of level.

Current Court layout Pavement	36370mm (N/S) x 46755mm (E/W)
Minimum Pavement required for compliance	34730mm (N/S) x 46330mm (E/W)
Available space within enclosure	36370mm (N/S) x 46755mm (E/W)

The pavement will not need to grow as there is already sufficient space within this enclosure for compliant courts. However the courts would need to be shuffled for each court to be complaint East/West.





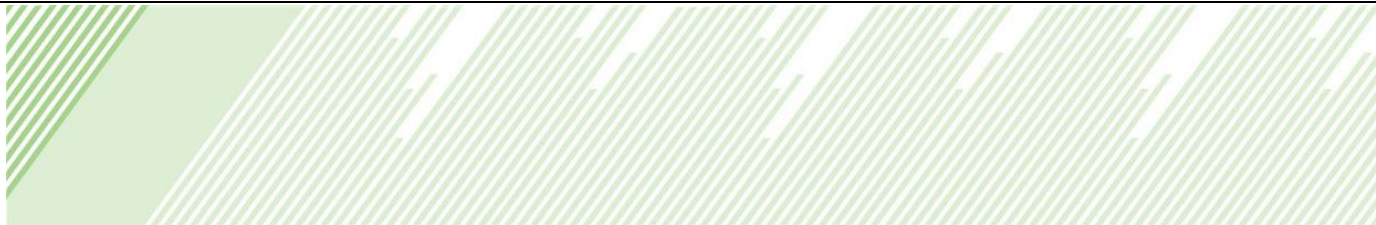
Court line marking: Line marking is cracked, chipped and dirty reflecting the deteriorated state of the courts.


Floodlights: There are 4 high steel light towers positioned outside of the enclosure. 2 light towers have several light fittings mounted to them due to their multiuse with the surrounding courts. A lux level test is recommended if redeveloping to ensure competition standard lux levels are met.

Maintenance / capital works recommendations:

- Regular court grooming is required (weed, debris and dirt removal within court enclosure a priority).
- Investigate the pavement, base and the soil conditions under the court to determine if remedial works would be successful long term.
- If the base has been undermined considerably, reconstruct all 3 courts, extending the enclosure East/West and ensuring the spoon drain and electrical conduits are placed outside of the required run-off areas (preferably outside the enclosures fencing).
- Install root barriers where trees are likely to impact.
- Net posts should be replaced when re-shuffling or reconstructing the courts; these should be replaced with black powder coated posts with collapsible winders and new ¾ length high quality nets with centre net straps.
- When reconstructing, ensure all dimensions and run-offs are compliant with the current Standards for Club competition.

3. COURT LIGHTING	
Number of courts with lights:	15
What type of lighting:	High steel light towers positioned outside of each the enclosure.
Provide Lux level reading (if appropriate):	Lux levels were not requested at this time
4. DRAINAGE	
Please note any comments in regards to site drainage:	All courts have issues as a result of poor drainage, both on court and surrounding the courts. Any redevelopment of these courts would require a full drainage design, the surrounding area should be considered in addition to the actual pavement surface drainage for each enclosure. There are no concrete plinths or pits at this complex; these would help prolong the lifespan of the courts if implemented in the redesign of this complex.
	
5. COURT FENCING	
Comments in regards to fencing type (steel or powder coated) AND any visible damage or rust AND whether top and/or bottom rails are provided:	Old PVC chain mesh fencing is used extensively throughout this site. There are no top or bottom rails and this had led to curling of the mesh at the bottom. The fencing is also slack and damaged in many areas. The three most concerning areas are; the Eastern side of Court 15 where the post foundations are failing and the fencing is leaning substantially, at the Southern end of Court 4 where there is a large hole and on the Western side of Court 13 where it allows access to the courts under the fence where it has been pulled up. Consideration and future budgets should be forecast to replace all fencing at this complex with black PVC chain mesh fencing with top and bottom rails.
6. CAR PARKING	
Comments in regards to whether it is a purpose built car parking including: sealed or unsealed, line marking, clearly marked traffic direction arrows, accessible spaces, access to courts for ambulance or car and/or security lighting:	Formed unsealed parking. It is not marked, however it is in a dedicated parking area in close proximity to the courts and clubhouse.
	
7. COURT SURROUNDS	
Comments in regards to landscaping, any overhanging trees or shrubs, shade trees or shelters:	The perimeter grounds appear mown and well cared for – however maintenance to the nearby trees and drainage infrastructure is required urgently.



8. CLUB HOUSE	
<p>Rating of facilities in general, please circle:</p> <p>Excellent</p> <p>Good</p> <p>Fair</p> <p>Poor</p> <p>Other comments: Inspection of the clubrooms was not conducted at this time</p>	<p>Please tick the facilities located on site;</p> <ul style="list-style-type: none"> <input type="checkbox"/> First aid facility, including running water <input checked="" type="checkbox"/> <u>Social Area</u> <input type="checkbox"/> Meeting room / Office <input type="checkbox"/> Equipment storage <input type="checkbox"/> Creche <input type="checkbox"/> Toilets (secure & adequate number – separate Male/Female) <input checked="" type="checkbox"/> <u>Toilets (accessible)</u> <input type="checkbox"/> Change rooms (players) <input type="checkbox"/> Change rooms (umpires) <input checked="" type="checkbox"/> <u>Canteen/ Kitchen facilities</u> <input type="checkbox"/> Heating / air conditioning <input type="checkbox"/> Impact protection glass windows <input type="checkbox"/> Fire safety equipment / devices <input checked="" type="checkbox"/> <u>Outdoor seating area, plus shade structure</u>
9. ADJACENT LAND / FACILITIES	
<p>Any comments in regards to adjacent facilities:</p>	<p>Tennis courts are located within a picturesque reserve.</p>
10. WATER AVAILABILITY	
<p>Is there non-potable water available at the site?</p>	<p>Unsure</p>
11. ACCESSABILITY	
<p>Are the facilities accessible?</p> 	<p>Yes. There is a path connection to the carparking area. However accessibility around the complex is risky and poses numerous dangers underfoot, with cabling, small metal ramps and conduit piping at numerous unavoidable areas around the complex.</p>

Identified **Urgent Priorities**, please list:



These unprotected electrical conduits and wires are at the entrance to the complex and pose a serious risk to the public and maintenance personnel.



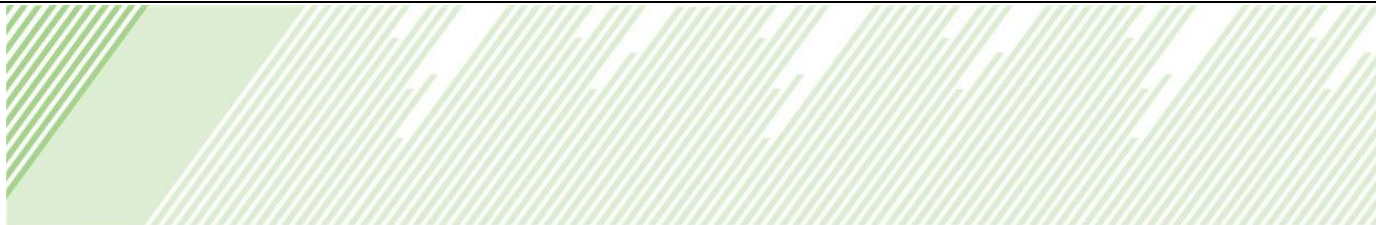
These conduit pipes have small ramps that are meant to help accessibility within the walkway areas between courts however they are inadequate and pose a different level of risk with exposed wire, sharp metal pieces and piping that is still uncovered creating a major trip/slip hazard.

Other Notes:

INSPECTION COMPLETED BY:



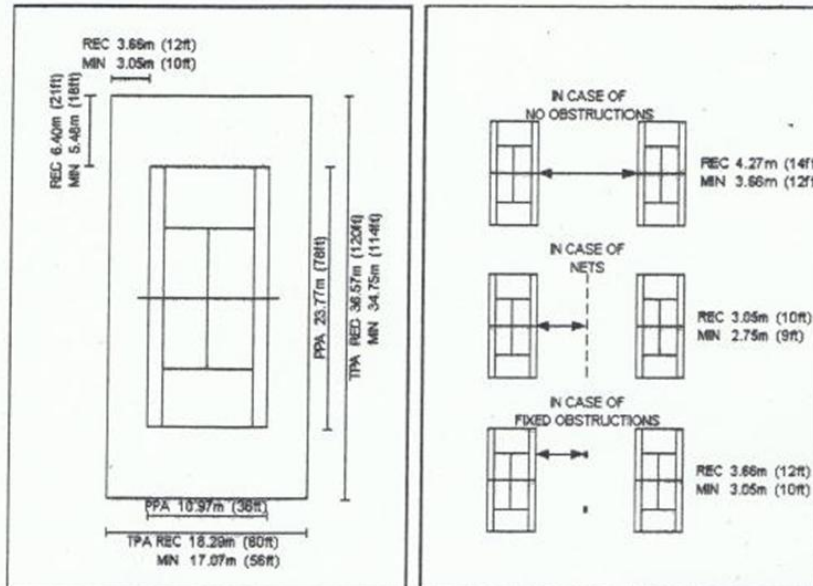
Mick Hassett & Kellie Duff
2MH Consulting
Ph: 5427 3080
admin@2mhconsulting.com.au



Dimension guide

for both recreational and club play (not to scale)

As a guide, the suggested recommended minimum and recommended dimensions for tennis courts are:



Principle Playing Area (PPA) and Total Playing Area (TPA)

Inter-court Spacing

For more information contact your respective state / territory Member Association's Facilities representative.

Tennis ACT
Phone: (02) 6247 8804
facilities@tennisact.com.au

Tennis NSW
Phone: (02) 9763 7644
facilities@tennisnsw.com.au

Tennis NT
Phone: (08) 8981 5609
facilities@tennisnt.com.au

Tennis Queensland
Phone: (07) 3871 8555
facilities@tennisqueensland.com.au

Tennis SA
Phone: (08) 8212 6777
facilities@tennissa.com.au

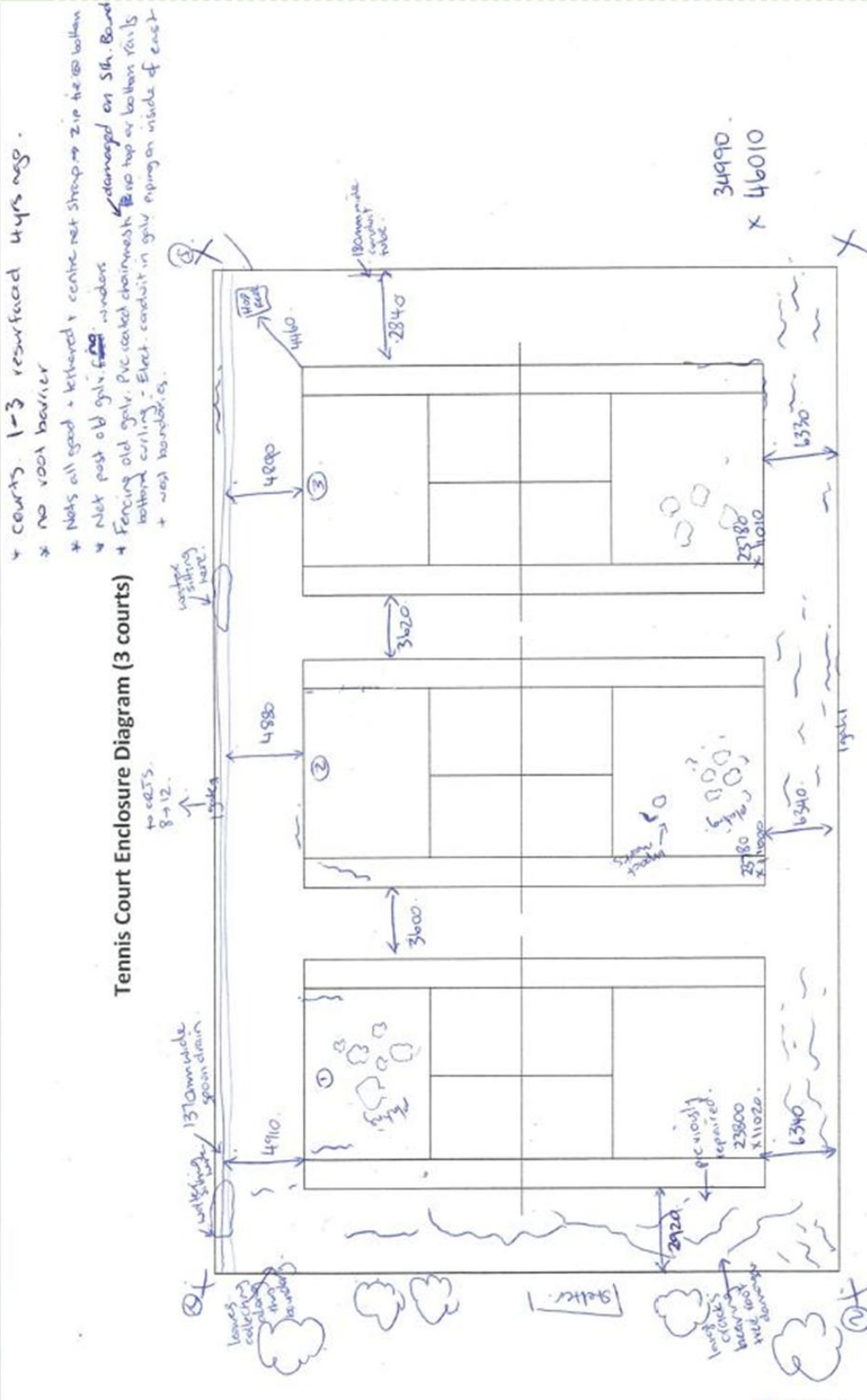
Tennis Tasmania
Phone: (03) 6334 4237
facilities@tennistasmania.com.au

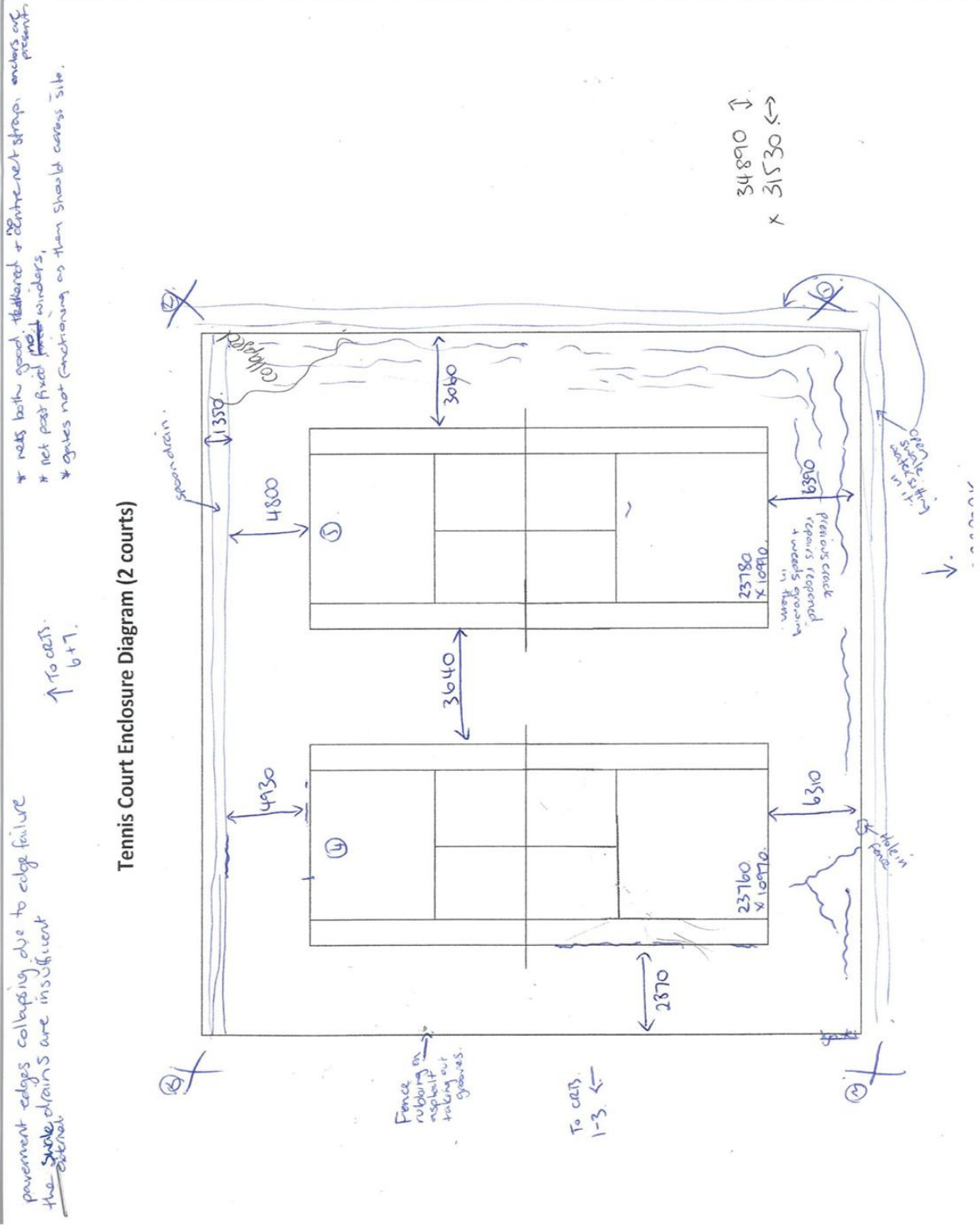
Tennis Victoria
Phone: (03) 8420 8420
facilities@tennisvic.com.au

Tennis West
Phone: (08) 9361 1112
facilities@tenniswest.com.au

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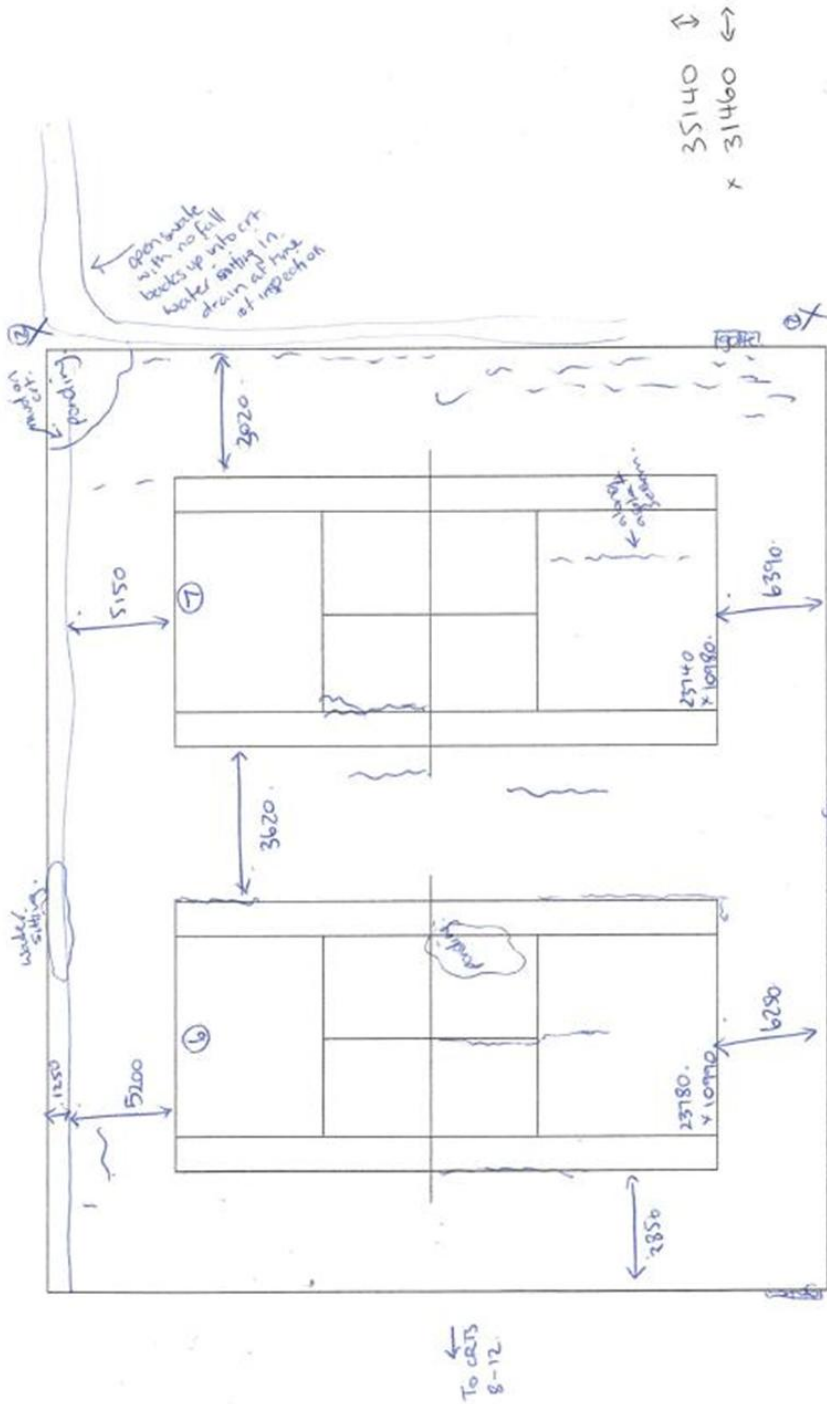




- * nets both cts good + tethered + center net strap.
- * net posts old galv. in fixed windows.
- * Fencing old galv in pic black mesh no top or bottom rails - cutting @ bottom.

To ccts 13-15
↑

Tennis Court Enclosure Diagram (2 courts)



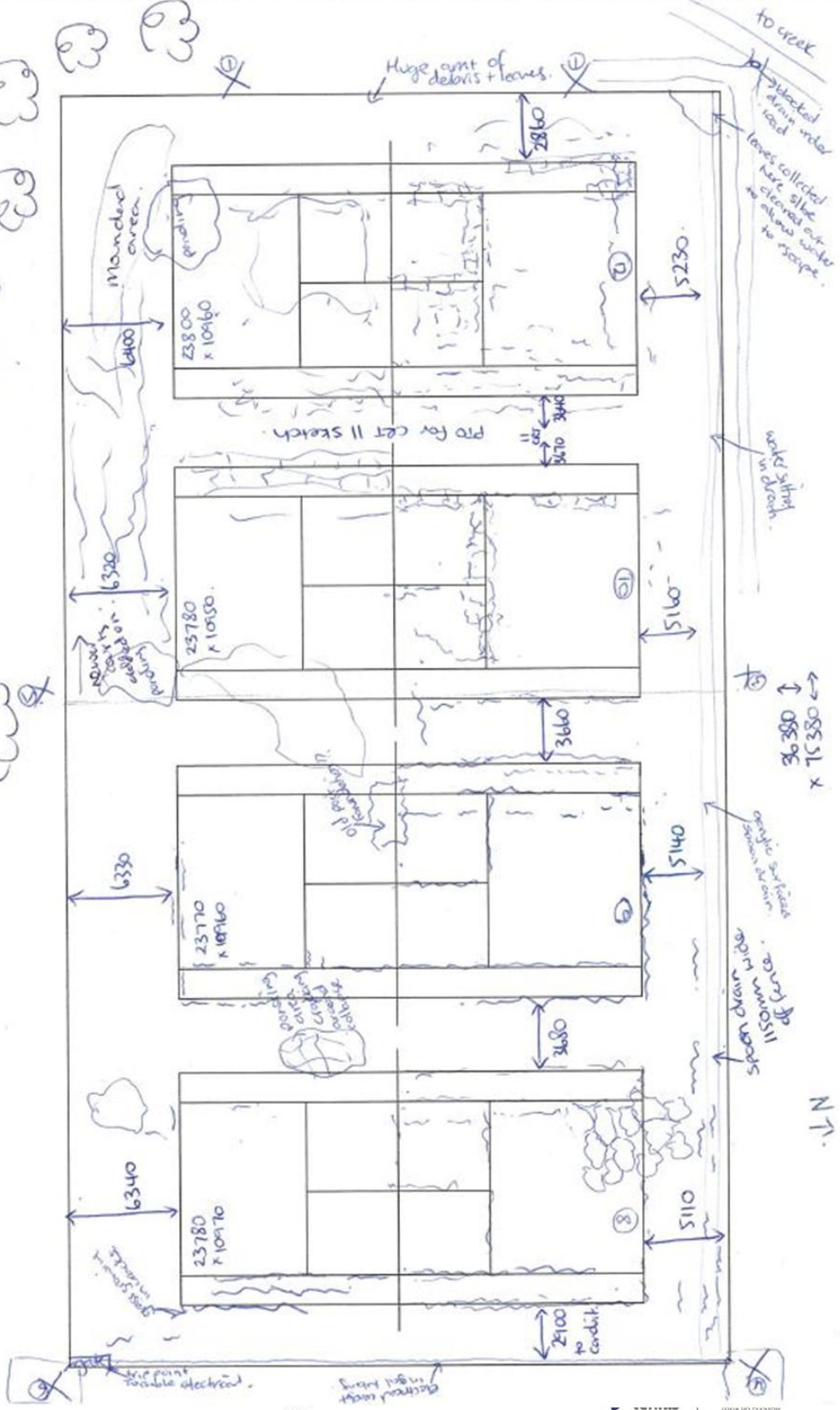


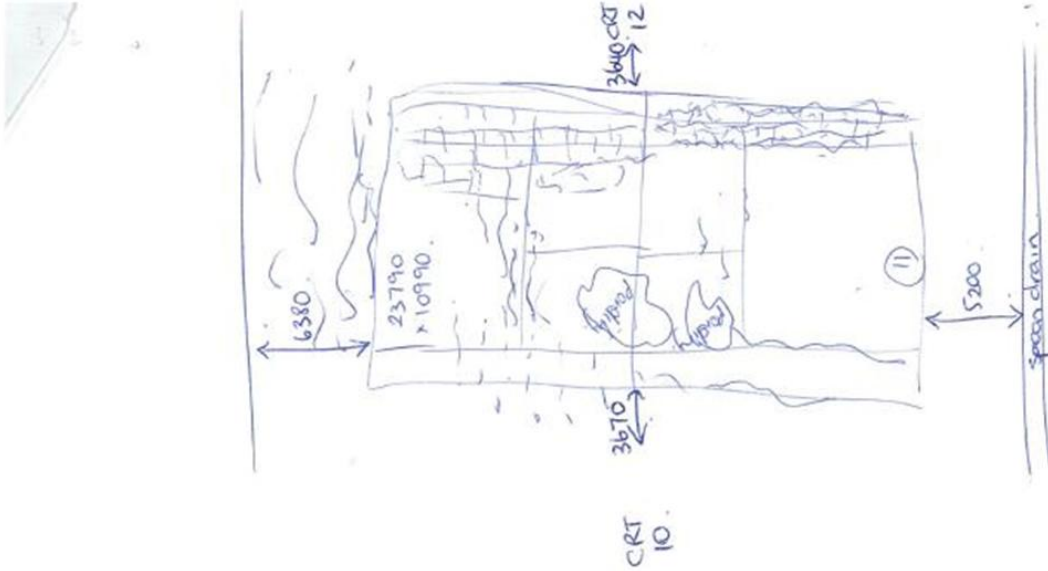
Significant debris on all CRTs → western end worse.
 Black soil on surface esp in parking network.
 Nets on CRTs 8 + 9 good + tethered.
 Nets on CRTs 10 + 11 need repair - no net on CRT 12 centre straps installed + good.

TO CRTS 1-3

Weeds growing from cracks.
 Net posts slight lean, fixed posts + windows - rusty.
 Fencing old galv posts PVC black chain mesh - no top or bottom rails - slack + damaged in parts - repairs are evident - bottom curling.

Tennis Court Enclosure Diagram (4 courts)





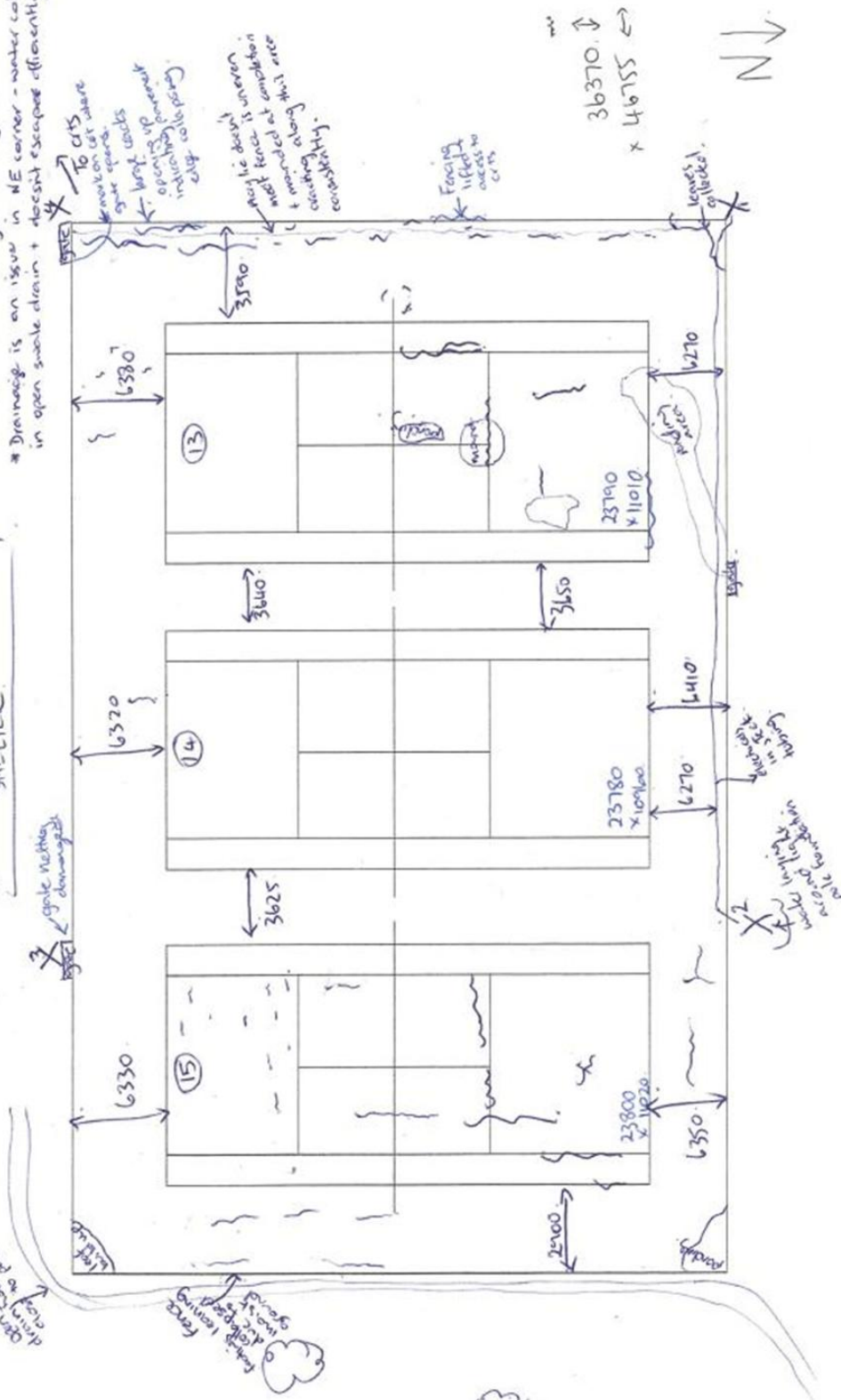


- * Net post old egg fired winders - slightly leaning
- * Net good condition need to be tethered to bottom of posts on all centre net strap fitted properly only on dt 13 all others damaged
- * Cr 13 in poor condition - uneven surface esp with end with mounding + ponding evident
- * Drainage is an issue in NE corner - water collects in open swale drain + doesn't escape efficiently

Tennis Court Enclosure Diagram (3 courts)

TO CRTS
6.71

- * weeds growing from cracks
- * flat cracks mostly
- * Fencing old - PVC chamfered to top or bottom rails
- * slat leaning on eastern side + damaged areas
- * General poor condition of fence
- * mounded on fence
- * Gate not damaged

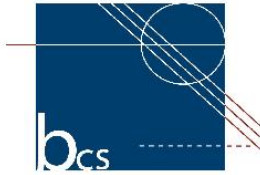




Overall site sketch.



covering exposed - electrical repair
cable + reinforced mesh



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Consulting Engineers Pty. Ltd.
A.C.N. 119 809 675 A.B.N. 28 283 904 297

REPORT ON CONDITION OF MOE TENNIS CLUB COURTS, BOTANIC GARDENS MOE



LATROBE CITY COUNCIL

REFERENCE: 11714/12
DATE: 17/08/12



MOE TENNIS COURTS
MOE TENNIS CLUB

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Figure 2 Typical Court Condition



MOE TENNIS COURTS
MOE TENNIS CLUB

1.0 INTRODUCTION

The purpose of this report is to investigate the conditions of the existing tennis court complex and offer recommendations on the viability of the site as an ongoing tennis court complex.

2.0 THE SITE

The site is located near the Moe Botanic Gardens within the Latrobe City Council. The principal vehicular access to the site is by way of Botanic Drive. See figure 1.



Figure 1. Site Plan

The club infrastructure includes a clubhouse, 15 tennis courts and car parking.

3.0 EXISTING CONDITIONS

The courts are asphaltic in nature and generally fall in an easterly to north/easterly direction. The courts are divided by a walkway, which runs in a north/south direction. The eastern and western sides of the courts are bounded by trees. A creek also abuts the court on the western side.



MOE TENNIS COURTS
MOE TENNIS CLUB

The courts are approximately 15 years old and have had various forms of resurfacing over this time.



Figure 2 – Typical Court Condition

Figure 2 shows the typical condition of the courts.

Around the perimeter of the courts, some significant surface cracking is evident. This cracking could be result of the close proximity of trees and or inadequate drainage, both surface and subsurface.

The grading of the courts is based on sloping planes and not a crest and valley design. A unique part of the courts are the shaped asphaltic spoon drains. The spoon drains have been strategically placed to intercept court runoff. As expected with this type of spoon drain construction it is difficult to construct uniform grades



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and the drains do hold water in places. The inappropriate location of large concrete blocks does not help the drainage situation. It is recommend that a detailed engineering feature survey is undertaken to check the grades of the existing courts.

The spoon drains convey water to open swale drains that are prevalent on the eastern sides of the court complex. The swale drains are shallow and hold water.

The geotechnical report shows a reasonably thick pavement constructed on firm clay. The pavement thickness is in the order of 300mm thick and asphalt 20-30mm thick.

It is understood the courts are not subjected to flooding from the nearby creek.

4.0 INVESTIGATION RESULTS:

It is understood that reconstruction of the courts is required and this has already been predetermined. The author of this report agrees that significant reconstruction works are required.

The site is suitable for reconstruction works. The underlying silty clay is moist but more importantly stiff. The clay can support the construction traffic associated with court construction.

Whilst the courts show areas of significant cracking and distortion, this is generally isolated and not prevalent over the whole court precinct. The general grading of the courts appears adequate and the shape or fall of the court planes have remained relatively true. This later issue is very important with respect to court reconstruction. If there were waves of distress over the whole court area then this would indicate issues with the underlying clays.



MOE TENNIS COURTS
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5.0 CONCLUSIONS

- The site requires significant reconstruction works.
- The site is suitable for reconstruction. Note, BCS Consulting Engineers reserve the right to a final opinion once a detailed engineering survey has been undertaken. The survey will confirm the existing grades and drainage paths of the court complex.
- The site can be reconstructed with an emphasis on the following infrastructure items:
 - Concrete spoon drains in lieu of the existing formed asphaltic spoon drains.
 - Subsurface agricultural drains.
 - Root barriers.
 - Underground drainage within the court precinct.
 - Deepened and or underground drainage to replace the existing shallow swale drains. Note, should inadequate outfall drainage be available then drainage sump pumps may be required.
- The composition of the courts can be of asphaltic construction or concrete construction. The land is not prone to flooding therefore concrete construction is not mandatory. Nevertheless, some further investigation is recommended to ascertain the cause of the extensive fungal growth on the courts. Asphalt is somewhat porous and cavatitious in nature as compared with concrete, particularly if a plastic membrane is used under the concrete. It is possible that moisture vapors add or indeed create a suitable environment for the fungal growth. The plastic membrane under the concrete will prevent the formation and hence entrapment of moisture vapors under the base of the finished court surfacing.



MOE TENNIS COURTS
MOE TENNIS CLUB



Jon Buckle *M.I.E. Aust, C.P. Eng (Civil & Structural), B.E. Civil.*
bcs Consulting **Engineers** Pty. Ltd



Moe Tennis Courts Re-development Advice

Update
February 2014



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1. EXECUTIVE SUMMARY

On Thursday January 30 2014 representatives from 2MH Consulting revisited the Moe Tennis Club to inspect the courts further (post-seismic activity) and to confirm their thoughts that the courts require total reconstruction.

Mick Hassett, Director and Project Manager with 2MH Consulting attended site with Jon Buckle, Consulting Civil Engineer, and Brett Field who is a sports court specialist surfacing contractor.

It was unanimously agreed between the three consultants/advisors that the decline and further degradation that has occurred with the tennis courts at Moe, places them in a situation where any short to medium term rejuvenation attempts will most certainly fail.

The consultants had discussed (prior to visiting site on Thursday January 30 2014) the possibility of undertaking low cost remedial works to rejuvenate the courts based on their knowledge of the state of the courts – as reported on November 16 2011 and February 6 2012. However, after visiting the site in 2014 it became immediately apparent that the seismic activity that occurred since the past site visits had in fact seriously impacted the courts.

It is the opinion of all three of the consultants who attended site that any attempts to repair the tennis court surfaces without addressing the drainage or the poor pavement base is a waste of time and money. This conclusion was arrived at after the consultants considered the alternatives available to undertaking a full reconstruction of the facility.

This report discusses further the options available to treat damaged and deteriorated courts – in the hope of achieving short to medium term (say 2/3 – 5/7 years) usable life in the courts. The Moe tennis courts are not candidates for this treatment for a number of reasons. These reasons are discussed further in the following section – Issues and Observations.

2. ISSUES AND OBSERVATIONS

As reported in the tennis facility audit report prepared in November 2011 by 2MH Consulting, "The type of damage to the pavement and acrylic surface of these courts would suggest that the pavement has been affected by a combination of age, lack of routine maintenance, poor drainage and water inundation from either the surface or rising water table as this facility has a creek running adjacent...."

The above comment was taken from the facility audit report conducted in November 2011 and it was in reference to courts 13, 14 and 15. These comments did also apply to all 15 courts on site. The courts are displaying severe wear; the acrylic surface has been damaged and very poorly applied. The asphalt is cracking, collapsing and showing reflective cracking from the pavement beneath the acrylic surface, from an inappropriate line marking paint having been used previously on site.

Oil based line marking paints eat into the asphalt and cause cracking in perfectly straight lines. This damage is almost impossible to rectify, and it has occurred throughout the Moe tennis complex.



The picture above shows opportunistic weed growth within the cracked asphalt directly along the tennis court lines.

Other significant problems with the existing tennis courts is that they have been constructed so that they do not meet current standards in relation to compliance. The run off areas around the courts are in many cases undersized. This was simply a design error, as the courts are large in actual footprint size, but they have unfortunately been built with a large and deep asphalt spoon drain within the rear run off areas.



The picture above shows a large spoon drain running along the rear of the tennis courts with a collection of grime and loose material within the invert of the drain. This spoon drain is situated within the safe run off zone behind the courts, which should be no less than 5.48 metres in length. This makes the courts non-compliant.

Past attempts to undertake crack repairs have not been successful, and in fact these efforts have helped to highlight just how useless that process is on this facility. There is plenty of evidence across all courts that crack repairs undertaken in the past have either simply failed, or continued to crack and deteriorate further. This demonstrates that no matter how many Kilograms of crack sealant is used and how many coats of acrylic sports surfacing is applied, the cracks will continue to open up and spread.



The spreading of the crack pictured above has occurred either end of the old repair, and the initial repair has failed. This is due to excessive movement in the asphalt and most likely the pavement base.



Evidence of past crack repair attempts and further new cracking throughout the court can be seen above.

Additional issues that determine that the tennis courts at Moe are beyond repair and now require reconstruction, is the absence of any concrete plinths or retaining edges that help support and contain the asphalt pavement. There is also a problem with no root barriers being installed around the pavement, as this exposes the asphalt to movement through root damage and sub-grade destabilisation. There are many sections of the existing tennis courts that are displaying serious pavement collapse.



Immediately adjacent to a stand of trees and shrubs, the pavement has collapsed and can no longer be patched up.



More pavement collapse where the pavement is situated close to a large Banksia Species. Not only do the roots undermine and damage the courts, the leaf and seed pod shedding also damages the sports surface and makes the courts unsafe.



Careful consideration needs to be given to the existence of sports pavements immediately adjacent to trees and shrubs. Very rarely do they live in harmony together.

Much to the surprise of the consultants visiting site, it was extremely obvious that the seismic activity within the Moe area appears to have severely impacted upon the tennis courts. Upon revision of the original site sketches prepared on site in November 16 2011, it was easy to identify a wide array of long cracks that had opened up across all sections of the pavement. There was no hint of these cracks during the 2011 site visit.

The consulting civil engineer – Jon Buckle, commented while visiting site in 2014, that he had never seen cracks like it in an asphalt pavement. The length and shape of the cracks was extraordinary and suggested that the asphalt pavement had been irreparably damaged and the pavement base seriously compromised – if not totally destroyed and unfit for building upon.



The cracks that have now appeared throughout the pavement (which were not evident in 2011) stem right across numerous courts and each and every court enclosure.



The shape of the cracks was peculiar and really didn't provide any clear reasoning for why the pavement had cracked in that fashion. The consultants were shocked, but had to concede that it could only have been the seismic activity that created this damage.




Any redesign works undertaken for this site would have to consider the existing soil type, the moisture/water content within the sub-soil and perhaps now even the risk of repeated seismic activity and the potential subsequent damage.


Essentially, it is going to be very difficult to restore the Moe tennis courts back to a safe, playable condition by only embarking upon remedial type works. 2MH Consulting has extensive experience in the redesign and reconstruction of tennis and netball sports pavements, and very rarely can remedial works be recommended. The Moe tennis facility has degraded to such a state that no remedial works can be guaranteed to last beyond 12 months. The level of investment required to implement any of the usually considered court surface rejuvenation operations is such that premature failures will render the site useless and the funds will have been wasted.

3. PRICING COMPARISONS


There are a number of industry accepted approaches to the restoration of sports surfaces for tennis and netball courts. The degree of success achieved will often depend upon the state of the existing facility, the way in which it was originally constructed, and the capability and credentials of the appointed contractor employed to undertake the remedial works.

For the purpose of comparing the level of investment required to restore the Moe tennis facility back to a playable state, a table has been prepared which highlights each individual approach, the cost of each, with comments outlining the overall viability of each approach.

No	Restoration Approach	Description	Cost per court	Cost for multiple courts (costed on 8 courts)	Comments
1	Basic crack repairs and a 2 coat acrylic sports surface application.	<p>Grinding and sanding of the existing sports surface, cutting out and filling all cracks with a flexible material.</p> 	Allow \$10,000.00 per court for a 2 coat resurfacing	\$80,000.00 for 8 courts	<p>This approach does not address the non-compliance issues with short rear run-offs, it fails to rectify on-going drainage issues, pavement collapses or major problems such as base problems. It is also highly unlikely to last 12 months without considerable failures occurring.</p> <p>This approach is not considered viable as existing court damage and cracking will, very quickly, reflect through.</p>

No	Restoration Approach	Description	Cost per court	Cost for multiple courts (costed on 8 courts)	Comments
2	Resheeting with Asphalt and Geofabric	<p>Laying a geofabric material over the entire courts and reapplying a 30mm (min) thick layer of asphalt. Resurface with a 3 coat sports surface system.</p> 	Allow \$35,000.00 plus GST	Savings can be made over a number of courts. \$252,000.00	<p>This approach does not address the non-compliance issues with short rear run-offs, it fails to rectify on-going drainage issues, pavement collapses or major problems such as base problems.</p> <p>This approach is not considered viable as existing court damage and cracking will, overtime, reflect through.</p>

No	Restoration Approach	Description	Cost per court	Cost for multiple courts (costed on 8 courts)	Comments
3	Rubberised sports surface installed over existing courts	<p>Supply a 7mm thick floating rubber system over the existing courts and paint with sports surfacing product – minimum 5 coats.</p> 	\$37,000.00 per court	\$296,000.00 for 8 courts.	<p>This approach does not address the non-compliance issues with short rear run-offs, it fails to rectify on-going drainage issues, pavement collapses or major problems such as base problems. It is also highly unlikely to last more than 12 months without considerable failures occurring.</p> <p>This approach is not considered viable as existing court damage and cracking will, overtime, reflect through.</p>

No	Restoration Approach	Description	Cost per court	Cost for multiple courts (costed on 8 courts)	Comments
4	Total reconstruction of courts	Embark upon a total redesign of the 13 court facility, addressing all drainage, fencing, future lighting and new sports surfacing. 	Depending upon the final design requirement, pavement depth, asphalt details etc – costs will range from \$80,000.00 - \$100,000.00 per court	Using \$80,000.00 as a guide for 8 courts = \$640,000.00 plus full design and project management works total of approx. \$700,000.00	With the current economic climate (early 2014) there is serious potential to extend this budget closer to 10 courts that could be built for around \$750,000.00. This approach will address all drainage issues, pavement problems, provide new fencing, new playing surface and new infrastructure such as nets and net posts.

In order of cost, from the cheapest to the most expensive, the options are summarised below –
 Basic crack repairs and a 2 coat acrylic sports surface application = \$80,000.00 plus GST for 8 court treatment.
 Resheeting with Asphalt and Geofabric = \$252,000.00 plus GST for 8 court treatment.
 Rubberised sports surface installed over existing courts = \$296,000.00 for 8 court treatment.
 Total reconstruction of courts = \$640,000.00 for 8 (possibly 9-10) courts.

All pricing above excludes professional design and project management services.

4. STAGED WORKS IMPLEMENTATION

To implement the recommended reconstruction works will take careful planning and accurate budgeting. It is suggested that the following works stages be adopted and implemented –

Stage 1A – Site Masterplanning and Design

Works will include full electrical and lighting design, civil design and drainage design – and tennis specific design allowing for total site Masterplanning. Cost Estimate = \$40,000.00 plus GST

Stage 1 – Demolition of 2 existing courts and reconstruction of 6 new tennis courts

Works to include demolition of 2 existing courts (Courts 11 and 12) and reinstatement back to Botanical Gardens – lawn only. Estimate \$15,000.00 plus GST

Light towers to the west of the site may be able to be relocated and reused. Exact pricing for this is unknown until lighting and electrical works has been undertaken. Cost Estimate = \$40,000.00 plus GST

Construction of 6 new tennis courts with asphalt pavement, new drainage, new fencing and tennis infrastructure. Costs based on “best guess” off current industry pricing and basic acrylic surfacing. Cost Estimate = \$480,000.00

Stage 2 – Construction of 4 new tennis courts

Construction of 4 new tennis courts with asphalt pavement, new drainage, new fencing and tennis infrastructure. Costs based on “best guess” off current industry pricing and basic acrylic surfacing. Cost Estimate = \$320,000.00

Efficiencies can be made through undertaking all design works at the beginning for Stage 1A, tendering all construction works a package for Stage 1 and Stage 2 – even if spread over 2 financial years so as to get the best pricing overall. Project Management for 2 stages of construction works will be greater than constructing as 1 stage, therefore cost estimates for professional project management over 2 stages of construction will be - \$30,000.00 plus GST

Stages 1 and 1A total estimated costs = \$575,000.00 plus GST

Stage 2 (with professional tennis specific project management) = \$350,000.00 plus GST

Total combined works Stage 1A, 1 and 2 = \$925,000.00 plus GST

5. MAINTENANCE IMPLICATIONS

It is important to keep in mind that no sports surface is maintenance free and cost free to keep in a safe and playable condition. However, a fully reconstructed facility will have the least maintenance costs attributable, particularly in the first few years while still under warranty. An asphalt resheet, low end crack repairs, and the rubberised surface will most certainly require regular intervention and on-going remedial works every year going forward, while the job continues to degrade and the facility becomes unusable.

All of the options offered in the previous table will require the same level of regular care in terms of surface cleaning and repainting after 5-10 years, depending upon the level of use. Only a full reconstruction can assure the tennis club and Council of a fully compliant, high quality facility with low cost maintenance obligations over the next 10+ years.

6. CONCLUSION

It is the opinion of all of the consultants who have attended site at the Moe Tennis Club that the existing 15 court facility is now in a state of disrepair that cannot be rectified without significant investment. Any efforts to rejuvenate the playing surface without addressing the drainage problems, poor base, aged and damaged asphalt and the second rate surfacing job, will most certainly fail. Lower cost remedial works will not deliver satisfactory results, and the courts will be damaged and heading towards once again being unplayable within months or just a year or two – depending upon which of the cheaper works options are implemented.

As Tennis Victoria's exclusive technical advisors, 2MH Consulting has been committed to helping tennis clubs and Councils work towards achieving better facilities for the sport of tennis. Band Aid solutions very rarely work, and will only lead to disappointment, and possibly litigation.

Some examples of the design works undertaken by 2MH Consulting over recent years have been included at the rear of this document, for your information. We encourage you to inspect the facilities that we have been involved with the design and project management of, and speak to people who use the facilities we have redeveloped. We are confident that once you step foot on one of our new complexes – like Kinglake, Natimuk, Woodend or any one of the 6 sites in Horsham, that you won't be let down.

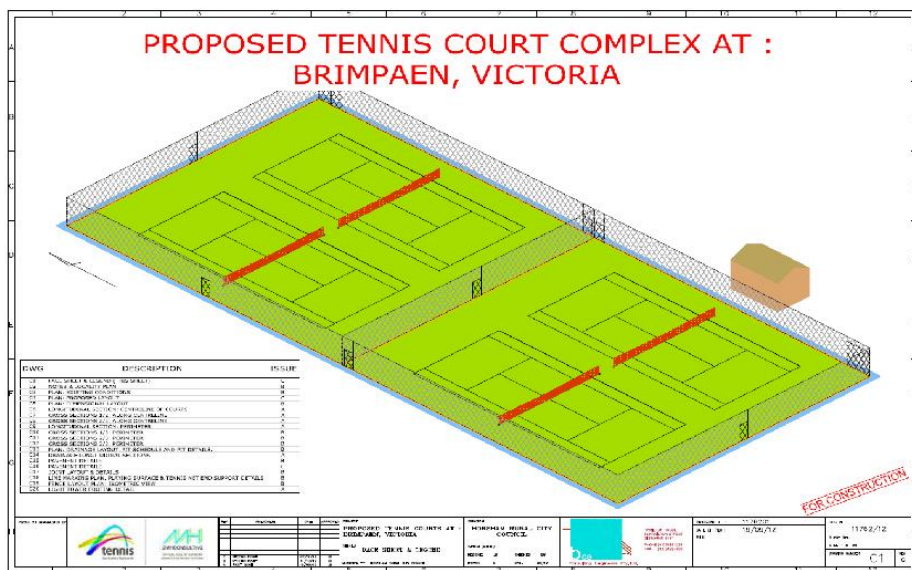


Mick Hassett
Director/Project Manager

7. EXAMPLES OF PREVIOUS DESIGN & PROJECT MANAGEMENT WORKS

Horsham 6 Tennis Project – 28 courts design, documentation and Project Management over 6 sites, construction value \$4.7 million, total construction timeframe 6 months - Horsham Rural City Council.

Brimpaen Tennis Design:

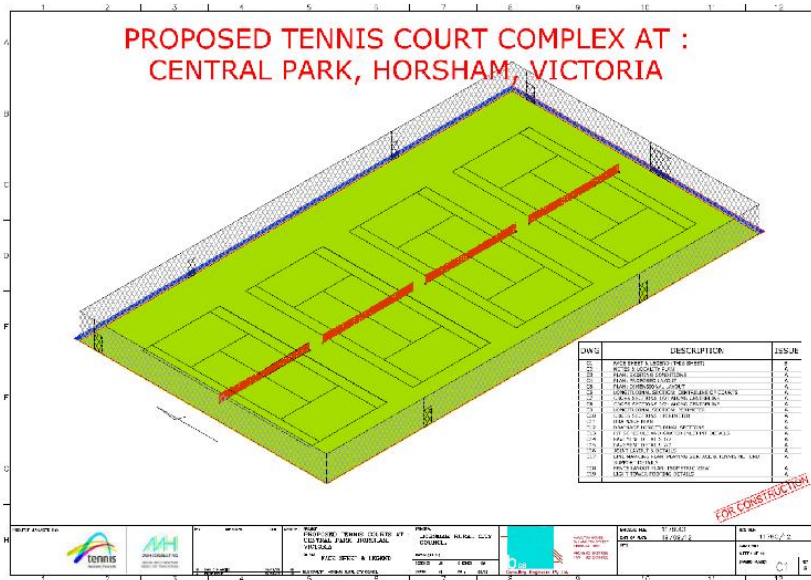




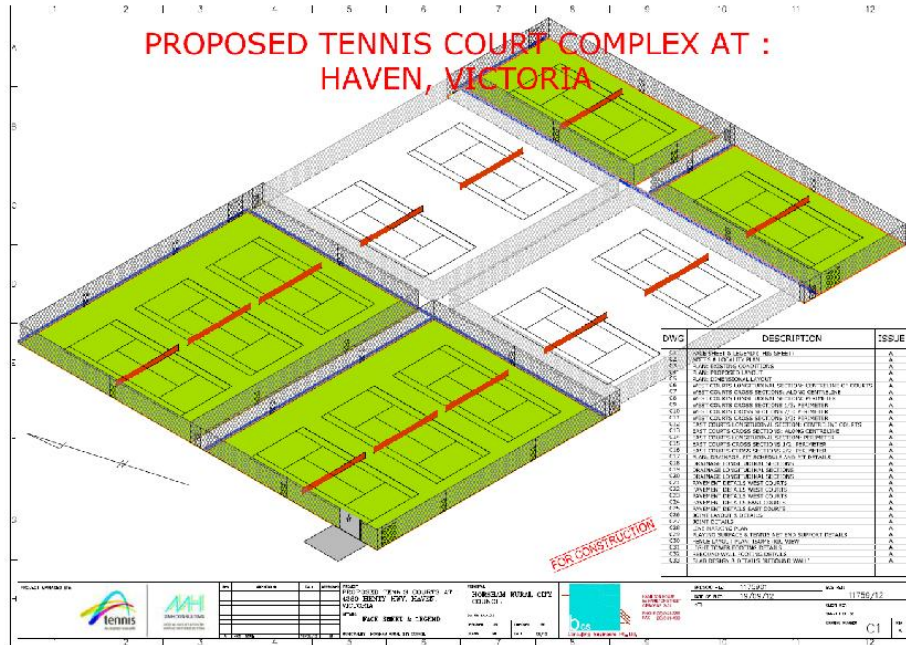




Central Park Tennis Design:

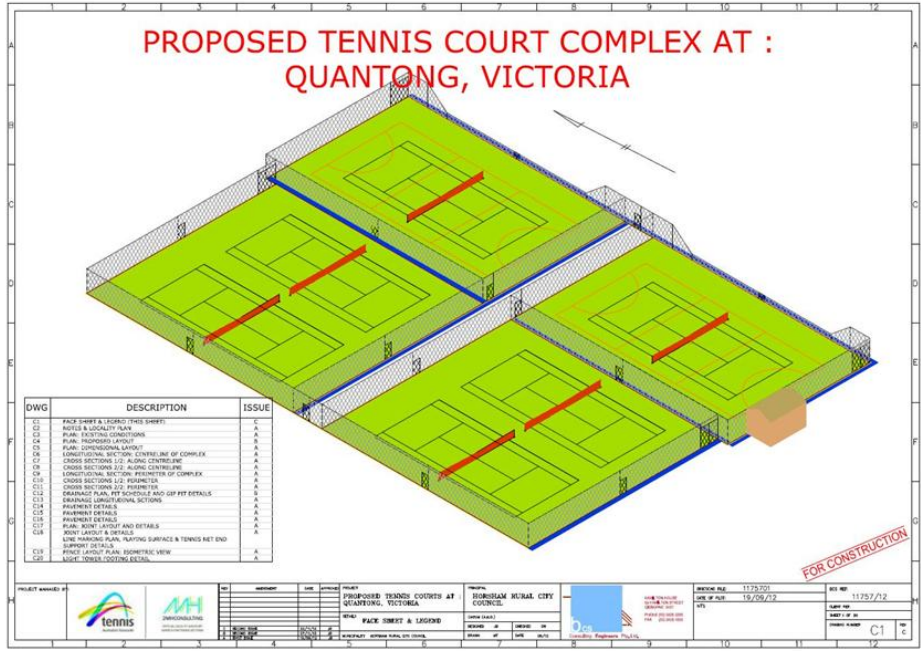


Haven Tennis Design:



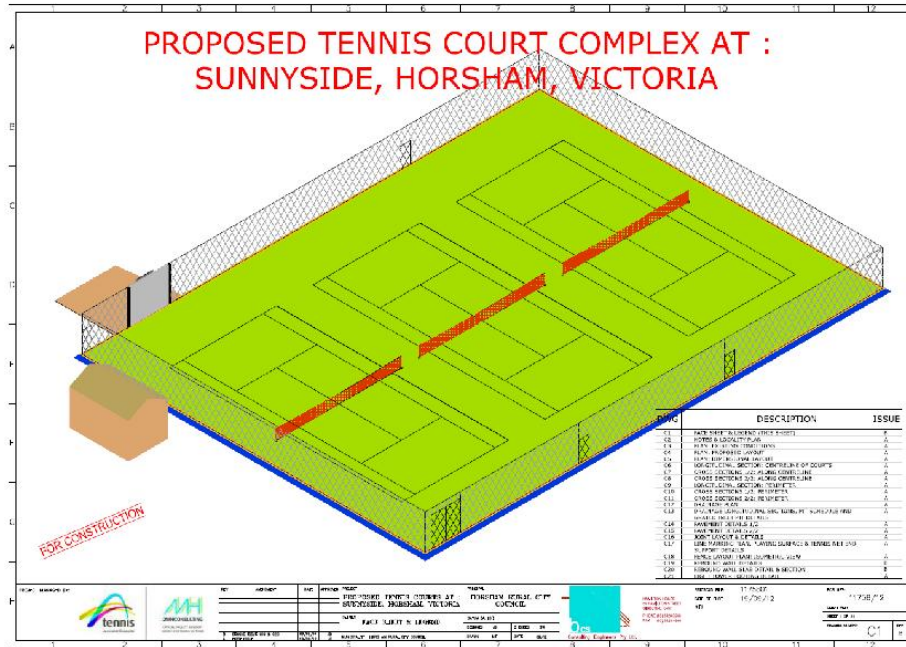


Quantong Tennis/Netball Design:



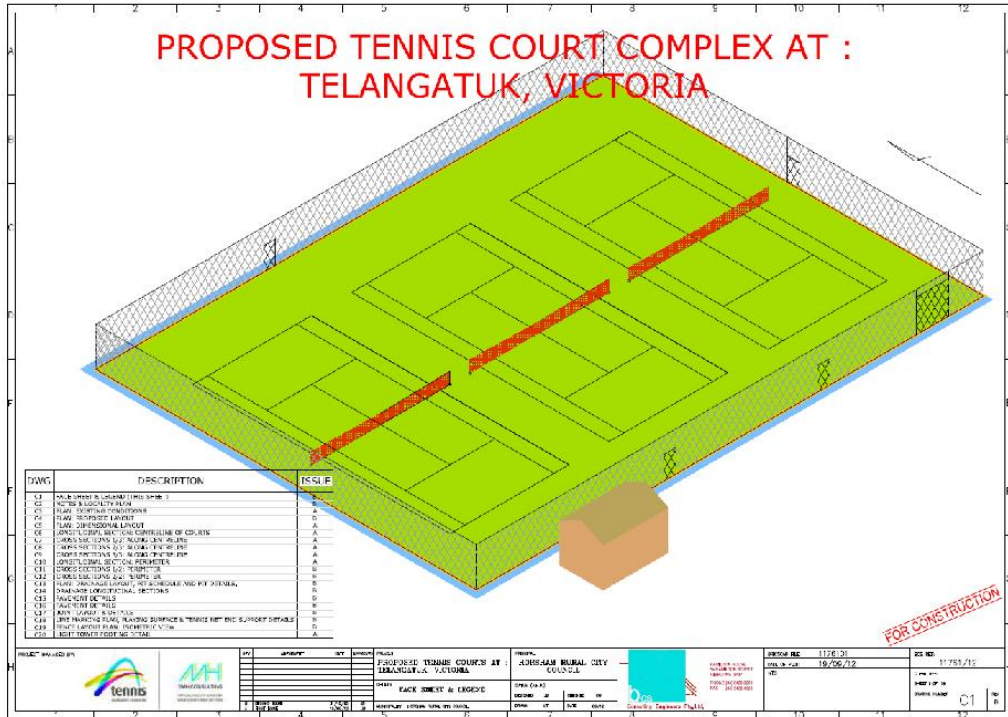


Sunnyside Tennis Design:





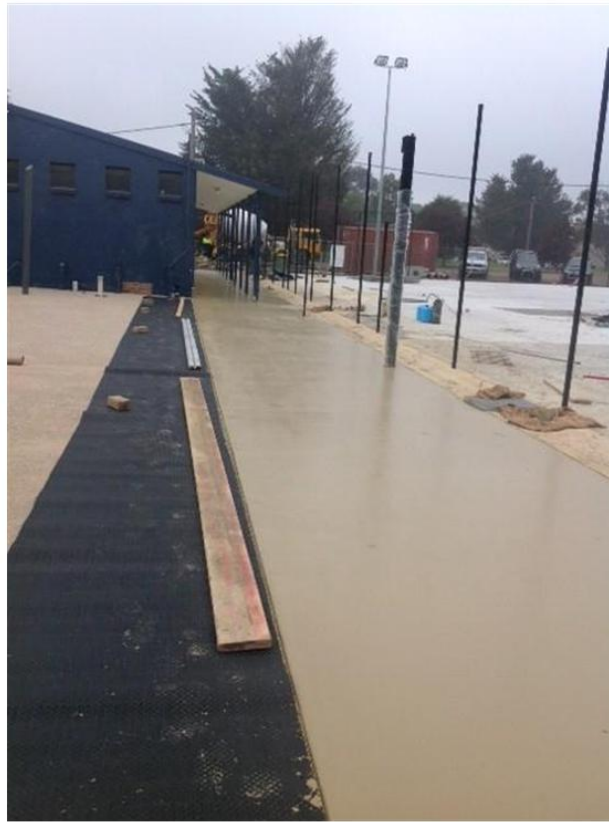
Telangatuk Tennis Design:





Woodend Tennis Court Reconstruction Project – 6 courts, common area infrastructure & connections; design, documentation and Project Management \$800k - 2013

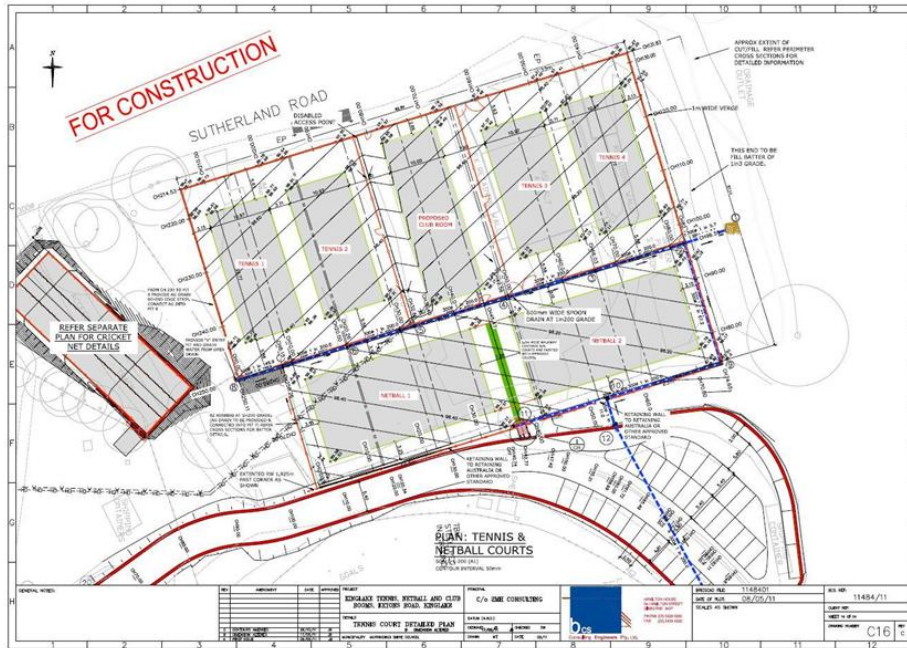








Kinglake Tennis/Netball Court Construction Project – 4 tennis courts, 2 netball courts, new pavilion, connections and sportsfield development; design, documentation and Project Management \$2 million - VBRA 2013







8. REFERENCES



30 August 2013

Mr Mick Hassett
2MH Consulting
PO Box 1135
Kyneton Vic 3444

Dear Mick

Horsham 6 Tennis Courts Project

I am writing to thank your company, and in particular Kellie and you, for the exceptional design and project management of our two major tennis court projects completed during 2012-13.

These projects are not the type of project normally conducted by Council, and we realised we needed specialist expertise to assist in getting them done.

The Natimuk project was a pilot for the subsequent larger project, and the exceptionally smooth conduct of the Natimuk project, from design through to completion, gave us significant confidence in our ability to draw on your expertise for the larger \$4.7 M, Horsham 6 project. This latter project, involving the construction of 28 projects at six sites scattered across the municipality, and up to 50 km from Horsham, involved a huge amount of project management during design and construction.

Significant challenges involved in these projects included:

- Tight time frames for completion of designs – as the construction period was limited by the period of funding availability – this put pressure on the design time.
- Development of quality designs to avoid variations.
- Engagement with the community, to ensure that the designs met the varying needs of the different communities.
- Quality project management, to ensure that construction occurred according to the designs and in compliance with construction standards and user requirements.

The success of this project must be attributed to a very large degree to the skills and capability of your company.

Please pass on Council's thanks to your entire team. We most certainly could not have done this without you.

Yours sincerely



John Martin
Director Technical Services

Address correspondence to: Chief Executive Officer PO Box 511 Horsham Victoria 3402
Civic Centre 18 Roberts Avenue Horsham Victoria 3400
Ph 03 5382 9777 Fax 03 5382 1111 Email council@hrcc.vic.gov.au Website www.hrcc.vic.gov.au



23 September 2011

To whom it may concern

Re: 2MH Consulting Recommendation

It is with great pleasure that I write to recommend 2MH Consulting, namely Mick Hassett and Kellie Duff for the consultation, design and project management of recreational facilities.

Kellie headed up the Woodend Children's Park project over a three year period, this was a major local community park project in our municipality. Kellie volunteered her time to lead a 20 strong committee, project control group and local contractors to achieve outstanding results. This project delivered many benefits to the community; the committee networks throughout the community and project management provided personal growth, team and community building and strengthening. All groups involved with the park have fostered relationships and support networks and are still good friends. The park committee continues to effectively offer input and new additions to the park through their ongoing relationship with Council.

Throughout the design stage, Kellie and her team embraced the community by asking them what they wanted to see in their park. Kellie is a strong communicator and was able to ensure the community was informed of the projects progress and happily displayed the local primary school children's design your park competition entries alongside the concept designs allowing the public to see how their ideas had been incorporated into the design. A real sense of ownership was born from this work with the community and the benefits are evident to this day, with little rubbish and no vandalism in the 2 year old park.

The Park was designed with a sustainable and holistic philosophy: with drought tolerant low maintenance plantings, significant earth and drainage works, the incorporation of three phase power for community events, challenging play equipment for all ages, bbq facilities and open spaces, all within the existing natural environment. This design was the result of the collaboration between community, stakeholders, local professional services and local government.

Mick and Kellie project managed the construction of the park. They did this by continuing their open communication ethos, ensuring all stakeholders including the Macedon Ranges Shire Council were consulted throughout the process. We are very pleased with the exceptional coordination of this community park's consultation, design and construction processes. The park is a sustainable, welcoming and safe environment for the community to enjoy long into the future. Their efforts of not only building a much needed playground for their local community and visitors alike, but for also harnessing and demonstrating the strength, knowledge, commitment and ability of the

All mail and tenders:
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 E: mrsc@mrsc.vic.gov.au
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 ABN 42 686 389 537

Kyneton Administration Centre 129 Mollison Street	Hours: Mon-Fri 8.30am-5pm	
Gisborne Administration Centre 40 Robertson Street	Hours: Mon-Fri 8.30am-5pm	
Romsey Service Centre 98 Main Street	Hours: Mon-Fri 9.30am-5pm	Open Thurs 9.30am-6pm
Woodend Service Centre cnr High and Forest streets	Hours: Mon-Fri 9.30am-5pm	Open Wed 9.30am-6pm

Woodend and surrounding community to ensure that the park will be well utilised well into the future should be applauded.

It is with great excitement that the Macedon Ranges Shire Council shares the experience and recognition of 2MH Consulting's involvement with other municipalities in the hope that others may benefit from their holistic approach to creating exciting recreational facilities

Please do not hesitate to contact me should you require any further information on 5421-1470 or rclough@mrc.vic.gov.au.

Yours sincerely



ROD CLOUGH
Manager Recreation and Cultural Development



4 December 2013

2MH Consulting
3/48-50 Mollison Street
Kyneton, VIC, 3444

To whom it may concern,

Letter of reference for 2MH Consulting

Mount Alexander Shire Council engaged 2MH Consulting through a recreation services panel in 2011, to provide Project Management and Design and Construction works.

Recently they have completed the Guildford Tennis Court and Taradale Tennis Court projects, the following tasks were involved:

- Design and specification development;
- Tender package;
- Tender evaluation; and,
- Project Management

Their skills and expertise throughout the project included their ability to engage local contractors to complete the works which has resulted in facilities that are now compliant with current standards and address user group needs.

In particular their strengths in the project life cycle have been communication, documentation and on site visits to oversee and control of the on ground works.

I would not hesitate in recommending 2MH for a similar size or larger projects and I can be contacted on 5471 1787 or r.young@mountalexander.vic.gov.au

Yours sincerely,

A handwritten signature in blue ink, appearing to read 'Ros Young', is written over a light blue horizontal line.

ROS YOUNG
Recreation Services Team Leader

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Patron:
The Honourable Alex Chernov, AD, QC
Governor of Victoria

13 February 2013

To whom it may concern,

RE: TENNIS VICTORIA FACILITY ADVISORY SERVICE

Tennis Victoria, the peak body for tennis in Victoria, is pleased to support **2MH Consulting** in its commitment to providing the best possible tennis facilities and Facility Advisory Service for the tennis community in Victoria.

In many cases the provision of Facility Advisory Services for tennis clubs and councils can add to the ongoing viability of tennis facilities and ultimately provide opportunities for tennis players of all ages and abilities to access a quality tennis environment – an essential component of a sustainable community facility.

The 2010 - 2015 Tennis Victoria Strategic Plan details a strong emphasis on facility development and remains dedicated to improving the standard and ongoing viability of tennis facilities across Victoria. As a State Sporting Association we must always recommend best practise and align our organisation with quality products and suppliers to create the best outcome for tennis. This is the reason for Tennis Victoria's partnership with 2MH Consulting. 2MH Consulting has taken a leadership role in catering for the needs of Tennis Victoria, tennis clubs, councils and community.

Many clubs have already worked with 2MH Consulting on facility development projects. 2MH Consulting has over 10 years experience working with a range of different council's. The services provided by 2MH Consulting are well respected and good examples include the auditing of a number of tennis and netball facilities in the Mitchell Shire, City of Boroondara, Colac and Otway Shire and facility audits for tennis and netball clubs affected by the worst of the flooding in early 2011. In addition, 2MH Consulting has recently been awarded the project management role to oversee the redevelopment of six tennis facilities in the Horsham region.

Tennis Victoria believes that tennis facility auditing and tennis strategy initiatives such as this will assist in the achievement of all stakeholders strategic targets. On behalf of Tennis Victoria, I encourage all stakeholders to consult further with Tennis Victoria and our Facility Advisory Service. Please contact Tennis Victoria on (03) 8420 8420 if you require any further information.

Yours sincerely

Ken Jacobs
Executive Manager
Government Relations & Places to Play

Tennis Victoria
ABN 29 757 304 158



Moe Tennis Needs Assessment

Final Draft Report

February 2014



Prepared by SGL Consulting Group Australia Pty Ltd



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APPENDIX

APPENDIX ONE:	MOE TENNIS COURTS NEEDS ASSESSMENT – STAKEHOLDER CONSULTATION FRAMEWORK
APPENDIX TWO:	2MH ASSESSMENT OF CLAY COURT OPTION
APPENDIX THREE:	2MH REPORT ON HARD COURT OPTIONS FOR MOE TENNIS CLUB



1 BACKGROUND

The Latrobe City Council is made of four major urban centres: Churchill, Moe/Newborough, Morwell and Traralgon with a number of smaller townships also within the boundaries. It is less than two hours drive from Melbourne and boasts all the recreational and cultural facilities of a large regional centre.

Latrobe City has a combined population of over 73,000 and is located at the gateway to Gippsland in the South East corner of Victoria.

This project has been commissioned in order to undertake a Needs Assessment for the Moe tennis courts that are situated in the Moe Botanic Gardens in Moe. Moe was recently (June 2012) subjected to an earthquake that caused significant damage to the Moe tennis courts and has added to the need to undertake this study as the courts are showing cracks through the surface of the plexi-pave treatment. Latrobe City Council was able to secure a level of insurance compensation that has been set aside for the potential resulting outcomes of this study.

The proximity of the four major urban centres of Moe/Newborough, Traralgon, Morwell and Churchill and the previous local governance structure of separate councils has created an allocation of courts to each area. When considered as a consolidated region there is a natural hierarchy that has emerged from large regional centres to small one and two court facilities.

In recent times the Traralgon facility has been redeveloped to become the regional centre for tennis with 24 courts (14 plexi-cushion, 8 plexi-pave and 2 synthetic clay) while the other three centres are considered to be sub-regional in nature with Moe (15 plexi-pave), Morwell (15 plexi-pave) and Churchill having just 7 plexi-pave courts.

The Latrobe Council consider that the continued provision of high quality and well-maintained facilities is important to ensure the ongoing growth of the club and in achieving maximum use of the available infrastructure and it is the task of this review to understand the needs and recommend the future provision of facilities for the Moe Tennis Club.

1.1 PROJECT OBJECTIVES

The project will:

1. Evaluate the current usage and capacity of the Moe Tennis Courts
2. Identify a range of court surfaces suitable for the site
3. Determine the number of tennis courts required for the facility
4. Provide a recommendation on what court surface would be feasible for the site
5. Provide a staging or implementation plan for the construction of the tennis courts
6. Provide a funding model for the reconstruction of the tennis courts
7. Provide a detailed design for the reconstruction of the tennis courts
8. Provide a detailed cost estimate based on the staging/implementation plan

1.2 PROJECT METHODOLOGY

The following methodology and associated tasks was agreed between SGL and Latrobe City.

Table 1.1 Project Methodology

Stage One	Needs Assessment and Analysis
	<ul style="list-style-type: none"> • Inception Meeting • Develop Engagement Plan • Review relevant documents and reports • Demographic Review • Industry Trend Review • Market Analysis • Occupancy Review • Key Stakeholder Interviews • State Government and State Sporting Associations Feedback • Surface Option Review • Facility Component Schedule • Site Review • Issues and Needs Report
Stage Two	Cost Benefit Analysis and Design Development
	<ul style="list-style-type: none"> • Values and Vision Workshop • Economic Benefit and Events • Business Case • Financial Modelling and sensitivity Analysis • Detailed Design and Construction Plan • Capital Cost • Funding Options • Draft Management Plan • Draft Report for Feedback • Final Report



2 PROJECT AREA

Situated in the Gippsland area of South East Victoria, Moe is positioned within the City of Latrobe that encompasses a number of communities of varying size and populations. The following information outlines the past, present and future population data situation and trends that need to be taken into consideration when assessing the needs for specific sporting facilities for the region.

2.1 POPULATION TRENDS

Between 2006 and 2011 the population of the Latrobe City Council area increased from 69,329 people to 72,402 people. This equates to an approximate growth of 4.4% (3,073).

2.1.1 Population Age Profile

The age profile of residents in 2011 (ABS) compared to Regional Victoria was estimated as follows:

Table 2.1 Population Age Profile of Latrobe City

Latrobe City Five year age groups (years)	2011			2006			Change 2006 to 2011
	Number	%	Regional VIC	Number	%	Regional VIC	
0 to 4	4,782	6.6	6.3	4,297	6.2	6.0	+485
5 to 9	4,539	6.3	6.2	4,757	6.9	6.8	-218
10 to 14	4,780	6.6	6.7	5,356	7.7	7.5	-576
15 to 19	5,213	7.2	6.8	5,188	7.5	7.0	+25
20 to 24	4,878	6.7	5.5	4,592	6.6	5.5	+286
25 to 29	4,491	6.2	5.2	3,740	5.4	4.9	+751
30 to 34	4,079	5.6	5.2	4,101	5.9	5.8	-22
35 to 39	4,304	5.9	6.1	4,562	6.6	6.6	-258
40 to 44	4,687	6.5	6.7	5,061	7.3	7.1	-374
45 to 49	5,098	7.0	7.0	5,156	7.4	7.4	-58
50 to 54	5,127	7.1	7.1	4,953	7.1	7.1	+174
55 to 59	4,814	6.6	6.9	4,366	6.3	6.7	+448
60 to 64	4,404	6.1	6.6	3,446	5.0	5.4	+958
65 to 69	3,366	4.6	5.2	2,810	4.1	4.6	+556
70 to 74	2,731	3.8	4.1	2,310	3.3	3.8	+421
75 to 79	2,061	2.8	3.2	2,070	3.0	3.4	-9
80 to 84	1,650	2.3	2.6	1,521	2.2	2.5	+129
85 and over	1,398	1.9	2.3	1,043	1.5	2.0	+355
Total	72,402	100.0	100.0	69,329	100.0	100.0	+3,073

Source: Australian Bureau of Statistics, Census of Population and Housing 2006 and 2011

An analysis of the data found in Table 1.1 shows that when comparing the Population Age Profile between the Latrobe area and Regional Victoria, Latrobe's age group segmentation is fairly consistent with the figures found in the rest of Regional Victoria. The age groups with the largest percentage of residents are the 15 to 19 years (7.2%), followed very closely by 50 to 54 years (7.1%) and 45 to 49 years (7.0%). The age groups with the lowest number of residents are the 85 years plus (1.9%) followed by 80 to 84 years (2.3%) and 75 to 79 years (2.8%).

The most significant difference between the Latrobe area and Regional Victoria is the difference in the number of residents aged over 60 years. In the Latrobe area 21.5% is over the age of 60 compared to the higher percentage of 24% in Regional Victoria.

Between 2006 and 2011 there was a considerable decrease in residents aged 5 to 19 (22.1% compared to 20.1%).

The below table details the distribution of residents into age brackets for Moe compared to that of the Latrobe City area.

Table 2.2 Population Age Profile of Moe

Moe - Moe South Five year age groups (years)	2011		
	Number	%	Latrobe City
0 to 4	539	5.8	6.6
5 to 9	530	5.7	6.3
10 to 14	538	5.8	6.6
15 to 19	655	7.0	7.2
20 to 24	594	6.4	6.7
25 to 29	488	5.2	6.2
30 to 34	452	4.9	5.6
35 to 39	502	5.4	5.9
40 to 44	558	6.0	6.5
45 to 49	646	6.9	7.0
50 to 54	678	7.3	7.1
55 to 59	675	7.3	6.6
60 to 64	679	7.3	6.1
65 to 69	534	5.7	4.6
70 to 74	414	4.4	3.8
75 to 79	336	3.6	2.8
80 to 84	283	3.0	2.3
85 and over	207	2.2	1.9
Total	9,318	100.0	100.0

Source: Australian Bureau of Statistics, Census of Population and Housing 2006 and 2011

Looking at the data it is clear that the make up of the Moe population is only slightly different to that of Latrobe with slightly fewer residents aged less than 50 years (59.1% compared to 64.6%) and more residents that are in the older age groups in Moe than the general Latrobe area (40.8% compared to 35.2%).

The following table details the gender division of the Latrobe City residents in 2011:

Table 2.3 Resident Population

Latrobe City	2011			2006			Change 2006 to 2011
	Number	%	Regional VIC	Number	%	Regional VIC	
Population (excluding O/S visitors)	72,402	100.0	100.0	69,329	100.0	100.0	+3,073
Males	35,369	48.9	49.1	33,872	48.9	49.2	+1,497
Females	37,033	51.1	50.9	35,457	51.1	50.8	+1,576

Source: Australian Bureau of Statistics, Census of Population and Housing 2006 and 2011

There are slightly more females than males within the Latrobe City population (51.1% compared to 48.9%) which is consistent with the rest of the rest of the Regional Victorian population. There was no change in the ratio of males to females between 2006 and 2011.

Moe has a similar ratio of females to males with 48.6% of the population being female (compared to the 48.9% in the Latrobe City area).



2.1.2 Country of Birth

The share of the population born overseas and the diversity in their country of origin can give an indication of how diverse the population is within the community.

An analysis of the country of birth data for the Latrobe area shows that there is a low level of diversity with a relatively small percentage of the population born overseas. Of the residents that were born overseas the majority of them were born in the United Kingdom.

The table below details the Country of birth of residents:

Table 2.4 Most Common Countries of Birth

Latrobe City Country of birth	2011			2006			Change 2006 to 2011
	Number	%	Regional VIC	Number	%	Regional VIC	
United Kingdom	3,112	4.3	3.5	3,194	4.6	3.5	-82
Netherlands	784	1.1	0.6	841	1.2	0.6	-57
Italy	716	1.0	0.6	752	1.1	0.7	-36
New Zealand	654	0.9	1.0	520	0.8	0.9	+134
Germany	552	0.8	0.5	574	0.8	0.5	-22
Malta	407	0.6	0.1	449	0.6	0.1	-42
Philippines	361	0.5	0.3	288	0.4	0.2	+73
China	270	0.4	0.2	124	0.2	0.1	+146
India	252	0.3	0.4	100	0.1	0.2	+152
Sudan	198	0.3	0.1	0	0.0	0.0	+198
South Africa	134	0.2	0.2	90	0.1	0.2	+44
Ireland	132	0.2	0.2	139	0.2	0.1	-7
Greece	132	0.2	0.1	135	0.2	0.1	-3
Poland	129	0.2	0.1	161	0.2	0.1	-32
Malaysia	113	0.2	0.1	97	0.1	0.1	+16
United States of America	112	0.2	0.2	101	0.1	0.2	+11
Cyprus	100	0.1	0.0	100	0.1	0.0	0
Croatia	97	0.1	0.2	112	0.2	0.2	-15
Serbia / Montenegro (fmr Yugoslavia)	96	0.1	0.1	118	0.2	0.2	-22
Canada	93	0.1	0.1	79	0.1	0.1	+14
Sri Lanka	77	0.1	0.1	44	0.1	0.1	+33

Source: Australian Bureau of Statistics, Census of Population and Housing 2006 and 2011

The table below identifies the countries of birth of the residents of the Latrobe area.

Table 2.5 Most Common Countries of Birth

Latrobe City Birthplace	2011			2006			Change 2006 to 2011
	Number	%	Regional VIC	Number	%	Regional VIC	
Total Overseas born	9,930	13.7	10.6	9,141	13.2	10.1	+789
Non-English speaking backgrounds	5,693	7.9	5.5	5,018	7.2	5.2	+675
Main English speaking countries	4,237	5.9	5.1	4,123	5.9	4.9	+114
Australia	58,318	80.5	84.3	55,853	80.6	84.3	+2,465
Not Stated	4,152	5.7	5.0	4,333	6.3	5.6	-181
Total Population	72,400	100.0	100.0	69,327	100.0	100.0	+3,073

Source: Australian Bureau of Statistics, Census of Population and Housing 2006 and 2011

The share of the population born overseas in the Latrobe City was higher than that found in Regional Victoria (13.7% compared to 10.6%).

Moe has a slightly higher percentage of residents born outside of Australia (14.9%) compared to Latrobe City (13.7%).

2.1.3 Languages Spoken at Home

The Latrobe City (88.5%) has a slightly lower percentage of residents that speak only English when compared to Regional Victoria (90.4%)

The table found below shows the primary language spoken at home:

Table 2.6 Most Common Languages Spoken at Home

Latrobe City Language (excludes English)	2011			2006			Change 2006 to 2011
	Number	%	Regional VIC	Number	%	Regional VIC	
Italian	1,000	1.4	0.9	961	1.4	1.0	+39
Greek	395	0.5	0.2	391	0.6	0.3	+4
Dutch	289	0.4	0.2	306	0.4	0.2	-17
Mandarin	283	0.4	0.2	151	0.2	0.1	+132
Maltese	267	0.4	0.1	304	0.4	0.1	-37
German	247	0.3	0.3	291	0.4	0.3	-44
Filipino/Tagalog	220	0.3	0.2	165	0.2	0.1	+55
Arabic	183	0.3	0.2	32	0.0	0.2	+151
Polish	139	0.2	0.1	177	0.3	0.1	-38
Dinka	104	0.1	0.0	0	0.0	0.0	+104
Cantonese	103	0.1	0.1	100	0.1	0.1	+3
Spanish	100	0.1	0.1	78	0.1	0.1	+22
Nuer	98	0.1	0.0	0	0.0	0.0	+98
Croatian	84	0.1	0.2	86	0.1	0.3	-2
Bengali	73	0.1	0.0	90	0.1	0.0	-17

Source: Australian Bureau of Statistics, Census of Population and Housing 2006 and 2011

The top five languages other than English spoken within the Latrobe City area in 2011 are:

- Italian
- Greek
- Dutch
- Mandarin
- Maltese



2.1.4 Income Levels

The table below presents the personal weekly income levels of Latrobe City residents:

Table 2.7 Weekly Individual Gross Income Levels for the Latrobe area

Latrobe City Weekly income	2011		
	Number	%	Regional VIC
Negative Income/ Nil income	4,302	7.4	6.6
\$1-\$199	4,768	8.2	8.0
\$200-\$299	7,666	13.2	12.5
\$300-\$399	7,454	12.8	12.5
\$400-\$599	7,525	12.9	14.1
\$600-\$799	5,661	9.7	11.5
\$800-\$999	4,005	6.9	8.1
\$1000-\$1249	3,836	6.6	7.1
\$1250-\$1499	2,493	4.3	4.3
\$1500-\$1999	3,061	5.3	4.4
\$2000 or more	2,759	4.7	3.1
Not stated	4,763	8.2	7.7
Total persons aged 15+	58,293	100.0	100.0

Source: Australian Bureau of Statistics, Census of Population and Housing 2011 and 2011

The review of the income levels of Latrobe City residents indicate that:

- Slightly more residents earn \$1000+ in the Latrobe City (29.1%) that the rest of Regional Victoria (26.6%) indicating a higher level of discretionary income to spend on leisure activities.
- The income brackets with the most residents is \$200-\$299 (13.2%), \$400-\$499 (12.9%) and \$300-\$399 (12.8%).

Table 2.8 Weekly Individual Gross Income Levels for Moe

Moe - Moe South Weekly income	2011		
	Number	%	Latrobe City
Negative Income/ Nil income	504	6.6	7.4
\$1-\$199	626	8.2	8.2
\$200-\$299	1,218	16.0	13.2
\$300-\$399	1,223	16.0	12.8
\$400-\$599	1,120	14.7	12.9
\$600-\$799	682	8.9	9.7
\$800-\$999	418	5.5	6.9
\$1000-\$1249	392	5.1	6.6
\$1250-\$1499	232	3.0	4.3
\$1500-\$1999	255	3.4	5.3
\$2000 or more	245	3.2	4.7
Not stated	705	9.3	8.2
Total persons aged 15+	7,624	100.0	100.0

Source: Australian Bureau of Statistics, Census of Population and Housing 2011 and 2011

As can be seen in the above table the individual weekly income for residents is less than that of the Latrobe City. 54.9% of resident earn less than \$600 per week in Moe, compared to 47.1% in the Latrobe City. There are also fewer residents earning over \$1000 per week (14.7% for Moe and 20.9% for Latrobe). This indicates that there is less disposable income available to the residents of Moe particularly for them to spend on physical activity.

2.1.5 Vehicle Ownership

The number of vehicles per household by residents is detailed in the below table:

Table 2.9 Vehicle Ownership

Latrobe City	2011			2006			Change 2006 to 2011
	Number	%	Regional VIC	Number	%	Regional VIC	
No motor vehicles	2,471	8.5	6.4	2,549	9.3	7.1	-78
1 motor vehicle	10,101	34.7	33.0	9,544	35.0	33.0	+557
2 motor vehicles	9,845	33.8	36.1	9,285	34.0	36.3	+560
3 or more motor vehicles	4,679	16.1	18.4	4,041	14.8	17.4	+638
Not stated	2,015	6.9	6.1	1,856	6.8	6.2	+159
Total households	29,111	100.0	100.0	27,275	100.0	100.0	+1,836

Source: Australian Bureau of Statistics, Census of Population and Housing 2006 and 2011

A review of the vehicle ownership in the Latrobe City indicates that the majority of residents, 84.6%, own one or more vehicles indicating ability to independently access leisure activities.

When comparing Moe to the rest of the Latrobe area, there were significantly more residents that do not have access to a car (13.5% for Moe and 8.5% for Latrobe). The number of residents in Latrobe that own two or more cars is also significantly higher (49.9%) than that in Moe (39.3%). This means it is more difficult for residents to get to sporting facilities that are further away.

2.1.6 Future Population Predictions

It is expected that the population within the towns in the Latrobe City region will increase 26.17% from 73,594 in 2011 to 92,855 in 2036. The towns that are likely to experience the greatest change in population numbers between 2011 and 2036 are Traralgon (40.35% increase) and Moe (28.67% increase). The Rural North East area is also predicted to increase by 32.09% by 2036.

The below table shows an indication of the increase in population numbers in the major townships in the Latrobe City area between 2006 and 2036:

Table 2.10 Projected Population in 2036 in the major Town in the Latrobe City Council

Latrobe City Council's areas	Forecast year							Change between 2006 and 2036	
	2006	2011	2016	2021	2026	2031	2036	Number	Avg. annual % change
Latrobe City	72,005	73,594	77,243	81,246	85,104	88,979	92,855	20,850	0.85
Churchill	4,966	5,008	5,044	5,144	5,293	5,459	5,643	677	0.43
Moe - Moe South	9,636	9,448	9,903	10,419	10,958	11,550	12,157	2,521	0.78
Morwell	14,135	14,205	14,559	15,076	15,418	15,796	16,123	1,988	0.44
Newborough	7,073	6,956	7,327	7,613	7,932	8,190	8,436	1,363	0.59
Rural North	3,218	3,105	3,128	3,206	3,295	3,362	3,429	211	0.21
Rural North East	2,115	2,147	2,200	2,357	2,519	2,683	2,836	721	0.98
Rural South East	3,511	3,500	3,655	3,674	3,772	3,891	4,008	497	0.44
Rural South West	3,186	3,187	3,232	3,342	3,476	3,577	3,678	492	0.48
Traralgon - Traralgon East	24,165	26,038	28,195	30,415	32,441	34,471	36,545	12,380	1.39

Source: forecast.id, from the Estimated Resident Population from ABS



The figures for the projected populations are slightly higher than that data collected during the census as it takes into account the population that may have been missed by the census and the population that were overseas at the time of the census.

The population of Moe is expected to increase to 12,157 by the year 2036 representing an increase of 2,709 people to the town from 2011.

The household size is expected to remain relatively stable at between 2.17 and 2.14 persons per household.

Table 2.11 Projected Population in 2036 in Moe

Moe - Moe South	Forecast year						
	2006	2011	2016	2021	2026	2031	2036
Population	9,636	9,448	9,903	10,419	10,958	11,550	12,157
Change in Population (5yrs)		-188	455	516	539	592	607
Average Annual Change (%)		-0.39	0.95	1.02	1.01	1.06	1.03
Households	4,200	4,333	4,549	4,800	5,060	5,330	5,594
Average Household Size (persons)	2.28	2.17	2.16	2.15	2.15	2.14	2.14
Population in non-private dwellings	62	62	97	97	97	132	172
Dwellings	4,518	4,732	4,969	5,242	5,526	5,820	6,110
Dwelling occupancy rate	92.96	91.57	91.55	91.57	91.57	91.58	91.55

Source: forecast.id

The age groups that are expected to experience the greatest change in numbers are the 75 – 79 year age bracket (328 person increase) and the 70 – 74 year age bracket (315 year age bracket). On the other hand there is expected to be a very small increase in the number of 55 – 59 years olds (25 people), 20 – 24 year olds (26 people) and 60 – 64 year olds (32 people).

Table 2.12 Projected Age Structure in Moe

Age Structure	2011 Number	2011 %	2021 Number	2021 %	2036 Number	2036 %	Change 2011 to 2036
0-4 years	554	5.9	622	6.0	694	5.70	140
5-9 years	532	5.6	689	6.6	777	6.40	245
10-14 years	559	5.9	660	6.3	771	6.30	212
15-19 years	679	7.2	595	5.7	726	6.00	47
20-24 years	611	6.5	528	5.1	637	5.20	26
25-29 years	536	5.7	547	5.3	604	5.00	68
30-34 years	473	5.0	579	5.6	644	5.30	171
35-39 years	501	5.3	638	6.1	720	5.90	219
40-49 years	567	6.0	629	6.0	757	6.20	190
45-49 years	655	6.9	617	5.9	760	6.30	105
50-54 years	693	7.3	627	6.0	750	6.20	57
55-59 years	689	7.3	658	6.3	714	5.90	25
60-64 years	676	7.2	687	6.6	708	5.80	32
65-69 years	504	5.3	707	6.8	733	6.00	229
70-74 years	421	4.5	665	6.4	736	6.10	315
75-79 years	330	3.5	455	4.4	658	5.40	328
80-84 years	276	2.9	314	3.0	490	4.00	214
85 years and over	191	2.0	202	1.9	278	2.30	87

Source: forecast.id

2.2 KEY FINDINGS – DEMOGRAPHIC ANALYSIS

The key findings of the project area's demographic review indicate:

- The population of Latrobe City has increased by 4.4% between 2006 and 2011 (69,329 to 72,402)
- In general terms the population of Moe is older than the average for Latrobe City
- The average weekly income for residents of Moe is lower than the Latrobe City overall average
- The population for Moe in 2011 was 9,448 dropping by 188 residents since the previous census in 2006
- The population for Moe is expected to rise by an average annual rate of 0.78% between 2006 and 2036 making it a reasonably stagnant residency

2.3 TENNIS FACILITIES IN LATROBE CITY

Latrobe City has an extensive array of tennis facilities ranging from the basic asphalt open courts with no lighting to the regional centre at Traralgon with 24 courts available for use. A full list of the courts inclusive of the Moe tennis Club's current offerings is below.

Table 2.13 Current Tennis Court Allocation in Latrobe City

Municipality	Venue	Club at Venue	No. of Courts	Description of Courts
Boolarra	Boolarra Rec Reserve	Boolarra Tennis Club	4	4 x Asphalt - 2 have lighting
Churchill	Gaskin Park	Churchill Tennis Club	11	7 x Acrylic 4 x Asphalt (in disrepair) - 3 have lighting
Flynn	Flynn Rec Reserve	Flynn Tennis Club	4	4 x Asphalt - no lighting
Glengarry	Glengarry Rec Reserve	Glengarry Tennis Club	4	4 x Asphalt - Limited lighting on courts 1 & 2
Hazelwood North	Hazelwood North Tennis Centre	Hazelwood North Tennis Club	4	2 x Acrylic 2 x Asphalt - no lighting
Moe	Moe Botanic Gardens	Moe tennis Club	15	15 x Plexi-pave - All have lighting (limited on 2 courts)
	Latrobe Indoor Tennis Centre	Private business – no club	5	5 x Synthetic grass - All have lighting
Newborough	Monash Reserve	Newborough Tennis Club	8	8 x Plexi-pave - No lighting
Morwell	Keegan Street Reserve	No club	4	4 x Asphalt - No lighting
	Ronald Reserve	Morwell East and Morwell Tennis Clubs	15	10 x Acrylic 5 x Asphalt - 5 courts have lighting
Toongabbie	Toongabbie Rec Reserve	Toongabbie Tennis Club	2	2 x Acrylic - no lighting
Traralgon	Maskrey Reserve	Pax Hill Tennis Club	4	4 x Asphalt - No lighting
	Eric Taylor Reserve		2	2 x Asphalt - No Lighting



Municipality	Venue	Club at Venue	No. of Courts	Description of Courts
	Traralgon Tennis Centre	Traralgon Tennis Association	24	14 x Plexi-cushion 8 x Plexi-pave 2 x Synthetic Clay
Traralgon South	Traralgon South Reserve	Traralgon South Tennis Club	4	4 x Asphalt - No lighting
Tyers	Tyers Rec Reserve	Tyers Tennis Club	4	4 x Asphalt - No lighting
Yallourn North	Yallourn North Rec Reserve	No Club	4	4 x concrete - No lighting
Yinnar	Yinnar Rec Reserve	Yinnar Tennis Club	4	4 x Asphalt - Limited lighting on courts 3 & 4
	Albert Deppeler Reserve		2	2 x Asphalt - No lighting

3 OPERATIONAL PERFORMANCE

3.1 INTRODUCTION

The following is the analysis of the overall performance of the Moe Tennis Club over the last five years 2008/9 – 2012/13 where available. Moe Tennis Club operates as a “classic” tennis club where it has an agreement with the local government authority (LGA), in this case Latrobe City Council, to conduct its activities out of the centre in exchange for an annual lease fee.

3.2 MEMBERSHIP

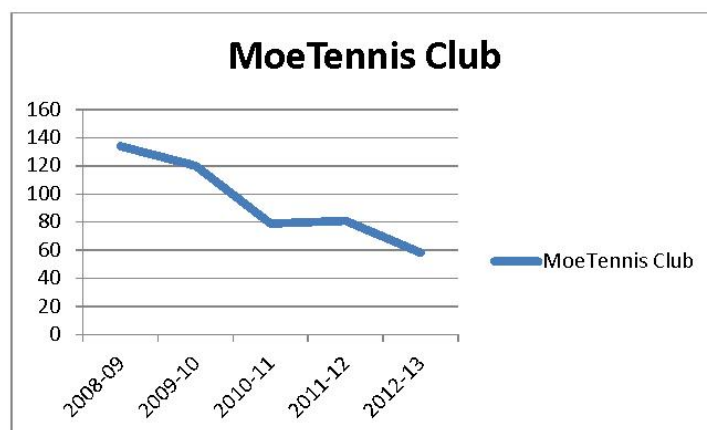
The following membership numbers are those provided to Tennis Victoria in line with the registration.

It can be seen that there has been a steady decline in the five-year period except for the 2011-2012 annual figures that showed a slight increase (2 members). From a total of 134 members in 2008/09 the membership numbers have decreased to 58.

The club have recognised that this is worrying trend and to their credit have been very open about the situation. It must also be said that these figures do not account for any casual play that is occurring at the club.

The national memberships have been trending down and over a similar period have decreased by 24%. Unfortunately Moe Tennis Club has shown a larger decrease.

Year	Moe Tennis Club
2008-09	134
2009-10	120
2010-11	79
2011-12	81
2012-13	58





According to the data provided by the club showing the official membership numbers given to Tennis Victoria on an annual basis there has been a steady decline in recent years.

The above table and graph shows the overall membership of the Moe tennis Club for the years 2008/9 to 2012/13. It correlates to a decline of almost 57% over the five-year period. According to the president the club was trending upwards until the 2007/8 season.

There are number of reasons that can be attributed to the decline such as the earthquake and the ensuing state of the courts, a general decline in tennis membership across Australia or the cultural shift away from the commitment to membership structures that a number of sports are experiencing. The also understand that the hard courts are not as attractive to the aging population of the Moe area.

The club therefore believes that a recovery of sorts will occur with a change of surface that is "softer" to play on and therefore will be more attractive to the older population. This contributes to the statement by the club to seek to change the surface to clay. The indoor facility in Moe, whilst not new, is also having an effect when it is coupled with the ability play at night, meeting players' time constraints and not being weather dependant.

3.3 FINANCIAL PERFORMANCE

The following is an analysis of the Moe Tennis Club for the previous five years of operation 2006/07 to 2011/12.

The table is a summary of the key elements of the budgets for both income and expenditure.

Table 3.1 Modern Tennis Club Income/Expenditure for Last 5 years

Income	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12
Membership/balls	\$7,762.00	\$10,792.00	\$6,882.00	\$8,558.00	\$8,710.00	\$8,648.00
Court Hire	\$300.00	\$650.00	\$450.00	\$630.00	\$690.00	\$834.00
Grants	\$-	\$-	\$-	\$-	\$-	\$9,427.00
Sponsorship	\$-	\$-	\$-	\$2,130.00	\$1,000.00	\$2,500.00
Kiosk	\$7,324.75	\$4,423.30	\$5,920.00	\$4,518.00	\$1,680.00	\$5,851.65
Other	\$1,532.44	\$433.55	\$344.62	\$1,116.97	\$164.25	\$991.86
Total	\$16,919.19	\$16,298.85	\$13,596.62	\$16,952.97	\$12,244.25	\$28,252.51
Expenditure						
Lease fee to Latrobe	\$952.38	\$918.20	\$1,276.87	\$1,362.60	\$2,495.00	\$1,105.00
Affiliation	\$426.50	\$506.00	\$3,216.00	\$3,604.00	\$2,380.00	\$2,510.00
Insurance	\$2,214.00	\$3,256.00	\$-	\$-	\$-	\$65.00
Electricity	\$947.11	\$1,567.12	\$1,877.29	\$1,364.89	\$1,670.60	\$1,803.94
Balls	\$1,485.00	\$7.60	\$1,090.00	\$847.00	\$858.00	\$1,452.00
Kiosk	\$6,798.09	\$5,281.29	\$2,853.50	\$3,976.40	\$1,775.93	\$3,359.48
Grants	\$-	\$-	\$-	\$-	\$-	\$8,896.20
Other	\$5,438.96	\$11,085.86	\$4,120.17	\$6,510.49	\$2,668.88	\$4,214.82
Total	\$18,262.04	\$22,622.07	\$14,433.83	\$17,665.38	\$11,848.41	\$23,406.44
Operating Surplus/Loss	-\$1,342.85	-\$6,323.22	-\$837.21	-\$712.41	\$395.84	\$4,846.07
Bank Deposit	\$29,388.21	\$23,064.99	\$22,227.17	\$21,514.76	\$21,910.60	\$26,756.56

The analysis shows that the club has had in place a cash-at-bank deposit that has been able to be used to make up any shortfalls in their budget cycles. To that end the club has shown a loss for the 2006/07, 2007/08, 2008/09 and 2009/10 financial reporting periods with the bank deposit showing the related support.

It is interesting to note the membership and 'ball' sales (competition purchase of balls by the players for matches) peaked in the 2007/08 season but has otherwise remained quite steady even though the membership numbers had dropped during this period.

Court hire had also increased steadily during this period, which is consistent with the notion that more people are wishing to play casually and just pay as they play.

A grant of \$9,427.00 was received in 2011/12 and this is reflected in the profit achieved in that same period although it can be seen that \$8,896.20 of the grant has been accounted for in the expenditure.

The club has also seen the introduction of sponsorship in the last three years and in 2011/12 achieved \$2,500 towards the running of the club.

In terms of expenditure the lease fee to Latrobe City peaked in 2010/11 and was reduced in 2011/12. It is also interesting to note the affiliation and insurance fees. In the first two years of the period it can be surmised that the affiliation fees to Tennis Victoria were low because the clubs were responsible for their own insurance and then in 2008/09 the insurance was included in a higher affiliation fee and therefore the club could reduce its need for cover.

The electricity costs for lights in particular has also risen steadily over the period and warrants consideration in the future planning for more efficient lighting schemes or the cost needs to be passed back to the users.

Overall the Moe Tennis Club showed an operating surplus of \$4,846.07 in the 2011/12 financial year and showed a bank deposit of \$26,756.56.



4 TRENDS

The following section reviews the participation trends of Tennis both nationally and within Victoria to provide an overview of the 6 issues and opportunities facing Moe Tennis Club in the future. The Australian Sports Commission undertakes regular research in to the participation trends within Australia and provides the data in the form of the Exercise, Recreation and Sports Survey (ERASS). The figures used below are from the latest ERASS reports published in 2010.

It must be noted that the ERASS results only include members of the population 15 years and older and therefore don't reflect any trends that may be happening in the junior development programs that sports are engaged in.

4.1 NATIONAL PARTICIPATION

In 2010 Tennis was positioned at number 7 in the top 10 activities in Australia. Walking was number 1 with 35.9% participation rate. Tennis 6% of the population playing tennis - either organised or non- organised.

Between 2001 and 2010 Tennis nationally has seen a decline of 24% with a significant decrease between 2003 and 2007, an increase in 2008 and then a steady decline. Currently it is at its second lowest participation rate since 2001 . In 2010 there were 1,051,000 participants. According to the ERASS results, the average rate for tennis participation was less than once per week.

Tennis ranked 5th in the top 10 club based activities at 1.9% - equal to cricket. Tennis showed a decline of 13% over the 2001 – 2010 period and in 2010 had 340,700 club members.

Nationally the participation rate for tennis is 6% and is made up of 2.4 % playing organised tennis and the majority (4.2%) playing non-organised tennis.

The ERASS figures show that when analysed on a gender basis, a total of 6.6% of the male population and 5.4% of the female population play tennis – making a total combined of 6%.

The age brackets that show the highest participation rates are 15 – 24 year olds and 34 – 44 year olds. There is definite decline in participation between 25 and 34.

4.2 VICTORIAN PARTICIPATION

In 2010 the participation rate for tennis in Victoria was 6.8% therefore tracking above the national average of 6%. In terms of gender participation the males make up 7.4% of the population and females make up 6.2%. Combined it shows the 6.8%.

The total participation numbers for 2010 are 297,800 with a breakdown of 146,900 playing organised tennis and 186,200 playing a non-organised format.

Some additional data compiled by Tennis Australia and Tennis Victoria show that there has been 3% decrease in membership in Victoria, In line with this is the finding that 66% of those surveyed prefer a more casual "pay to play" model therefore supporting the notion that tennis along with other membership based sports need to consider new ways to deliver their product to the majority of the potential participants.

There has also been a shift within clubs from the classic daytime members competition to more casual competitions and evening (with lights) play. Lighting of courts has therefore become far more important in the provision of tennis products that meet the needs of the participants.

4.3 REGIONAL PARTICIPATION

Recent years have seen a decline in the participation numbers of regional/inter club competitions that have traditionally been conducted by the associations formed for that purpose.

Traralgon Tennis Association operates out of the recently upgraded regional centre in Traralgon and is considered the largest association/club the region. Its numbers have dropped from 44 junior teams to 24 teams over the last 4 years.

There are now only two remaining local associations after recent closures and amalgamations.

The Latrobe Valley Tennis Association now only provides competition for junior players after the senior competition folded in the late 90's.

The Loy Yang, Yinnar and District Association has approximately 12 clubs (including Moe Tennis Club) participating over 5 senior grades.

The indoor tennis facility at Moe, though it does not conduct itself as an association, runs regular more casual-type competitions during the week at night which seem to be catering for the needs of some players who have been able to or have moved away for the traditional Saturday play.

4.4 COURT SURFACES

Traditionally the trend in Victoria was to provide hard court surfaces due to the costs of both construction and maintenance. The recent ten-year drought also made tennis clubs with clay (red porous) and grass courts, consider other alternatives due to the need for large amounts of water to maintain them.

There has also been a shift towards 'soft' courts such as synthetic grass as they are seen to be more attractive and beneficial for older players.

Recently Tennis Australia has developed a preference for courts (where practical) to be constructed of surfaces that grand slams are played on in order to assist the development of Australia's next generation of talented players. To this end they have introduced a rebate scheme that provides financial assistance to the clubs when they are constructing surfaces such as plexi-cushion and clay in particular.



5 CONSULTATION AND DOCUMENT REVIEW

This section summarises the key findings identified through the study's review of previous documentation and consultation with the key stakeholders as identified and agreed with Latrobe Council Officers.

5.1 INTERVIEWS WITH KEY STAKEHOLDERS

5.1.1 Latrobe Councillors

Key Informants - Cr Sharon Gibson (Deputy Mayor) and Cr Peter Gibbons

- An invitation was conveyed to all councillors to attend the meeting
- The council was represented by Councillors Gibson and Gibbons
- A summary of comments from the meeting included:
 - Want to maintain tennis as an affordable activity that is accessible to all especially children
 - There is approximately \$299,000 available to upgrade the Moe tennis courts form the earthquake insurance
 - They are looking to obtain the grant/rebate funding from Tennis Australia as well as source other funding opportunities
 - They were happy for the study to focus on the number of courts and agree a surface
 - Cr Gibbons feels that 1.5 courts is optimal
 - Cr Gibbons was aware of the club's aspirations to move courts 11 & 12 to a better site to avoid the trees and potential flooding
 - Aware that golf and tennis are facing issues with declining membership
 - Believe that lighting is important for participation and the clubhouse needs to be inviting and adequate to needs
 - Cr Gibson believes that there is merit in making the Tennis Club more obvious through signage
 - Cr Gibbons suggested the idea of providing access to the club from Narracan Drive but understands the difficulties
 - Both supported the concept of having 3 courts made available to the public at all times
 - They acknowledged that there is a safety factor with the park and surrounding area and suggested that increasing the level of activity and making it more obvious would help to alleviate this

5.1.2 Moe Tennis Club

Key Informant - Mr Brad Griffin, President of Moe Tennis Club

- Until about 2007/2008 the participation and membership levels were trending up but they have fallen away since then
- The membership numbers were about 130 but have decreased to 65 - 70
- The club has approximately \$24,000 in the bank
- They expect to lose money this financial year
- Saturday tennis is changing in terms of people's other commitments
- The indoor facility has been an issue in terms of providing a different alternative - indoors, not weather dependent, competition based rather than club overlay etc

- According to Mr Griffin he understands that Trafalgar is “booming”. Trafalgar is in the Baw Baw Shire
- There are a number of coaches in the area working at multiple venues
- The club has an arrangement with a professional coach (Mark Stevens) who works at the club on 1 or 2 nights per week with approximately 20 players
- Saturday juniors is run by Brad Griffin and is conducted with the purpose of increasing membership
- Members play on Saturday afternoons
- Agreed that they need to look at evening competitions midweek
- Membership for adults is \$85 plus ball fees (includes \$29 tennis Vic affiliation fee)
- Income is mostly from membership, functions, bar and kiosk
- Have a committee of 9 but 5 about are particularly active
- Have suggested exploring the idea of building a stronger relationship with the indoor centre (this is a commercial enterprise) and even creating a common management model
- Currently general maintenance is done by the club
- Council did a recent upgrade but it was not of high quality
- Council is apparently looking to tender out for a maintenance program to be implemented
- The “grand plan” going forward is:
 - Change the surface to clay - they are suggesting the new Conipur - Pro
 - Attract events because of the clay and number of courts
 - Clay is considered “softer” for veteran tennis
 - Provide a training facility for Tennis Australia - they have had discussions
 - They want 16 courts
 - Upgrade to the clubrooms
 - Look at creating a multi sport facility to attract funding - Criterium cycling track through the Botanic Gardens
 - Have 3 courts open to the public at all times
 - No real need to provide seating capacity
 - Looking to attract Foundation Cup events and local Victorian tournaments

5.1.3 Newborough Tennis Club

Key Informant - Mr Ray Bright, President of Newborough Tennis Club

- Currently have 20 playing members and 12 social members
- There is a midweek ladies competition but it is not linked to the club
- Numbers have been decreasing and they are struggling to maintain their membership
- Financially they are struggling as they charge low membership rates (\$85 for seniors) just to cover their costs but have no other income to create a surplus
- Currently have approximately \$30k in a bank deposit which they draw on if needed for minor maintenance or repairs
- In the past they have allowed public access to one course free of charge but they have ceased to do this due to the insurance issues
- Local coaches use the courts for classes but the lack of lighting is an issue
- The club does not derive any income from the coaching activities
- There are two associations that offer competitions for Newborough to play in
 - Latrobe Valley Tennis Association - only juniors as the seniors folded in the late 90's
 - Loy Yang Yinnar District Association - Newborough has one senior team of about 12 clubs (including Moe TC) over 5 grades
 - The numbers have been dropping consistently in the associations - Traralgon TA had 44 teams junior teams but have dropped to 24 over the last 4 years



- Traralgon Tennis Association runs a midweek competition and night competitions as an association in its own right
- Moe Indoor also conduct their own internal competitions on Monday, Tuesday and Wednesday evenings as well midmorning on Monday and Tuesday
- Maintenance of courts at Newborough
 - The then Moe City Council tried to amalgamate the Moe and Newborough clubs in the early 1990's
 - Nothing has been done to the courts since then
 - The courts had a plastic matting on them but this has been replaced with plexi-pave
 - Council "tends to pay for minor maintenance"
 - Council is resurfacing the Glengarry courts and about to do the same for Toongabbie
- Amalgamation with Moe Tennis Club
 - It was raised again about two years ago and again at the most recent committee meeting
 - It was rejected sighting an issue with committee membership and wanting to remain as a separate entity
- SGL has sought further clarification on the position of Newborough Tennis Club as to the possibility of a coming together of the two clubs by arranging a meeting with the presidents of both clubs and representatives of Latrobe City but the Newborough Tennis Club has, as a committee, considered their position and have reiterated their desire to remain as a separate entity
- The club has tried membership drives in the past but is not presently marketing actively

5.1.4 City of Latrobe Council Officers

Key Informant - Simon Clark - Co-ordinator of Recreation Liaison

- Simon is responsible for all outdoor sporting facilities where he allocates usage and assists with arranging council maintenance where required
- Believes Moe Tennis Club is well run and are a largely self-sufficient club
- The location is very good
- Botanical gardens could have some further development
- Suggested there may be benefit in combining Moe and Newborough Tennis Clubs and removing the unused one
- Supports the idea of having public courts open for all at the Moe site
- Believes the pavilion at Moe TC needs to be upgraded as part of this project otherwise it will be an issue in the future

Key Informant - Jamey Mullen - Manager Recreational Liveability

- The Council has approximately \$300,000 ready to apply to this project the proposal is agreed
- The Council view is that Traralgon has been developed as the Tennis event centre for the region
- Supports the concept of having three courts available for public use free of charge at Moe

5.1.5 Moe Tennis Club Coach

Key Informant - Mark Stevens (made comments during the public forum and after)

- Supports the idea of having clay courts for development
- Supports the idea that Moe has the ability to increase its membership and participation rates
- Is also an owner of the indoor complex in Moe and has training squads at venues across the municipality

5.1.6 Public Forum

Key informants - Approximately 20 people attended the public meeting. Many were members of the club though some were from other clubs. In brief the key points discussed were:

- The trees are an issue in terms of root damage, visibility on courts 11 and 12 and dropping of foliage on the courts and in the fences
- Believe courts 11 and 12 are unusable
- Believe that floods have not been a problem in recent history
- Because the courts are low down and the trees are around there is never a real wind issue
- Clay courts would provide a point of difference and are good for veterans (softer on the joints)
- Plexi-cushion is more easily damaged
- It was suggested that the state government would not provide funding for plexi-cushion courts because it has already for Traralgon TA
- There was unanimous support for providing three courts open to public use at all times for free
- Very keen to ensure 'point of difference' with whatever the solution is
- The surface needs to be recognised/approved by the WTA
- The clubhouse needs to have more storage provided as part of the upgrade
- Signage on the fences is an accepted notion

5.2 KEY RELEVANT DOCUMENT REVIEW

5.2.1 Council Plan 2103 – 2017

The Council Plan is based on five themes with the most relevant to this project being theme #2 - Appropriate, affordable and sustainable facilities, services and recreation.

It refers to providing affordable people focused community services and has a number of strategic directions. The most relevant of these are:

- To promote and support more involvement of children in active recreation and sport
- Encourage and create opportunities for more community participation in sports, recreation, arts, culture and community activities
- Work collaboratively with art partners to engage and support volunteers

5.2.2 Moe – Newborough Outdoor Recreation Plan - October 2007

This plan has some specific comments that relate to the Moe Botanic Gardens on which the Moe Tennis Club is located.



Though it is now some six years old it refers to the Botanic Gardens as underutilized with a need to expand the walking tracks and have better access to the Moe Yallourn Rail Trail.

It also makes comment about the need to assess the trees near the courts and to look at improving the fencing around the courts.

5.2.3 Moe Tennis Club Facility Redevelopment Cost Estimates

Following the earthquake in 2012, the City of Latrobe commissioned 2MH Consulting in association with BCS Engineering to conduct a review of the facilities and prepare cost estimates for any necessary repair or redevelopment works required.

The full report is attached as appendix 3 however in summary the report made the following recommendations:

- The courts are in need of full reconstruction
- The drainage system needs to be re-engineered to be more efficient
- The sub-base is good and able to sustain redevelopment meaning there is no need to replace the subsurface with concrete as opposed to asphalt
- The report was guided toward providing some costs estimates for the replacement of the existing 15 courts with 16 new courts (thought to meet event needs)
- The costs for 16 courts was:
 - o Concrete base – approx. \$2,075,590
 - o Asphalt base – approx. \$1,503,250

5.2.4 Tennis Facilities Plan June 2008

This report was completed in 2008 and since then the Traralgon Tennis Association has been upgraded and is considered the regional centre by Tennis Victoria and Tennis Australia.

It concluded that Latrobe City had more tennis facilities than it can adequately sustain based on the standard of some facilities, population and the declining memberships. Decisions regarding the rationalisation of some clubs need to be considered to enable resources to be effectively allocated towards developing/maintaining high quality facilities that can attract and retain tennis participants.

5.2.5 Community Engagement Plan

A comprehensive Community Engagement Plan is in place to ensure that all members of the community are given the opportunity to partake in the planning and reviews by council.

Based on this plan, a community engagement strategy was developed for the Moe Tennis Needs assessment and agreed by council prior to undertaking this review. See Appendix One for a copy of the plan.

6 SUMMARY OF KEY FINDINGS/ISSUES

The following is a list of the key findings and issues that will be taken into consideration when developing the strategic direction and proposed solution as a result of this assessment.

- The existing courts have been damaged by the 2012 earthquake and are in need of replacement.
- It has been determined that there may be an option to repair at least some of the courts which would provide a short term solution and may be part of the overall strategy going forward.
- Latrobe City Council has been able to secure approximately \$300,000 for the earthquake insurance and other sources to contribute to the upgrade of the facilities.
- Moe Tennis Club currently has 15 plexi-pave hard courts.
- Moe tennis Club membership has been in a steady decline and in 2013 has only 58 registered members.
- The club is in need of injection of facility upgrade to attract new players and casual participants.
- Nationally players are moving away from the commitment of 'club membership' models and are looking to more casual 'pay to play' ones.
- Anecdotally there is an increase in casual play at Moe Tennis Club (supported by the financial statements).
- Moe Tennis Club have expressed a preference for the replacement courts to be clay surfaced – preferably Conipur Pro because of its acceptance by the Tennis Australia under the rebate scheme but also because of its cost and low need for water.
- The clubhouse is currently adequate but an upgrade would provide a more inviting product.
- With only 58 players currently there is a question over the number of courts that should be provided however the council has shown strong support to maintain the current levels if possible and viable.
- Courts 11 and 12 are considered to be too dangerous to use due to damage to the surface and the constant tree branches and leaves on the courts. They are also "tucked away" out of direct line of sight from the club house and therefore have not been in full use for a number of years
- Both the club and the council have supported the idea that three courts (13,14 and 15) be provided as public access courts with the gates always open for free use.
- While there has been discussion around the need to have enough new clay courts to attract a certain level of tournaments, there has been no guarantee from Tennis Victoria or Tennis Australia that events would be available for Moe to host.
- There is also an issue with accommodation capacity in Moe should the club be looking at large events.
- Sale Tennis Club is also in the process of undertaking a study into the upgrade of its clay courts and the ability to attract events. If it is successful in its bid for funding and events, it will decrease Moe's 'point of difference' as clay court destination.
- Traralgon Tennis Association is the recognised Regional Centre for Tennis in Latrobe and has the focus in terms of attracting events to its newly upgraded plexi-cushion courts.
- Newborough Tennis Club is in close proximity to the Moe Tennis Club and has had a major decline in membership in recent years and is struggling to continue. A suggestion was made to explore the option to combine the membership of Moe and Newborough tennis clubs and subsequent meetings were arranged. Unfortunately the Newborough Tennis Club has recently agreed that they do not wish to explore any of these opportunities and prefer to remain as their own entity despite their very low membership.



7 STRATEGIC DIRECTION

Based on the key issues and findings as well as an awareness of the support from the Latrobe City Councillors and officers for tennis in Moe, the following strategic options were explored.

The Latrobe City Council has \$300,000 in current funding for the Moe Tennis Complex - \$100,000 remains from the original capital works funding and \$200,000 from the Insurance claim for damage to the tennis courts. Additional funding for the project will be sought through the 2014/15 Latrobe City Council capital works budget and possible future funding through the State Government's Community Facility Funding program.

Tennis Australia also has a rebate scheme that it makes available to conforming new constructions and upgrades in particular for surfaces that grand slam events are played on - namely Plexi-cushion and endorsed clay surfaces. The rebate scheme provides funding for up to \$18,000 per court for these surfaces in particular.

The initial consultation with the stakeholders expressed a preparedness to investigate the option of rebuilding the courts using the new clay surface (Conipur Pro) that is endorsed by Tennis Australia as a way of attracting events to Moe Tennis Club as well as providing a 'softer' surface to encourage older players to return to participating.

A detailed plan including costs was produced for the clay option but proved to be prohibitive in terms of the total cost and potential benefits it would provide for the small membership base at Moe Tennis Club (see section 7.1).

The council then instructed the consultants to investigate other more economical options such as the basic resurfacing of the existing courts as well as the option of the total replacement as hard court surfaces similar to the current ones.

The full reports as prepared by the tennis court construction experts (2MH) can be found in Appendices 2 and 3, however a summary of the applied process and key findings is provided below in sections 7.2 and 7.3.

Based on the findings for the options explored, a recommendation has been determined and is proposed for the consideration of the Latrobe City Council.

7.1 OPTION 1 – PROVISION OF CLAY COURTS

Prior to the appointment of the consultants to this project the Moe Tennis Club had sought advice from Tennis Victoria as to the preferred surface options that were approved or recommended and would best fit the needs of the club as well as provide the potential to attract events and elite training camps to Moe.

The new clay surface (Conipur Pro) was suggested because of its likeness to European clay but also because of its lower use of water for maintenance. As an endorsed clay surface it attracted the potential for meeting the criteria for the rebate scheme of \$18,000 per court for assistance in the construction cost.

As this is a new product on the market there are only a couple of courts already constructed and therefore it was felt by the club that this would provide the point of difference to allow them to attract events and other activity.

The potential levels of funding and discussions with stakeholders inclusive of council officers and councillors supported the direction to explore the potential options for installing Conipur Pro clay courts at Moe Tennis Club.

The stakeholders expressed a desire to retain all fifteen courts at Moe Tennis Club however it was felt that the cost to replace all courts at once would be cost prohibitive. Therefore it was decided that the following plan be explored and costed:

- Construct 8 new clay courts over the existing western courts while relocating courts 11 and 12 (8 courts would provide an initial number of courts that may allow for events to be hosted)
- Repair and resurface the remaining 7 courts as hard courts with the intention that would be re-addressed in the future in terms of the surface type

The cost as provided in detail in the attached 2MH report (Appendix 2) showed a total cost of:

• 8 new clay courts	\$1,645,119.00
• 7 repaired courts	\$ 139,445.00
• TOTAL	\$1,784,564.00

This cost was inclusive of all works and provided for all new lighting towers and court fences and equipment as well as design and management provisions.

For the purpose of comparison, 2MH also provided the alternative of provided the 8 new courts as hard court or plexipave surfaces.

The cost to construct the 8 hard courts was estimated at \$1,220,431 inclusive of all costs including all new lighting.

These cost estimates were provided to council and the direction was given to investigate alternative options due to the cost of the potential installation of the clay courts given the low membership numbers at the club and the uncertainty of being able to attract events.

7.2 OPTION 2 – BASIC REPAIR OF ALL COURTS

As a baseline, tennis expert consultants 2MH were instructed to provide a plan and cost estimate for the basic repair and resurfacing of the courts. The full report is provided as Appendix 3.

In order to provide the best possible advice, 2MH conducted a site visit in January 2014 as a follow-up to their previous visits and reports in 2011 and 2012. They found that the earthquake had created more damage than they had first observed and that there was likely more damage to the subsurface than was previously estimated.

For the sake of providing a full suite of alternatives for consideration by Council, 2MH have explored three options for the basic repair and resurfacing of the courts but as can be seen from the reports they do not encourage or endorse any of them for Moe Tennis Club given the potential damage that has been done to the subsurface by the earthquake and poor initial construction.

In summary the following three options for basic repair were provided. All options have been used on other facilities with mixed results.

Option 2A – Basic crack repair and re-coating with acrylic



This option looks at grinding and sanding of the existing sports surface and cutting out and filling all cracks with a flexible material followed by a surface treatment (2 coat acrylic).

The estimated cost to perform this work is \$10,000 per court or \$80,000 for the 8 front courts

The advice is that this approach does not address the non-compliance issues of runoff and drainage along with pavement collapses. It also does not resolve the potential issues with the subsurface and therefore it is felt that the cracks will re-appear within a 12-month period. It is not considered to be even a viable short to medium term solution.

Option 2B – Resheeting with asphalt and geofabric

This option requires the laying of a geofabric material over the entire courts and applying a 300mm thick layer of asphalt. The surface will then be covered with a 3 coat sports surface system.

The estimated cost to perform this treatment on one court is \$35,000 with a total cost of \$252,000 (with savings for multiples) for 8 courts.

The advice is that this approach does not address the non-compliance issues of runoff and drainage issues along with pavement collapses. It also does not resolve the potential issues with the subsurface and therefore it is felt that the cracks will re-appear over time. It is not considered by the consultants to be a viable long term solution.

Option 3C – Rubberised sports surface installed over existing courts

This option lays a 7mm thick floating rubber system over the existing courts and then paint with a sports surfacing product - with a minimum of 5 coats.

The estimated cost for this treatment is \$37,000 per court or \$296,000 for 8 courts.

This approach does not address the non-compliance issues with short rear run-offs. It fails to rectify on-going drainage issues, pavement collapses or major problems such as base problems. It is also highly unlikely to last more than 12 months without considerable failures occurring. It is not considered viable, as the existing court damage and cracking will overtime reflect through.

7.3 OPTION 3 – STAGED REPLACEMENT AS NEW HARDCOURTS

As part of the thorough review of possibilities for the Moe tennis courts the following option was discussed and marked as a potential solution that would provide the club with a number of new courts immediately, and the opportunity to have further courts rebuilt as a second stage of the process. Whilst it does not meet the desire of the club to have softer clay courts it potentially provides the new courts that would be an attractive option to new and returning players at a cost that is possible to fund.

The option is to conduct reconstruction works over a two-stage process as follows:

- Stage 1
 - Permanent removal of courts 11 and 12
 - Total rebuild of the 6 western courts as acrylic hardcourt with new subsurface works
 - Replace all fences, equipment and pathways
 - Maintain the existing lights where possible
 - Realign the courts within the existing footprints to meet compliance needs
- Stage 2
 - Total rebuild of the 4 eastern courts as acrylic hardcourt with new subsurface works
 - Replace all fences, equipment and pathways
 - Maintain the existing lights where possible
 - Realign the courts within the existing footprints to meet compliance needs

No works would be undertaken on the current courts 13, 14, 15 as these would be used as the public courts that are open at all times for casual use.

The facility would ultimately be a 13 court venue with 10 new courts.

The detailed analysis and cost plan is provided in Appendix 3. A summary of those costs is as follows:

Stage 1A – Site Masterplanning and Design

Works will include full electrical and lighting design, civil design and drainage design – and tennis specific design allowing for total site Masterplanning. Cost Estimate = \$40,000.00 plus GST

Stage 1 – Demolition of 2 existing courts and reconstruction of 6 new tennis courts

Works to include demolition of 2 existing courts (Courts 11 and 12) and reinstatement back to Botanical Gardens – lawn only. Estimate \$1 5,000.00 plus GST

Light towers to the west of the site may be able to be relocated and reused. Exact pricing for this is unknown until lighting and electrical works have been undertaken. Cost Estimate = \$40,000.00 plus GST

Construction of 6 new tennis courts with asphalt pavement, new drainage, new fencing and tennis infrastructure. Costs based on “best guess” off current industry pricing and basic acrylic surfacing. Cost Estimate = \$480,000.00

Stage 2 – Construction of 4 new tennis courts

Construction of 4 new tennis courts with asphalt pavement, new drainage, new fencing and tennis infrastructure. Costs based on “best guess” off current industry pricing and basic acrylic surfacing. Cost Estimate = \$320,000.00

Efficiencies can be made through undertaking all design works at the beginning for Stage 1A, tendering all construction works a package for Stage 1 and Stage 2 – even if spread over 2 financial years so as to get the best pricing overall. Project Management for 2 stages of construction works will be greater than constructing as 1 stage, therefore cost estimates for professional project management over 2 stages of construction will be - \$30,000.00 plus GST

Stages 1 and 1A total estimated costs = \$575,000.00 plus GST

Stage 2 (with professional tennis specific project management) = \$350,000.00 plus GST

Total combined works Stage 1A, 1 and 2 = \$925,000.00 plus GST

These estimates need to be considered as indicative costs and may vary depending on the final design. To meet the funding that may be available for the stages it may also be possible to reduce the number of courts supplied in stage 1.



8 CONCLUSIONS, RECOMMENDATIONS AND NEXT STEPS

8.1 SUMMARY OF OPTIONS

The following table is a brief summary of the proposed options that have been investigated as part of the process to provide upgraded facilities to the Moe Tennis Club following the damage created by the earthquake in 2012.

Table 8.1 Summary of Options

Option	Description	Estimated Costs	Summary
1. Provision of clay courts	<ul style="list-style-type: none"> Construct 8 new Conipur pro clay courts and resurface the remaining 7 courts with a basic acrylic coating 	<ul style="list-style-type: none"> Total \$1,784,564 	<ul style="list-style-type: none"> Considered too expensive Limited opportunity for events Council recommended not to pursue
2A. Basic crack repair and re-coating with acrylic	<ul style="list-style-type: none"> Cut out and fill existing cracks with flexible material Resurface with a 2-coat acrylic 	<ul style="list-style-type: none"> \$10,000 per court 	<ul style="list-style-type: none"> Not considered a viable solution that would not provide any longevity
2B. Resheeting with asphalt and geofabric	<ul style="list-style-type: none"> Apply a geofabric layer covered by a coat of asphalt and then 3-coat acrylic paint 	<ul style="list-style-type: none"> \$35,000 per court 	<ul style="list-style-type: none"> Not considered a viable solution that would not provide any longevity
2C. Rubberised sports surface installed over existing courts	<ul style="list-style-type: none"> Apply a rubberised layer then painted with five coats of acrylic 	<ul style="list-style-type: none"> \$37,000 per court 	<ul style="list-style-type: none"> Not considered a viable solution that would not provide any longevity
3. Staged replacement as new hardcourts	<ul style="list-style-type: none"> Replacement of 6 acrylic courts as stage one then 4 additional courts as stage 2 	<ul style="list-style-type: none"> Stage 1 = \$575,000 Stage 2 = \$350,000 	<ul style="list-style-type: none"> Would provide a long term solution with the minimal level of required maintenance

8.2 CONCLUSIONS

The Moe Tennis Club is a 15-court acrylic hard court facility that sustained significant damage in the 2012 earthquake that affected the Latrobe Valley. The extent of the damage provided for an insurance claim to be lodged by Council and a payout achieved with a net value of some \$300,000. This sum was then put aside pending a review of the venue to determine the most appropriate methodology for replacing or repairing the damaged courts.

The ensuing needs assessment for the Moe Tennis Club has taken a number of turns through the process in order to arrive at the following conclusions and subsequent recommendation and next steps.

Like a number of other tennis clubs around Australia (nationally membership has dropped significantly in recent years) Moe Tennis Club has suffered a decline in membership from 134 in 2008/2009 to just 58 members in the 2012/2013 season. There is a shift to a more casual 'pay to play' environment around a number of sports that traditional have existed using the membership model. The club is looking to use the upgrading of the courts as a catalyst to draw more participation through membership and casual play.

The original concept that had the support of the council officers and some councillors that provided feedback, was to explore the club's desire to reconstruct the existing acrylic coated hard courts with a new Tennis Australia approved clay surface product called Conipur Pro. This clay surface is regarded as being less reliant on the volumes of water of other clay products and therefore requires less maintenance cost. As a new product with very few courts already constructed in Australia, the pricing was assumed to be more reasonable than other clay products. It was also assumed that the clay surface would provide an opportunity for Moe Tennis Club to host events and training camps as the clay surface would be a "point of difference" and therefore be in demand from the athletes to play on – as grand slam type surface.

It was also originally assumed that the council would pursue other funding sources through grants from the state government and rebates through the Tennis Australia construction assistance fund based on the estimates that would result from the investigation.

SGL with the assistance of tennis court experts, 2MH Consulting, developed a concept and cost plan to reconstruct eight clay courts over the existing court footprint and resurface the other seven courts in acrylic. The cost to achieve this result was estimated as approximately \$1.78 million.

This cost coupled with the low membership numbers, limited secured funding and a lack of surety around obtaining events caused the Council to reassess the concept and to direct the study to change its focus and explore alternative solutions.

It is also important to note that Latrobe City has recently upgraded the tennis facilities at Traralgon to meet the criteria of a regional tennis centre and be the focus for any major tennis events that may be hosted in the area.

SGL was asked to look at alternatives that provided different surface and staging options.

With these parameters in mind, SGL explored a number of options to simply resurface the existing courts however the more detailed inspection of the courts revealed that the surfaces had deteriorated even further over the last 12 months since 2MH had conducted their original review as part of another study and that the earthquake damage had potentially caused greater damage to the subsurface than first thought.

The advice from the experts in court surfaces therefore stated that none of the three options that were suggested and have been used on other facilities would provide any surety or long term solution to the problem and would not be a viable alternative.

The final option that was proposed and assessed was the concept of a staged process where in stage 1, a total of six of the eight courts at the west end of the venue would be fully rebuilt as acrylic hard courts surfaces with the existing courts numbered 11 and 12 being demolished and not replaced. Stage 2 would then see further courts being rebuilt on the eastern end of the site. It is anticipated that all four of these courts will be able to be rebuilt within the available budget but this needs to be subject to more detailed planning and the costs at the time the work is to be done.

In all options that were proposed as part of this study, it was agreed with Council and the club that the pod of three courts (numbered 13, 14 and 15) would be left to be available as public courts where the community could have free access to them with the intention of providing activity alternatives for the public but also to encourage people to begin tennis.



8.3 RECOMMENDATIONS AND NEXT STEPS

Based on the key issues and findings that that are the result of the detailed needs assessment process the following recommendations and next steps are provided.

It is recommended that:

- Council adopt Option 3 as proposed in this report – ie to reduce the number of courts from 15 to 13 (by removing courts 11 and 12), fully rebuilding 6 acrylic surfaced tennis courts as stage 1 and a further 4 new courts as stage 2 subject to budget allowances.
- Council proceed with the detailed design and cost planning as soon as possible keeping in mind that the construction of outdoor facilities requiring earthworks are best achieved prior to April and post September to avoid delays due to the wet months.
- The surfaces are to be retained as acrylic hard court to minimise the cost of maintenance and provide a longer-term solution for the Moe tennis Club members. The relative low membership numbers makes it even more advisable to provide a low maintenance cost facility that allows the club to focus on growing capacity, membership and participation.
- The club adopt a financial plan that allows for the creation of a “sinking fund” for the maintenance and replacement of facilities over a ten-year period. It is advise that a sum of \$1,000 per court is set aside each year for this purpose.
- The club continue to focus on building participation through junior development programs, casual “pay to play” opportunities and night-time competition opportunities for non members.
- Continue to encourage the potential to merge the Newborough Tennis Club membership with the Moe Tennis Club

APPENDIX ONE: MOE TENNIS COURTS NEEDS ASSESSMENT – STAKEHOLDER CONSULTATION FRAMEWORK

Key Stakeholder Groups	Methodology	Timeframe
Latrobe City Councillors	<ul style="list-style-type: none"> Issue invitations to all 9 councillors Meeting #1 at commencement of project Meeting #2 at end of Stage 1 Meeting #3 at completion of draft report 	August 2013 through to completion of project
Council Officers	<ul style="list-style-type: none"> Speak one-on-one with officers as identified by project leader In commencement of Stage 1 	August 2013
Moe Tennis Club Committee	<ul style="list-style-type: none"> Face-to-face meeting in Stage 1 Committee to select members to be involved Provide feedback to Committee as report evolves and elicit comment 	August 2013 through to completion of project
Moe Tennis Club Members and Players	<ul style="list-style-type: none"> Public meeting at Tennis Club or Council offices Send invitation to players and members via club communication and Tennis Victoria "My Tennis" Also invite general interested public via council website etc 	August 2013
Newborough Tennis Club Committee	<ul style="list-style-type: none"> One-on-one meeting with committee members NTC to select attendees 	August 2013
Latrobe Tennis Association	<ul style="list-style-type: none"> One-on-one meeting – in person or via phone 	August 2013
Loy Yang Yinnar and District Tennis Association	<ul style="list-style-type: none"> One-on-one meeting – in person or via phone 	August 2013
Tennis Coaches associated with Moe Tennis Club	<ul style="list-style-type: none"> Identify coaches associated with Moe Tennis and meet with them if possible or on the phone 	August 2013
Tennis Victoria	<ul style="list-style-type: none"> Meet with Tennis Victoria "Places to Play" General Manager and Coordinator 	August 2013
Tennis Australia	<ul style="list-style-type: none"> Meet with Tennis Australia "Places to Play" representatives and others as required (eg events) 	August 2013
General Interested Community Members	<ul style="list-style-type: none"> Provide outline of project on Council website On website ask for written submissions for any feedback from community members via Council officers Alert public to the project via the bulletin in local newspaper 	August – September 2013
Steering Group	<ul style="list-style-type: none"> Report regularly to steering group as required by Council and as per tasks schedule Steering Group to decide on methodology for communication of draft and/or completed report to stakeholder groups as identified 	July to completion of project



APPENDIX TWO – 2MH ASSESSMENT OF CLAY COURT OPTION

The attached report details the option and costs for the construction of eight clay courts and the resurfacing of seven acrylic courts at Moe tennis Club.

APPENDIX THREE – 2MH REPORT ON HARD COURT OPTIONS FOR MOE TENNIS CLUB

The attached report details the option and costs for the resurfacing and replacement of the existing hard courts at Moe Tennis Club with acrylic hard courts.

**14.2 STATE GOVERNMENT RECREATION FUNDING
OPPORTUNITIES 2014/15**

General Manager

**Recreation and Community
Infrastructure**

For Decision

PURPOSE

The purpose of this report is to present to Council recreation projects that are eligible to be submitted for funding under the State Governments Community Facility Funding Program and Country Football Netball Program and to seek Council endorsement of the chosen funding applications to be prepared and lodged in the 2014/15 financial year.

DECLARATION OF INTEREST

The General Manager Recreation and Community Infrastructure and Acting Manager Recreational Liveability declared an indirect interest under section 78B of the Local Government Act 1989.

STRATEGIC FRAMEWORK

This report is consistent with Latrobe 2026: The Community Vision for Latrobe Valley and the Latrobe City Council Plan 2013-2017.

Latrobe 2026: The Community Vision for Latrobe Valley

Strategic Objectives - Recreation

In 2026, Latrobe Valley encourages a healthy and vibrant lifestyle, with diversity in passive and active recreational opportunities and facilities that connect people with their community.

Latrobe City Council Plan 2013 - 2017

Theme and Objectives

Theme 2: Appropriate, affordable and sustainable facilities, services and recreation

Objective - To promote and support a healthy, active and connected community.

Objective - To provide facilities and services that are accessible and meet the needs of our diverse community.

Objective - To enhance the visual attractiveness and liveability of Latrobe City.

Strategic Directions:

- 1.2.1 Promote and support more involvement of children in active recreation and sport.
- 1.2.2 Develop and maintain community infrastructure that meets the needs of our community.
- 1.2.3 Promote and support opportunities for people to enhance their health and wellbeing.
- 1.2.4 Encourage and create opportunities for more community participation in sports, recreation, arts, culture and community activities.
- 1.2.5 Improve and link bicycle paths, footpaths and rail trail networks to encourage physical activity and promote liveability.
- 1.2.6 Deliver and promote environmentally sustainable waste management services that meet the expectations of the community and industry.
- 1.2.7 Continue to ensure Latrobe City is clean and tidy through the provision of effective litter control services.
- 1.2.8 Enhance and develop the physical amenity and visual appearance of Latrobe City.
- 1.2.9 Continue to maintain and improve access to Latrobe City's parks , reserves and open spaces.
- 1.2.10 Work collaboratively with our partners to engage and support volunteers in providing services to the community.
- 1.2.11 Work in partnership with all stakeholders to ensure the provision of quality education and care services to the community.

Theme 5: Planning for the future

Objective - To provide a well planned, connected and liveable community.

Objective - To provide clear and concise policies and directions in all aspects of planning.

Objective - Advocate for planning changes at the state level to reflect regional needs and aspirations.

Objective - To reduce the time taken to process land use and development planning applications.

Strategic Directions:

- 1.5.1 Explore the establishment of a Council planning committee to guide land use planning, development and growth.
- 1.5.2 Provide efficient and effective planning services and decision making to encourage development and new investment opportunities.
- 1.5.3 Plan and coordinate the provision of key services and essential infrastructure to support new growth and developments.
- 1.5.4 Investigate the need for and provide appropriate resources to support land use planning and development of Latrobe City.
- 1.5.5 Review our policy and guidelines for new residential development in particular lot density, unit development, road widths and emergency vehicle access.
- 1.5.6 In consultation with the community, review Council's Municipal Strategic Statement and the Latrobe City Planning Scheme.
- 1.5.7 Work with stakeholders to maintain and enhance the natural environment and biodiversity of Latrobe City and the region.
- 1.5.8 Protect and celebrate the cultural heritage and historical character of Latrobe City.

Strategy & Plans – Recreation

Council has adopted a range of plans and strategies to provide guidance for the improvement of existing and the development of future recreation facilities across the Municipality, these include:

- *Recreation and Leisure Strategy 2006*
- *Traralgon Outdoor Recreation Plan 2006*
- *Moe Newborough Outdoor Recreation Plan 2007*
- *Gippsland Hockey Facilities Plan 2007*
- *Morwell Outdoor Recreation Plan 2008*
- *Tennis Facilities Plan 2009*
- *Soccer Facilities Plan 2009*
- *Southern Towns Outdoor Recreation Plan 2009*
- *Ted Summerton Reserve Master Plan 2009*
- *Northern Towns Outdoor Recreation Plan 2010*
- *Gaskin Park Master Plan 2011*
- *Traralgon South Recreation Reserve Master Plan 2013*
- *Public Open Space Strategy 2013*

There is recognition that some of the above plans were undertaken some time ago. There are projects that were not previously identified in these plans, which have now been considered for submission to funding programs.

BACKGROUND

On an annual basis, the Victorian Government, through the Community Facility Funding Program and the Country Football Netball program provide a number of funding opportunities to support the improvement and development of community recreation facilities. The key objective of the Victorian Government in providing this funding is to assist in developing healthy and active communities.

There is a two stage process for submitting a funding application to the Victorian Government. Stage one is a brief project proposal and the second stage is a full detailed application.

Based on project proposals submitted by Council, Sport and Recreation Victoria will advise which projects can proceed to full application. This approach gives Councils the opportunity to receive feedback on project ideas, while giving clubs and community groups the opportunity to work more closely with Council to develop their projects and proposals for funding, while reducing the work involved in developing full applications.

Expression of interest for project proposals for all categories in the Community Facility Funding Program will close in approximately 6 weeks. For projects proposals that proceed to full application stage, a full application will be due in early May 2014. This will allow funding announcements and signed funding agreement to occur prior to the Victorian Government election in November.

The Country Football Netball Program will be open for application until 30 June 2014.

The Community Facility Funding Program and the Country Football Netball Funding program are administered by the Department of Planning, Transports and Local Infrastructure, and provide the opportunity for Council to access funding to assist in the delivery of projects that meet the program funding criteria.

The following guidelines for both the Community Facility Funding Programs and the Country Football Netball Funding program have been recently advised by the Victorian Government:

Community Facility Funding Program – Major Facilities

Funding under the Major Facilities program encourages the development of community sports and recreation facilities that are innovative, effectively managed, accessible, environmentally sustainable and well used.

Council can submit one application and the total cost must be greater than \$500,000.

The maximum grant of \$650,000 per project is available under this program. The funding ratio for this program is \$1 State Government funding to \$1 Council funding.

Community Facility Funding Program – Better Pools

Funding under the Better Pools Program encourages the development or redevelopment of aquatic leisure facilities that focus on increasing participation and access to aquatic activities and are supported by comprehensive planning.

Council can submit only one application. The maximum grant of \$3 million per project is available under this program. The funding ratio for this program is \$1 State Government funding to \$1 Council funding.

It must be noted that Council may only submit either a Major Facilities funding application or a Better Pools funding application, as funding for these two programs comes from the same funding pool.

Seasonal Pools

The Seasonal Pools program provides funding to renew and modernise small aquatic facilities in small rural and regional towns where access to indoor facilities are significantly limited.

A maximum grant of \$200,000 per project is available under this program. The funding ratio for this program is \$2 State Government funding to \$1 Council funding.

Community Facility Funding Program – Minor Facilities

Applications under the Minor Facilities program are available for community groups, working in partnership with Council to develop or upgrade community sport and recreation facilities. The program is also designed to strengthen communities through the development of sustainable sport and recreational facilities where the total project cost does not exceed \$500,000 (GST exclusive).

Council can apply for a maximum of \$200,000 total funding under this grant, with a maximum of three applications per Council. Any single funding application cannot exceed \$100,000 in funding. The funding ratio for this program is \$2 State Government funding to \$1 Council funding.

Community Facility Funding Program – Soccer Facilities

Applications under the Soccer Facilities program encourage soccer clubs, working in partnership with local government to upgrade or develop new facilities to maximise their capacity to cater for additional participation in soccer.

Council can apply for a total of \$100,000 funding under this grant, with a maximum of two applications. Successful applications for the maximum \$100,000 grant will involve an exceptional project or circumstance. However, smaller projects that achieve the objectives of this program are encouraged and will be highly regarded.

Community Facility Funding Program – Planning

This program supports Council to provide a planned response to local community sport and recreation needs. Councils may submit only one application under Recreation planning for Facility feasibility.

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A second planning project may be submitted under the Regional Planning category where the scope and funding contributions extend beyond a single municipality. The funding ration for this program is \$2 State Government funding to \$1 Council funding.

Country Football Netball Funding Program

Councils may be successful in receiving up to \$100,000 per financial year. This can comprise one larger project seeking \$100,000 or up to three smaller projects across different sites.

At the discretion of the *Country Football Netball Program Steering Committee*, only councils invited to resubmit applications can reapply to the following assessment period of the program, rather than waiting to resubmit in the next financial year.

The cash flow of each grant will be negotiated with each council individually following approval of the grant. In order for a project to receive \$100,000, the project must be deemed as an exceptional project or circumstance. Exceptional projects should include one or more of the following elements:

- Applications where both the football and netball components of the club jointly benefit from the project
- Applications where two or more football and netball clubs benefit from the project
- Applications for projects that are of regional significance and with strong participation outcomes
- Applications where a football and netball club has recently been affected by a natural disaster such as flood or bushfire.

For all programs, applications are considered during the 14/15 year and funds become available in 15/16. Therefore, by committing to applications at this stage, Council is committing to providing matching funding in 15/16. Council has 24 months to complete Community Facility Funding – Major projects and 18 months to complete Community Facility Funding – Minor, Soccer and Planning projects upon signing of funding agreements.

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The following table summarises the funding co-contribution and submission dates for each of the programs.

PROGRAM	MAX GRANT	FUNDING RATIO State/Council (\$)	EXPRESSION OF INTEREST CLOSING DATE	FINAL APPLICATION CLOSING DATE
Community Facility Funding Program - Major	\$650,000	1:1	To be advised	To be advised*
Community Facility Funding Program – Better Pools	\$3 million	1:1	To be advised	To be advised*
Community Facility Funding Program – Seasonal Pools	\$200,000	2:1	To be advised	To be advised*
Community Facility Funding Program - Minor Facilities	\$100,000	2:1	To be advised	To be advised*
Community Facility Funding Program – Soccer Facilities	\$100,000	2:1	To be advised	To be advised*
Community Facility Funding Program - Planning	\$30,000 (Recreation Planning or Facility Feasibility) or \$50,000 for a Regional Planning project (across two LGA's)	2:1	To be advised	To be advised*
Country Football Netball Funding Program	\$100,000	2:1	N/A	30 June 2014

*Although the dates have not been formally announced, SRV representatives have indicated that it is imminent and the turnaround time for submissions will be short due to this year's State election.

Recreation Project Delivery Context

The strategic recreation plans adopted by Council since 2006 have assisted in the facilitation of the construction, upgrade and improvement of a range of facilities across Latrobe City.

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Projects delivered 2006 – 2013:

YEAR	RESERVE	PROJECT	TOTAL PROJECT COST	LCC FUNDING	EXTERNAL PROJECT FUNDING
2009	Traralgon West Sporting Complex	Pavilion Upgrade	\$1.5 million	1.18 million	\$320,000
2009	Northern Reserve Newborough	Pavilion Upgrade	\$200,000	\$200,000	N/A
2010	Boolarra Memorial Park	Pavilion Upgrade	\$200,000	\$140,000	\$60,000
2010	Hazelwood North	Due Diligence report	\$20,000	\$20,000	N/A
2010	Hazelwood South Reserve	Lighting Project	\$140,000	\$40,000	\$100,000
2010	Yinnar Recreation Reserve	Pavilion Upgrade	\$300,000	\$240,000	\$60,000
2011	Boolarra Memorial Park	Netball Courts & Lighting	\$100,000	\$100,000	N/A
2011	Lions Park Moe	AAA Playground	\$150,000	\$100,000	\$50,000
2011	Burrage Reserve Newborough	Pavilion Upgrade	\$60,000	\$60,000	N/A
2011	Tyers Recreation Reserve	Lighting Project	\$80,000	\$80,000	N/A
2011	Harold Preston Reserve Traralgon	Pavilion Upgrade	\$100,000	\$40,000	\$60,000
2011	Toners Lane Reserve Morwell	Road access	\$40,000	\$40,000	N/A
2011	Burrage Reserve Newborough	Lighting project	\$100,000	\$100,000	N/A
2011	Morwell Recreation Reserve	Ground improvements	\$250,000	\$150,000	\$100,000
2011	Keegan Street Reserve Morwell	Lighting project	\$100,000	\$40,000	\$60,000
2011	Northern Reserve Morwell	Pavilion construction	\$320,000	\$320,000	N/A
2011	Crinigan Road South Reserve Morwell	Pavilion upgrade	\$244,000	\$184,000	\$60,000
2011	Ted Summerton Reserve Moe	Pavilion & ground upgrade	\$6 million	\$340,000	\$5.6 million

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2011	Federation (formerly Monash) University Churchill	Construction of synthetic pitch	\$900,000	\$600,000	\$300,000
2011	Various reserves	Upgrade to soccer grounds	\$150,000	\$50,000	\$100,000
2012	Ronald Reserve Morwell	Lighting project	\$90,000	\$30,000	\$60,000
2012	Tyers Recreation Reserve	Upgrade to Football/Netball change facility	\$280,000	\$230,000	\$50,000
2012	Moe Olympic Reserve	Construction of pavilion	\$680,000	N/A	\$680,000
2012	Monash Reserve Newborough	Upgrade of pavilion	\$50,000	N/A	N/A
2012	Harold Preston Reserve Traralgon	Upgrade to Traralgon Tennis Centre	\$714,000	\$100,000	\$614,000
2013	Yallourn North Town Oval	Construction of new pavilion	\$680,000	\$340,000	\$340,000
2013	Glengarry Recreation Reserve	Construction of 4 multi-use Netball/Tennis Courts	\$500,000	\$430,000	\$70,000
2013	Tyers Recreation Reserve	Construction of Soccer pavilion	\$420,000	\$400,000	\$20,000
2013	Moe Outdoor Pool	Facility Upgrade	\$2.6 million	\$800,000	\$1.8 million
2013	Traralgon South Recreation Reserve	Construction of Skate Park	\$90,000	\$20,000	\$70,000
2013	Centenary Park Yinnar	Construction of Skate Park	\$115,000	\$20,000	\$95,000
2013	Alexanders Park Morwell	Construction of Skate Park	\$420,000	\$350,000	\$70,000
2013	Yallourn North Bowling Green	Construction of synthetic bowling green	\$200,000	N/A	\$200,000
2013	Harold Preston Reserve Traralgon	Installation of drainage on pitch 2	\$55,000	\$40,000	\$50,000
Total			\$17,848,000	\$6,784,000	\$10,989,000

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The following projects schedule to be delivered during 2014/15 which have been funded under 2013/14 Community Facility Funding Program:

YEAR	RESERVE	PROJECT	TOTAL PROJECT COST	LCC FUNDING	EXTERNAL PROJECT FUNDING
2014	Joe Tabuteau Moe	Moe Netball Courts Lighting project	\$160,000	\$110,000*	\$50,000
2014	Latrobe City Sports & Entertainment Stadium	Installation of irrigation and drainage	\$160,000	\$110,000	\$50,000
2014	Harold Preston Reserve Traralgon	Lighting project for Pitch 2	\$90,000	\$40,000	\$50,000
2014	Harold Preston Reserve Traralgon	Construction of new change pavilion	\$450,000	\$380,000*	\$70,000
2014	Latrobe City Council	Latrobe City Tracks, Trails and Pathways Strategy	\$100,000	N/A	\$100,000

*Based on the success of 2013/14 applications, Council will be required to allocate \$490,000 in the 2014/15 capital works budget.

The other projects listed above are funded in the 2013/14 budget.

ISSUES

A number of factors and issues require consideration when nominating projects for funding, in addition to the requirements set by the State Government. These include:

1. Existing Council Strategy/Plan/Policy or Resolution
2. Applicable Council adopted recreation strategies and plans have been analysed to assess potential projects for the funding programs. These include:
 - Traralgon Outdoor Recreation Plan 2006
 - Moe Newborough Outdoor Recreation Plan 2007
 - Gippsland Hockey Facilities Strategic Plan 2007
 - Morwell Outdoor Recreation Plan 2008
 - Tennis Facilities Plan 2009
 - Soccer Facilities Plan 2009
 - Southern Towns Outdoor Recreation Plan 2009
 - Northern Towns Outdoor Recreation Plan 2010

- Gaskin Park Master Plan 2011
- Traralgon South Recreation Reserve Master Plan 2013

When Council adopted these plans and strategies, a number of priority projects for funding and delivery were identified.

In addition to the priority projects adopted by Council, each of the plans contains a significant number of other projects identified as 'future opportunities'. Whilst being identified as such, they have no priority or weighting for funding or delivery.

In preparing this report, the Council adopted project priorities from each of the above plans formed the basis for considering the nominated projects for funding through the Community Facility Funding Program.

Alternatively, Council may consider other projects from the plans that are listed as future opportunities, rather than the nominated projects.

Scoping and planning of the project

In order to access potential funding, an eligible project must have been subject to adequate scoping and planning. This includes community engagement, design, building/planning approval, site tenure and a comprehensive financial cost assessment.

To deliver a project in accordance with program guidelines and completion dates, a number of factors must be demonstrably progressed.

These factors, when considered with the project eligibility criteria applicable to the Community Facility Funding Program and Country Football Netball Funding program can limit the range of potential projects that can satisfactorily be progressed for funding.

Eligibility Assessment

In the context of assessing all eligible projects under the Community Facility Funding Program and Country Football Netball Funding program, officers have prepared a list of potential projects from the strategic recreation plans and nominated community projects. The approximate projects costs and an assessment of the delivery timelines of the project (including planning and design, funding application and delivery) are factored in to allow the consideration of eligible projects.

Planning, funding and delivery of projects

It is important to note that the dates identified for planning, funding and delivery of projects in this section of the report reflect current circumstances and will be reviewed on an annual basis (as future funding opportunities become available).

Community Facility Funding Program – Major Facilities

When considering eligible projects for submission under this funding program, a review of all adopted priority projects arising from the town based outdoor recreation plans against the Community Facility Funding Program – Major Facilities funding criteria has been undertaken.

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The following table provides details of all projects considered for submission:

Reserve	Project Description	Total Cost (Approx)	Council Costs (Approx)	Strategy/Plan	Planning & Design	Funding Application	Project Delivery
Gaskin Park Reserve - Churchill	Multi-use facility	\$1.3 million	\$650,000	Gaskin Park Master Plan	2013/14	2014/15	2015/16
Moe Rail Revitalisation Project	Youth Precinct	\$20.8 million	\$2.85 million	Moe Rails Revitalisation master plan	Completed	2015/16	2016/17
Latrobe City Synthetic Sports Field	Multi-use facility	\$1.1 million	\$550,000	Gippsland Hockey Facility Plan	2013/14	2016/17	2017/18
Total		\$23,200,00	\$4,050,000				

The Gaskin Park Multi-Use Facility has been planned and designed in preparation for a funding submission to the Victorian Government. The design funding for this project was provided in the 2013/14 Council budget.

The multi-use facility identified for Gaskin Park Churchill was identified as a priority project in the Gaskin Park master plan (Attachment 1) along with the construction of a bowls green. A separate funding application will be submitted for the bowls green under the Community Facility Funding Program – Minor Facilities.

Current change room and public toilets facilities at Gaskin Park Churchill are inadequate. The current facilities and public toilets no longer comply with any accepted standards. The upgraded facility will provide for functional and accessible facilities for all users that meet the current standards for AFL Football and Netball Victoria.

Considerable community and stakeholder engagement has been undertaken in both the preparation of the Gaskin Park master plan, but also in the planning and concept design of the Gaskin Park Multi-use facility.

The facility if constructed will provide the following aspects:

- Two change rooms for Senior Football/Cricket
- Two change rooms for Junior Football/Cricket
- Two change rooms providing for female players and Netball
- Change facilities for umpires
- First Aid room
- Gymnasium room
- Meeting room
- Canteen/Kiosk facilities
- Public toilets

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The facility will provide for all current reserves users, including:

- Churchill Football Netball Club
- Churchill Junior Football Club
- Churchill Cricket Club
- Churchill Bowls Club

\$50,000 was allocated in the 2013/14 budget towards the development of a design for the facility. A concept design has now been completed at a cost of \$10,000. The concept design will be used to obtain a detailed quantity surveyor report to determine the expected costings for the project to support the funding application to the CFFP Major.

A capital works request for \$60,000 will be made as part of the 2014/15 budget process and a further request for \$540,000 will be made as part of the 2015/16 capital budget process with a view of beginning construction in late 2015.

Community Facility Funding Program – Better Pools

When considering projects eligible for submission under this funding program, a review of all adopted priority projects arising from Council's adopted strategies and plans has been undertaken.

The following table provides details of all projects considered for submission:

Pool	Project Description	Total Cost (Approx)	Council Costs (Approx)	Strategy/Plan	Planning & Design	Funding Application	Project Delivery
Gippsland Regional Aquatic Centre	Construction of an indoor 50m Aquatic Facility	\$36 m	\$12 m	Traralgon Indoor Aquatics leisure Centre Feasibility Study	Concept plans are completed.	TBA	TBA

Only one application from the Major Facilities program or Better Pools program can be submitted. As the Gaskin Park multi-use pavilion is being nominated at a Major Facilities application, no application will be submitted under the Better Pools program.

At this point, Council cannot confirm the matching funding from the Federal government and thus is unlikely to be successful.

In addition, feedback received from funding partners has indicated that there are concerns regarding the "project readiness" of the GRAC. Council will need to consider the funding of the detailed designs (estimated at \$3 million) in the upcoming budgets. There is currently no funding source for the design documents.

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Community Facility Funding Program – Seasonal Pools

When considering projects eligible for submission under this funding program, a review of all adopted priority projects arising from the Leisure Facilities Audit has been undertaken.

There are no suitable projects that meet the program funding criteria that have been sufficiently planned, designed and costed to allow submission under this funding stream this year.

Community Facility Funding Program – Minor Facilities

When considering projects eligible for submission under this funding program, a review of all adopted priority projects arising from the town based outdoor recreation plans together with the soccer, tennis and hockey plans against the Community Facility Funding Program – Minor facilities funding criteria has been undertaken.

The following table provides detail of all projects considered for submission:

Reserve	Project description	Total Cost	Council Cost	Strategy/Plan	Planning & Design	Funding Application	Project Delivery
Gaskin Park Bowling Green	Construction of a synthetic green	\$400,000	\$300,000	Gaskin Park master plan	2013/14	2014/15	2015/16*
Agnes Brereton Reserve - Traralgon	Upgrade to Pavilion & Public toilets	\$400,000	\$350,000	Traralgon Outdoor Recreation Plan	2013/14	2014/15	2015/16
Duncan Cameron Park Traralgon	Resurfacing of main oval	\$150,000	\$100,000	Traralgon Outdoor Recreation Plan	2014/15	2014/15	2015/16
Andrews Park West Churchill	Drainage & Resurfacing of the main oval	\$200,000	\$200,000	Southern Towns Outdoor Recreation Plan	2014/15	TBC	TBC
Joe Tabuteau Reserve Moe	Moe Netball Courts – Reconstruction project	\$400,000	\$400,000	Moe Outdoor Recreation Plan	2013/14	TBC	TBC
Moe Botanic Gardens	Upgrade to the Moe Tennis Complex – Stage 1	\$750,000	\$750,000	Tennis Plan Moe Tennis Needs Assessment	2013/14	TBC	TBC
Catterick Crescent Reserve Traralgon	Resurfacing of the main oval	\$100,000	\$50,000	Traralgon Outdoor Recreation Plan	TBC Master Plan being completed in 2014/15		
Gil Blythman Reserve	Drainage and Oval works	\$100,000	\$50,000	Traralgon Outdoor Recreation Plan			

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Catterick Crescent - Traralgon	Upgrade to Pavilion for Imperials Cricket Club	\$400,000	\$300,000	Traralgon Outdoor Recreation Plan			
Traralgon South Recreation Reserve	Construct change facilities at CATS Cricket pavilion	\$150,000	\$100,000	Traralgon South Recreation Reserve Master Plan	TBC		
Burrage Reserve - Newborough	Upgrade Baseball Lighting	\$150,000	\$100,000	Moe Outdoor Recreation Plan	TBC		
Maryvale Reserve - Morwell	Upgrade pavilion for all users	\$400,000	\$300,000	Morwell Outdoor Recreation Plan	TBC		
Gaskin Park Reserve - Churchill	Install lighting at Tennis Facility	\$150,000	\$100,000	Gaskin Park Master Plan	TBC		
Maskrey Reserve - Traralgon	Resurfacing of courts and Install lighting	\$400,000	\$350,000	Traralgon Outdoor Recreation Plan	TBC		
Traralgon Croquet Club	Resurface grass greens	\$80,000	\$40,000	N/A	TBC		
Traralgon South Recreation Reserve	Construction of 2 nd oval	\$500,000	\$400,000	Traralgon South Recreation Reserve Master Plan	TBC		
Traralgon South Recreation Reserve	Construction of pavilion at 2 nd oval	\$500,000	\$400,000	Traralgon South Recreation Reserve Master Plan	TBC		
Total		\$5,230,000	\$4,290,000				

*Depending on the timing of the funding agreement and documents being signed, this project may be able to commence in 2014/15.

Three projects from the above table meet the Community Facility Funding Program criteria and can be sufficiently scoped, planned, designed and financially assessed for submission to the State Government. These are:

1. Gaskin Park Bowling – The construction of a synthetic bowling green with associated infrastructure such as fencing and shelters.
2. Agnes Brereton Netball Pavilion – the upgrade of the existing pavilion to provide facilities for female players and umpires. It also include the relocation of public toilets and the demolition of the old existing toilet block.
3. Duncan Cameron Reserve – Re-levelling and resurfacing of the oval to improve the surface for both football and cricket.

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Latrobe City Council is currently undertaking a Needs Assessment for the Moe Tennis Complex. A Council report has been prepared detailing the results of the needs assessment and recommendations for the future upgrade of the facility. A capital works funding bid will be submitted for this project.

Community Facility Funding Program – Soccer Facilities

When considering eligible projects for submission under this funding program, a review of all adopted priority projects arising from the town based outdoor recreation plans and the soccer plan against the Community Facility Funding Program – Soccer facilities criteria has been undertaken.

The following table provides details of all projects considered for submission:

Reserve	Project Description	Total Cost (Approx)	Council Costs (Approx)	Strategy/Plan	Planning & Design	Funding Application	Project Delivery
Ronald Reserve Morwell	Installation of drainage at Morwell Park Oval.	\$130,000	\$80,000	Morwell Outdoor Recreation Plan	2013/14	2014/15	2015/16
Hazelwood South Reserve	Construction of a change pavilion	\$500,000	\$400,000	Southern Towns Outdoor Recreation Plan	2014/15	2015/16	2016/17
Harold Preston Reserve Traralgon	Levelling of Pitch 1 at Traralgon City Soccer Club*	\$50,000	\$50,000	Traralgon Outdoor Recreation Plan	2014/15		
Ronald Reserve Morwell	Upgrade to the change pavilion for Soccer	\$400,000	\$300,000	Morwell Outdoor Recreation Plan	TBC		
Harold Preston Reserve Traralgon	Upgrade to pavilion at Traralgon City Soccer Club	\$300,000	\$250,000	Traralgon Outdoor Recreation Plan, Soccer Plan	TBC		
Moe Olympic Reserve	Lighting Upgrade	\$120,000	\$60,000	Moe Outdoor Recreation Plan	TBC		
Total		\$1,500,000	\$780,000				

*Proposed that project be fully funded through the 2014/15 capital works program.

From the above table, one project meets the funding criteria and can be sufficiently scoped, planned, designed and financially assessed for submission to the Community Facility Funding Program. This project is:

1. Morwell Park Oval – This oval is owned and managed by Latrobe City Council, and used by the Morwell Park Primary School. The

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oval adjoins Ronald Reserve. The Pegasus Soccer Club situated at Ronald Reserve, have access to only one pitch for their entire club. The Morwell Park Oval is currently used for training for soccer and football, however its lack of drainage especially during winter, prohibits more extensive programming. The installation of drainage will ensure the oval is able to be utilised by all users on an annual basis.

Community Facility Funding Program – Recreation Planning

When considering eligible projects for submission under this funding program, a review of all adopted priority projects arising from the town based outdoor recreation plans, together with the soccer, tennis and hockey plans against the Community Facility Funding Program – Recreation Planning funding criteria has been undertaken.

The following table provides details of all projects considered for submission:

Reserve	Project Description	Total Cost (Approx)	Council Costs (Approx)	Strategy/Plan	Planning & Design	Funding Application	Project Delivery
Northern Reserve - Newborough	Northern Reserve Precinct Master Plan	\$45,000	\$30,000	Public Open Space Strategy	2014/15	2014/15	2015/16
Moe Botanic Garden*	Master plan			Public Open Space Strategy			
Traralgon Creek - Traralgon	Traralgon Creek Linear Pathway Master Plan	\$50,000	\$25,000	Public Open Space Strategy	TBC		
Total		\$95,000	\$65,000				

*The Moe Botanic Garden master plan will be undertaken in house by Latrobe City Council Recreation & Open Space team.

From the above table one project meets the funding criteria and has been sufficiently scoped, planned, designed and financially assessed for submission to the Community Facility Funding Program. This project is:

1. The Northern Reserve Newborough Precinct master plan. This master plan was identified in the Public Open Space Strategy as a priority master plan project. The precinct is a major community recreation and leisure precinct in the Moe/Newborough area.

Latrobe City Council has recently applied for funding from Regional Development Victoria's Putting Locals First Program for three recreation planning projects:

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Project	Project cost	Funding Stream	Funding amount	LCC contribution
Catterick Crescent master plan	\$70,000	Putting Locals First	\$50,000	\$25,000*
Maryvale Reserve master plan	\$30,000	Putting Locals First	\$10,000	\$20,000*
Review of the Playground Strategy	\$70,000	Putting Locals First	\$46,700	\$23,300*

2. *LCC funding for these project has been requested in the Recreation & Open Space recurrent budget for 2014/15

Latrobe City Council has been successful in getting to the second round of this funding program, and expects to receive confirmation of the funding in the coming months.

Country Football Netball Funding Program

When considering eligible projects for submission under this funding program, a review of all adopted priority projects arising from the town and reserve based outdoor recreation plans against the Country Football Netball Funding program funding criteria has been undertaken.

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The following table provides details of all projects considered for submission:

Reserve	Project description	Total Cost	Council Cost	Strategy/Plan	Planning & Design	Funding Application	Project Delivery
Traralgon Recreation Reserve & Showgrounds	Lighting to match standard for the main oval	\$500,000	\$400,000	Traralgon Outdoor Recreation Plan	2014/15	2014/15	2015/16
Ronald Reserve Morwell	Reconstruction of netball court including drainage	\$170,000	\$120,000	Morwell Outdoor Recreation Plan	2014/15	2014/15	2015/16
Gaskin Park Reserve	Construction of two Netball Courts & Lighting	\$400,000	\$300,000	Gaskin Park Master Plan	2015/16	2015/16	2016/17
Glengarry Recreation Reserve	Upgrade to the Netball/Tennis Pavilion	\$300,000	\$250,000	Northern Towns Outdoor Recreation Plan	TBC		
Apex Park Traralgon*	Upgrade of pavilion to provide facilities for all user groups	\$400,000	\$350,000	Traralgon Outdoor Recreation Plan	TBC		
Northern Reserve Newborough	Installation of lighting	\$250,000	\$200,000	Moe Outdoor Recreation Plan	TBC		
Total		\$1,850,000	\$1,500,000				

* Not in a Council Strategy or Plan. This project has been identified by the community

From the above table one project meets the funding criteria and has been sufficiently scoped, planned, designed and financially assessed for submission to the Country Football Netball Funding program. This project is:

1. Upgrade to the lighting at Traralgon Recreation Reserve & Showgrounds. Although the Master Plan is not adopted, the existing Traralgon Outdoor Recreation Plan clearly identifies the need to upgrade the existing lighting on the main oval at Traralgon Recreation Reserve & Showgrounds. The lighting will be upgraded to a 300 lux for high level cricket and Australian Rules Football.

Regional Development Australia – Round 5 Funding Applications

In June 2013 the Minister for Regional Development and Local Government, announced that applications for Round Five of the Regional Development Australia Fund (RDAF) open on Friday 21 June 2013.

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RDAF Round Five is an allocative funding round, with each local government that was funded under the General Purpose component of the Financial Assistance Grants 2012–2013 eligible to apply for funding for infrastructure projects.

Latrobe City Council was allocated \$860,281 under this funding. The following projects were submitted by Latrobe City Council:

Project	RDAF 5 Amount applied for
Gippsland Plains Rail Trail – Traralgon to Glengarry section	\$83,514
TEDAS Junior Football Pavilion – Traralgon Recreation Reserve & Showgrounds	\$120,000
Traralgon West Sporting Complex – Fit out of upstairs	\$270,000
Agnes Brereton Reserve – Upgrade to Netball pavilion	\$386,767

Funding applications were submitted, however before agreements could be signed, the Federal election was called and the Government immediately went into caretaker mode. During a caretaker period, the Government does not make major policy decisions that are likely to commit an incoming Government or enter into major contracts.

The new Government did not honour any RDAF 5 commitments.

The projects that were identified for applications for RDAF 5 have been considered for current round of CFFP Funding for 2015/16, however only the Agnes Brereton Pavilion is eligible for submission.

Both the TEDAS pavilion project and the Traralgon West Sporting Complex project have previously received significant funding through the State Governments CFFP funding program, and are ineligible for further applications.

These projects will therefore be referred to the 2014/15 Council budget process.

The Gippsland Plains Rail Trail has already received a commitment from Council to fund the \$83,514 required to complete the Traralgon to Glengarry component of the project.

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FINANCIAL, RISK AND RESOURCES IMPLICATIONS

Risk has been considered as part of this report and it is considered to be consistent with the Risk Management Plan 2011-2014. The following table provides a summary of the grants available from the State Government for each of the recommended projects and the funds to be contributed by Latrobe City Council.

Program	Project	Total Cost	Proposed State Government Contribution	LCC Contribution	Other Contribution
Community Facility Funding Program - Major Facilities	Gaskin Park Multi-use pavilion	\$1.3 million	\$650,000	\$650,000	N/A
Community Facility Funding Program – Minor Facilities	Gaskin Park Bowling Green	\$400,000	\$100,000	\$300,000	N/A
Community Facility Funding Program - Minor	Agnes Brereton Pavilion	\$400,000	\$50,000	\$350,000	N/A
Community Facility Funding Program - Minor	Duncan Cameron Re-levelling and resurfacing project	\$150,000	\$50,000	\$100,000	N/A
Community Facility Funding Program – Soccer Facilities	Morwell Park Oval – Installation of drainage	\$130,000	\$50,000	\$80,000	N/A
Community Facility Funding Program - Planning	Northern Reserve Precinct master plan	\$45,000	\$30,000	\$30,000	N/A
Country Football Netball Funding Program	Traralgon Recreation Reserve & Showgrounds Lighting Project	\$500,000	\$100,000	\$400,000	N/A
Total		\$2,925,000	\$1,030,000	\$1,910,000	

If projects are successful in attracting funding from the Community Facility Funding Program and Country Football Netball Funding program, there will need to be a Council contribution in the 2014/15 or 2015/16 budget.

INTERNAL/EXTERNAL CONSULTATION

Engagement Method Used:

The projects identified for application to the State Government form part of an existing Council Strategy/Plan/Policy/program or resolution with additional nominated projects by community sporting clubs.

Significant community consultation and engagement was undertaken in the formation of each of the plans details in the report to Council for endorsement.

**ORDINARY COUNCIL MEETING MINUTES
03 MARCH 2014 (CM431)***Details of Community Consultation / Results of Engagement:*

Significant community consultation and engagement was undertaken as part of the development of the following plans, which have been adopted by Council:

- Traralgon Outdoor Recreation Plan 2006
- Moe Newborough Outdoor Recreation Plan 2007
- Gippsland Hockey Facilities Strategic Plan 2007
- Morwell Outdoor Recreation Plan 2008
- Tennis Facilities Plan 2009
- Soccer Facilities Plan 2009
- Southern Towns Outdoor Recreation Plan 2009
- Northern Towns Outdoor Recreation Plan 2010
- Gaskin Park Master Plan 2011
- Traralgon South Recreation Reserve Master Plan 2013
- Public Open Space Strategy 2013

OPTIONS

Options available to Council include:

1. Endorse the projects identified for preparation and submission of funding applications to the Community Facility Funding Program and Country Football Netball Funding program.
2. Not endorse the projects identified for preparation and submission for funding applications to the Community Facility Funding Program and Country Football Netball Funding program.
3. Amend the projects identified for the preparation and submission of funding applications to the Community Facility Funding Program and Country Football Netball program, giving consideration to the project delivery factors, identified in Section 4.

CONCLUSION

The recreation projects nominated for submission to the Victorian Government's Community Facility Funding Program and Country Football Netball Funding program provides an opportunity to deliver significant benefit to the Latrobe City community and improve the quality of the City's recreation facilities and contribute to the sustainability of local recreation venues.

This report takes a strategic approach to the selection of eligible projects within the guidelines of the Community Facility Funding Program whose key objective is to create healthy and active communities. These key objectives are support of the overall directions of our community as identified in Latrobe 2026.

Attachments

1. Attachment 1

RECOMMENDATION

1. That Council endorse the following projects for funding applications to be prepared for submission in the 2013/14 year:
 - a. Gaskin Park Multi-use pavilion – Community Facility Funding Program Major
 - b. Agnes Brereton Reserve pavilion – Community Facility Funding Program Minor
 - c. Gaskin Park Bowling Green – Community Facility Funding Program Minor
 - d. Duncan Cameron Park Resurfacing project – Community Facility Funding Program Minor
 - e. Morwell Park Oval Drainage and Resurfacing project – Community Facility Funding Program Soccer
 - f. Traralgon Recreation Reserve & Showgrounds Lighting project – Country Football Netball Program
 - g. Northern Reserve Newborough Precinct Master Plan – Community Facility Funding Program Planning

Moved: Cr White**Seconded:** Cr Middlemiss**That the Recommendation be adopted.****For the Motion**

Councillor/s Gibbons, Middlemiss, O'Callaghan, White.

Against the Motion

Councillor/s Rossiter, Gibson, Kam, Harriman.

The Motion was put and LOST on the casting vote of the Mayor.

ALTERNATE MOTION

1. That Council endorse the following projects for funding applications to be prepared for submission in the 2013/14 year:
 - a. Agnes Brereton Reserve pavilion – Community Facility Funding Program Minor
 - b. Gaskin Park Bowling Green – Community Facility Funding Program Minor
 - c. Duncan Cameron Park Resurfacing project – Community Facility Funding Program Minor
 - d. Morwell Park Oval Drainage and Resurfacing project – Community Facility Funding Program Soccer
 - e. Traralgon Recreation Reserve & Showgrounds Lighting project – Country Football Netball Program
 - f. Northern Reserve Newborough Precinct Master Plan – Community Facility Funding Program Planning

Moved: Cr White

Seconded: Cr O'Callaghan

That the Motion be adopted.

CARRIED UNANIMOUSLY

14.2

State Government Recreation Funding Opportunities 2014/15

1	State Government Recreation Funding Opportunities 2014/15.....	313
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gaskin park, churchill

master plan report

by hansen partnership

in association with
meldrum architecture

september 2011

aila victoria medal 2008
australian institute of
landscape architects
(victorian state group)

consultant planner of the year 2006
consultant planner of the year 2005
planning institute of australia
(victoria division)

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urban planning | urban design | landscape architecture



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2



gaskin park master plan report

1 introduction

In June 2010 Latrobe City Council appointed Hansen Partnership to prepare a Master Plan for Gaskin Park, Churchill. The aim of the project was to develop a detailed master plan identifying all opportunities for the creation and redevelopment of facilities at Gaskin Park to form a major sporting precinct and provide amenities to accommodate the local community.

The first stage of the project focused on gathering information relating to the existing conditions of the park and issues concerning its use, from the following sources;

- A review of background documents including the *Southern Towns Outdoor Recreation Plan*, the *Churchill Structure Plan*, Latrobe City Council's *Recreation and Leisure Strategy*, *Sporting Reserves*, *Pavilion and Grounds Use Policy* and other relevant documents.
- Initial site visits and the identification of physical attributes of the park and surrounding area; and
- Community consultation sessions which gathered information about the use and presence of the park. A total of seven consultation sessions were held, with members of Latrobe City Council and Council Officers, representatives from the different sporting clubs associated with the park (including the Senior Football / Netball Club, Junior Football Club, Tennis Club, Lawn Bowls Club, Cricket Club, Badminton Club and Baseball Club), Churchill and District Community Association and members of the general community.

In collaboration with Council and Meldrum Architecture, Hansen Partnership developed a number of options for the development of the reserve. These draft master plan options were presented to Council, stakeholders and the general community in a further consultation session, which was followed by a public exhibition period.

The feedback from the public exhibition period was reviewed and the final master plan was tailored to consolidate the three options and incorporate stakeholder feedback as required. Along with the Implementation Framework, this Master Plan will guide the future use and long term development of Gaskin Park, subject to funding opportunities. The recommendations contained within the plan are described in relation to a number of key actions and associated tasks, as outlined within this report.



gaskin park master plan report

2 background

2.1 site context

The study area, which is situated on the western edge of the Churchill Township, is indicated in the accompanying context diagram (Figure 5). The analysis of the relationship of Gaskin Park within the broader region identified a number of key influences, which are briefly described as follows.

- Churchill currently has a large provision of public open space that provides for a range of recreational and sporting pursuits, and the Master Plan seeks to consolidate the presence of Gaskin Park within this green ribbon of open space by developing it into a key regional sporting precinct, as identified in the Southern Towns Outdoor Recreation Plan (2009).
- Existing connections through to the surrounding sporting facilities and open spaces are to be strengthened, particularly to Andrews Park West which currently provides for the township's baseball and cricket communities, and Hazelwood South Reserve further to the north, which houses the soccer club.
- Gaskin Park is located on the western edge of the township and needs to cater for an anticipated increase in Churchill's population, servicing both the current and future population of the region.
- A future east west link has been identified within the proposed Churchill Structure Plan through Gaskin Park to McDonald Way, connecting the reserve through to the town centre.
- Gaskin Park is located within walking distance of the majority of Churchill's existing residential neighbourhood, the town centre and a multitude of other open space areas. These are predominantly within a five to ten minute walking catchment of the park, therefore the opportunity to strengthen existing shared path connections and integrate new clear and accessible pedestrian and cycling paths is important in realising the vision of the overall Churchill Structure Plan. This envisages a walking trail around the reserve to pick up on broader linkages north to the Strzelecki Track and the National Park.
- Churchill has a number of educational institutions, the largest being Monash University to the east of town, and it has been indicated that many students from the campus are involved in sporting clubs that utilise facilities at Gaskin Park. There are also three primary schools within a ten minute walking distance of the reserve, which mean that it is an important neighbourhood community asset for school groups to use for events such as cross country and sports days, as well as the formal sporting clubs.



Figure 1: Andrews Park West oval



Figure 2: Residential development frontage

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gaskin park master plan report

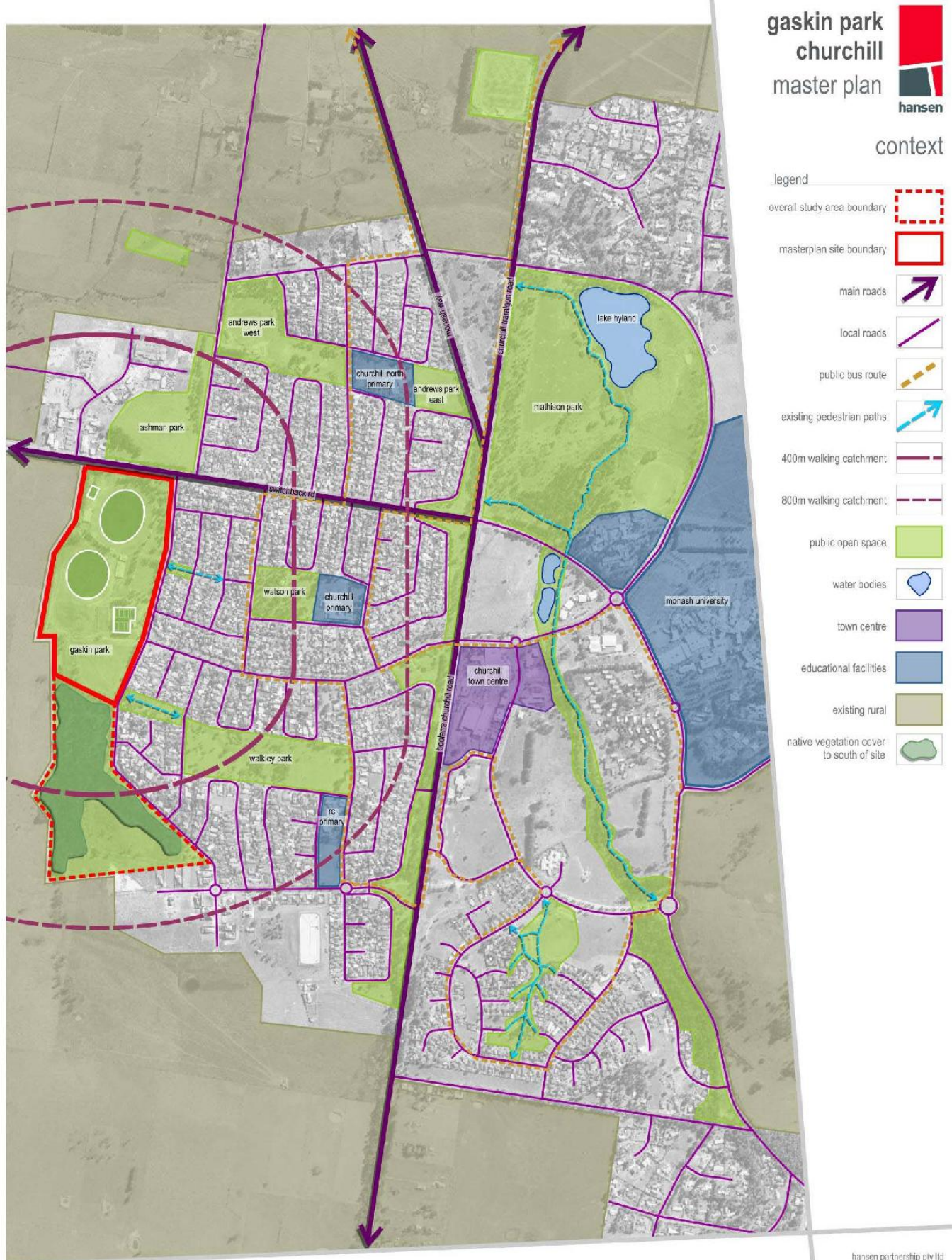
- Churchill Town Centre is presently undergoing a number of upgrades, including traffic improvements which will contribute to increased activity and encourage more people to visit and stay in Churchill. Along with improvements to east west linkages across the town, this will contribute to presenting Churchill as a more accessible town and creating an inviting destination for sporting clubs and the regional community.
- There is a regional bus route that runs through Churchill; however this does not run directly by Gaskin Park. There is the opportunity for public transport links to be extended as residential development continues, and pedestrian linkages through to these transport corridors should be enhanced.
- Gaskin Park itself is essentially divided into two precincts. Gaskin Park South is primarily an area of remnant native vegetation, which is an important wildlife corridor that is to be preserved and potentially enhanced through a sensitively placed walking trail that links into Gaskin Park North. This area includes the existing Scouts Hall, and is often used for recreational pursuits including walking, horse riding and dirt bike riding. Gaskin Park North is a precinct of more formal sporting pursuits that comprises a number of different user groups and potential activities that require consolidation, and as such is the primary subject of this Master Plan.



Figure 3: Gaskin Park recreational precinct



Figure 4: Gaskin Park entrance road





gaskin park master plan report

2.2 land use

The northern end of Gaskin Park, which forms the Master Plan study area, covers an area of approximately 19 hectares. The reserve incorporates a number of formal sporting fields for recreational use, as well as a large informal area of undulating grassland to the south. The various recreational facilities are currently quite disconnected, and there is presently a lot of underutilised space between the designated sporting fields. The Master Plan will work to integrate all the different elements within the reserve and allow the surrounding parkland areas to function as an open space destination for the community.

The analysis of land use at Gaskin Park identified a number of key areas, described as follows, and identified in the accompanying land use analysis diagram (Figure 16).

2.2.1 adjacent land use

- Gaskin Park has an existing residential frontage to the east along Manning Drive, and access to the park from this large residential catchment should be clear and direct.
- As part of a generous open space network around Churchill, Gaskin Park's green connections extend north to Ashman Park and Andrews Park West and south through the areas of remnant native vegetation. The western boundary of the park is currently fronted by rural land.

2.2.2 active sporting fields

Gaskin Park comprises a number of active playing fields that are used by various sporting groups within the community that have seasonal hire agreements that are negotiated directly with Council. These users are identified in the Southern Towns Outdoor Recreation Plan (2009) and are discussed below.

A number of other members of the local community have indicated that they currently or potentially could make use of the recreational facilities in the reserve. It is also important to consider the Churchill Leisure Centre, which has facilities located adjacent to Monash University and has been significantly upgraded. The sharing of uses between these facilities would allow for quality recreational pursuits for all users and ensure that facilities within Churchill are not being duplicated and thus underutilised.



gaskin park master plan report

sporting ovals

The reserve includes two ovals; Gaskin 1 is the main oval to the north which is generally used for senior football only and Gaskin 2 to the south which is used for C grade football and junior cricket.

- The main oval, Gaskin 1, is heavily used during the week for training as well as for weekend football matches, due to being the only space with adequate lighting in the reserve for such purposes. The oval had improved in recent times, with good grass cover and drainage, however the high amount of traffic puts the surface under a great deal of pressure, and we understand that it has fallen below standard as a result of this high use and deterioration caused by drainage issues during wet weather. The cricket pitch has recently been removed from the oval and drainage issues will look to be rectified by connecting infrastructure in the centre of the ground.
- We understand that there has been minimal improvement to ground lighting for a long time, and is now below accredited standard. For the installation of new lighting, Council have noted that power infrastructure will need to be upgraded, therefore the expense of this exercise requires careful planning. The football club has indicated that if lighting was to be provided for Gaskin 2, the oval would be able to be used for training purposes, which would assist in taking the pressure off the surface of Gaskin 1.
- The southern oval, Gaskin 2, is currently not irrigated and has poor drainage which results in an uneven and often muddy surface for the junior football and cricket teams to play on. The Junior Football Club has also identified that there is drainage infrastructure to the north of the oval behind the goals that needs to be removed, as it presents a hazard for those using the ground.
- The consideration of a well designed and installed irrigation system could possibly be extended to service both ovals to provide a high turf quality on both.
- We understand that the cricket club only uses the Gaskin 2 oval for games on a Saturday, as training and change room facilities are located at Andrews Park West. For them to be able to continue to utilise the ground however, they do require a safe, flat surface on Gaskin 2 that has adequate drainage and preferably irrigation. The current process for covering the cricket pitch during the football season causes levelling issues, so a better option for this should be considered.
- A review of other facilities associated with the use of the ovals, such as the condition of goal posts and the lack of a scoreboard and siren on Gaskin 2, is also to be investigated.



Figure 6: Gaskin 1 main oval



Figure 7: Gaskin 2 southern oval

gaskin park master plan report

netball court

- Gaskin Park currently has one netball court, which is located in the north western corner of the reserve. Drainage is currently an issue on the existing court, and it does not comply with Netball Victoria mandated minimum requirements for 'run off area, which is an important consideration in any improvement works.
- There is also the future need for a second court, which would allow additional teams to play and offer a safe warm up area for all players.



Figure 8: Netball court

tennis courts

- Gaskin Park is the home of the Churchill Tennis Club, which is located to the south east of the reserve. The club has seven acrylic tennis courts in use, which is considered by the club as sufficient through October – March when they get the most activity; with junior competition on the weekends, some night competition during the week, use by schools on sports days and regular recreational use by the tennis community.
- Three of the courts in use are provided with lighting. The installation of lighting on the remaining four active courts is required to enable the expansion of night competition, and repairs to the fence around the courts are necessary.
- As well as improvements to the courts, Latrobe City Council's Tennis Facilities Plan (2008) identifies a number of upgrades required to the existing club rooms. It has been identified that disability access and toilets are required and sewerage problems and lack of an outdoor tap needs to be addressed.
- The existing gravel car park causes issues with congestion and stones scattering onto the courts, and the sealing and formalisation of this car park would be beneficial.
- Shade and shelter for spectators around the courts is lacking, and the introduction of some vegetation around this area would improve the amenity of the area.
- The tennis club has suggested that it would be beneficial to perform a risk assessment on their facilities to ensure they meet Tennis Victoria guidelines.
- Latrobe City Council's Tennis Facilities Plan also includes the decommissioning of the four disused courts, which is discussed below.



Figure 9: Active tennis courts



Figure 10: Tennis clubrooms

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gaskin park master plan report



2.2.3 disused sporting fields

inactive tennis courts

- Four asphalt tennis courts are located down the embankment to the west of the active courts, which have been fenced off and disused, as they are not suitable for play due to the dilapidated surface quality, most likely a result of the reactive clay soils on site. The tennis community have indicated that the existing seven courts available for use are sufficient for their needs, and if the four courts were to be removed and not replaced this would not be an issue.



Figure 11: Inactive tennis courts

cricket nets

- There are some underutilised cricket nets located in the far north east corner of the reserve that are in poor condition. We understand that the cricket community is happy for them to be removed, as the main cricket practice facilities are located at Andrews Park West.

hockey field

- The hockey field along the Manning Road frontage is in poor condition and is thus disused for the game. The development of a regional synthetic hockey facility at Monash University in April 2011 has provided the opportunity for usage by the hockey club.
- The soccer club casually uses the hockey ground to train on, however there is the potential for them to shift their activity to another space within the reserve, and their main facilities are located at Hazelwood South Reserve.
- Due to the hockey club's relocation, the leftover field creates a suitable, high profile position for the potential new bowls club, as discussed below.



Figure 12: Hockeyfield

rugby field

- The rugby field towards the south west corner of the reserve is also disused. The master plan therefore provides a suitable opportunity to investigate the potential future use of this area, including the possible development of new playing areas and providing better access and surveillance to this part of the reserve.



Figure 13: Disused rugby field

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gaskin park master plan report

2.2.4 buildings

gaskin park stadium

- Gaskin Park Stadium includes a number of indoor rooms that are currently used for a multitude of events by local sporting clubs and the general community. Our project team includes Meldrum Architecture, who is on board to carry out a review of the existing facilities in the reserve and address any issues and look at the possibility of creating a new built facility.
- The Stadium comprises a number of indoor courts for the basketball, badminton and carpet bowls communities and is also used casually by the soccer club during winter. The soccer club have suggested that the stadium could be used as a more formal indoor training facility for both Australian Rules football and soccer.



Figure 14: Gaskin Park Stadium

existing change rooms

- The existing change rooms for the Senior Football Club are a considerable distance from the social club rooms and needs of umpires and players are currently not being met. The facilities require a number of improvements, particularly additional rooms for umpires as well as separate areas for female umpires.
- The netball club has expressed the need for a refurbishment of existing facilities or possible new change rooms, as they are currently of a low standard and have no toilet or shower facilities and lack disabled access.

football club social rooms

- The recently constructed social rooms are currently being used for many events, and have a strong sense of ownership as they have been constructed with the football club's own funding. The club hosts a variety of social events; however the facility is generally for the use of the senior football club only. There is no sharing of facilities between the senior club and the junior football club, therefore the junior club is lacking a space of their own for meetings and the display of trophies and club memorabilia.
- It has been identified that the septic tank for the social rooms is not coping with the high level of usage at the present time, particularly with the usage of the function rooms continuing to increase.



Figure 15: Football Club social rooms

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gaskin park master plan report

potential new building

- In order for Gaskin Park to enhance its presence as a sporting destination, the clubs have indicated the need to upgrade their existing facilities, which provides the opportunity to potentially consolidate a number of uses within the reserve into a possible new building. The idea would be that this could accommodate various members of the sporting community, as well as allowing them to have their own space as required.
- Meldrum Architecture has undertaken a review of the existing buildings and this project may provide the catalyst for the development of a new signature building within the park to give the reserve itself and Churchill a greater identity, particularly as the surrounding residential community continues to grow. A suitable site for a new central pavilion within the park is possibly between the two ovals so that it is accessible for all users and brings both sides of the reserve together.
- It is suggested that a number of different clubs should be encouraged to consolidate into one building. The importance of such a facility in bringing the different clubs together is paramount to developing a safe, integrated and vibrant community precinct.
- Sustainable implementations within buildings such as solar lighting and panels and water harvesting and tanks should be carefully considered as they can be funded by schemes such as Sustainability Victoria.

2.2.5 potential future uses

Following on from the Latrobe Recreation and Leisure Strategy, the development of the Master Plan provides the opportunity to investigate the feasibility of establishing new sports fields that possibly accommodate for a number of different recreational uses. The Southern Towns Outdoor Recreation Plan notes that *'Gaskin Park Churchill is ideally located and adequately sized to provide the opportunity to develop a sporting precinct to meet the higher level sporting needs of the southern towns. There is the opportunity to create high quality facilities at Gaskin Park to accommodate lawn bowls, junior and senior football, tennis, cricket, baseball and badminton.'*

bowls club

- The Churchill Bowls Club, as well as the broader community, have identified that a priority within the development of Gaskin Park is to develop a lawn bowls facility in the reserve to provide for the recreational and social needs of a range of ages.
- The Bowls Club envisage that the construction of the facility would be a staged development, ultimately including two synthetic greens of 40m x 40m with eight rinks on each, with associated clubrooms, lighting, seating, fencing and landscaping.
- As well as providing recreational pursuits, the club would have the potential to host some future social events to take pressure off the existing football club social rooms.

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public facilities

The incorporation and expansion of a number of publicly accessible facilities is important in facilitating the transformation of Gaskin Park into a high amenity precinct that provides a comfortable and pleasant environment for spectators and the general community.

- The existing public toilets are not in good condition, and new ones need to be incorporated into the redevelopment in a safe and easily accessible location available to the public at all times.
- There is the opportunity to create a passive recreational area for spectators and families that incorporates picnic facilities and barbeques within a parkland setting. This would include shelter and seating, which the community has indicated would be well used, as well as a new playground facility, which would be particularly beneficial for families of players with young children who currently have no safe designated area to play on game days.
- It is important that there are affordable options within the reserve for participation in unstructured recreational activities to encourage people of different ages, particularly youths, to walk and use the reserve beyond organised team sports and spectating.
- The provision of shade is an important consideration within the Master Plan, in the form of vegetation, picnic shelters and a possible new grandstand structure with associated lighting and improved canteen facilities. The reserve is well placed to continue to hold large events such as music festivals, Relay for Life events and the Churchill Festival, and the redevelopment provides the opportunity to create a more inviting and accommodating environment for such occasions to take place.



Figure 16





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2.3 access and movement

The analysis of access and movement within and around Gaskin Park identified a number of key areas, described as follows, and identified in the accompanying access and movement analysis diagram (Figure 24).

2.3.1 access points

- The main entry to Gaskin Park is currently from the east along Manning Drive. It has been noted that the configuration here requires upgrading to enhance traffic flow at busy times and to improve public safety, through potentially separating pedestrian movement from traffic, and boosting entrance and street lighting.
- This main entrance provides direct access through to the entry point to the main football oval, which is a ticketed entry on match days and is currently the only accessible gate into this northern section of the reserve, leading to congestion on these occasions.
- There is a locked gate along Switchback Road, which we understand was originally intended to be the main entrance for the football oval, however there has not been any access through here for a long time.
- There are two other vehicular access points off Manning Drive that provide entry to different segregated areas of the park. The Master Plan will consider the internal circulation within Gaskin Park and existing and proposed linkages to the surrounding neighbourhood to identify the most suitable locations for future major and minor entrances to encourage smoother traffic flow.
- The Master Plan will also need to consider the proposed road connection through the park from the future development to the west to connect into McDonald Way.



Figure 17: Manning Drive entrance



Figure 18: Locked northern entrance

2.3.2 vehicular access and car parking

- The main area of sealed asphalt surface for vehicular access is through the main entrance point of Manning Drive and around the northern football oval. As well as catering for vehicular access around the oval perimeter and across to the social club rooms, the capacity to fit the cars around the ground three deep on this surface makes it an ideal venue for large football games, especially if it is wet, as car spectating is part of country football culture.



Figure 19: Main car park

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- This large asphalt expanse is also used for sporting practice activities, especially during winter, which takes the pressure off the oval surface. While still accommodating this, there is the opportunity to break up some of this area with planting and shade trees for spectator amenity.
- There is further sealed vehicular access and car parking around the existing club rooms and around half of the second oval. The clear sealed areas around the clubrooms are required for ambulances and emergency vehicles which need to be retained, and evacuation procedures must be accounted for.
- We understand that junior and senior football games are not scheduled together, so traffic is not on both ovals at the same time. However, for large matches, there is often overflow car parking in an ad hoc manner around the junior oval, which can create congestion and block access.
- Much of the access road around the southern oval is unsealed, and this requires improvement in order to prevent cars getting bogged.
- The existing gravel car parking areas need to be better maintained and the potential sealing of the tennis club car park should be considered to prevent stones scattering onto the courts. The formalisation of this car park would be beneficial to allow more cars to park here, as parking for competition on Saturdays flows behind the club rooms to the south and creates congestion.



Figure 20: Sealed asphalt road around main oval



Figure 21: Unsealed surface around south oval

2.3.3 pedestrian

- There is currently a limited designated pedestrian network around the reserve, which means that circulation for pedestrians and cyclists, in particular children, can be quite hazardous. The Master Plan will look to separate pedestrian circulation and create a clear shared path network that connects the different zones within the reserve and enhances linkages to open space areas beyond the park.
- We understand that many members of the community use the park for passive recreational use, particularly dog walking, and there is evidence of activities such as horse riding and dirt bike riding around the southern end of the park. A trail network with better drainage, surfacing and directional signage would therefore create a higher amenity environment for a variety of users.



Figure 22: Embankment west of tennis courts

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- Future designated pedestrian linkages should pick up on major spectator points across the reserve to enhance views across the ovals and other sporting fields. This should particularly consider higher viewing points across the reserve, such as the embankment to the west of the active tennis courts, where there is currently inconvenient pedestrian access through from the quite isolated tennis club rooms.
- Surrounding connectivity of open space areas to the parklands to the north and existing shared paths off Manning Drive to the east create an opportunity to further integrate Gaskin Park into the wider Churchill community. There is presently no clear walking track through the bushland to the south around the existing Scouts Hall through to the park, which is an existing area of high environmental quality which should be enhanced with carefully located shared trails through to Gaskin Park.

2.3.4 safety

- The upgrade of Gaskin Park calls for the implementation of security measures along new paths and buildings, including the consideration of improved and additional lighting and traffic management measures.
- It has been indicated from users of the reserve that the unsealed surfaces within it are difficult to negotiate, particularly for users with disabilities and the elderly. The Master Plan should consider the provision of DDA (Disability Discrimination Act 1992) compliant paths, signage, ramped building access, disabled toilets and car parking.

2.3.5 fencing

- Gaskin Park is currently fenced along the western boundary of the site and around the main football oval, which segregates the different zones of the reserve. The fencing is required around Gaskin 1 for revenue on match days, but the layout and type should be reviewed and the potential for further access gates for pedestrians between the two ovals should be investigated.
- Outside of the football season the whole reserve is accessible to the public, and entrances into the area should be made clear with wider and more carefully located gates to make people aware that it is a public facility. Potential feature entrance signage to assist visitors to the reserve could be included to indicate entrances and key locations.



Figure 23: Fencing around main oval

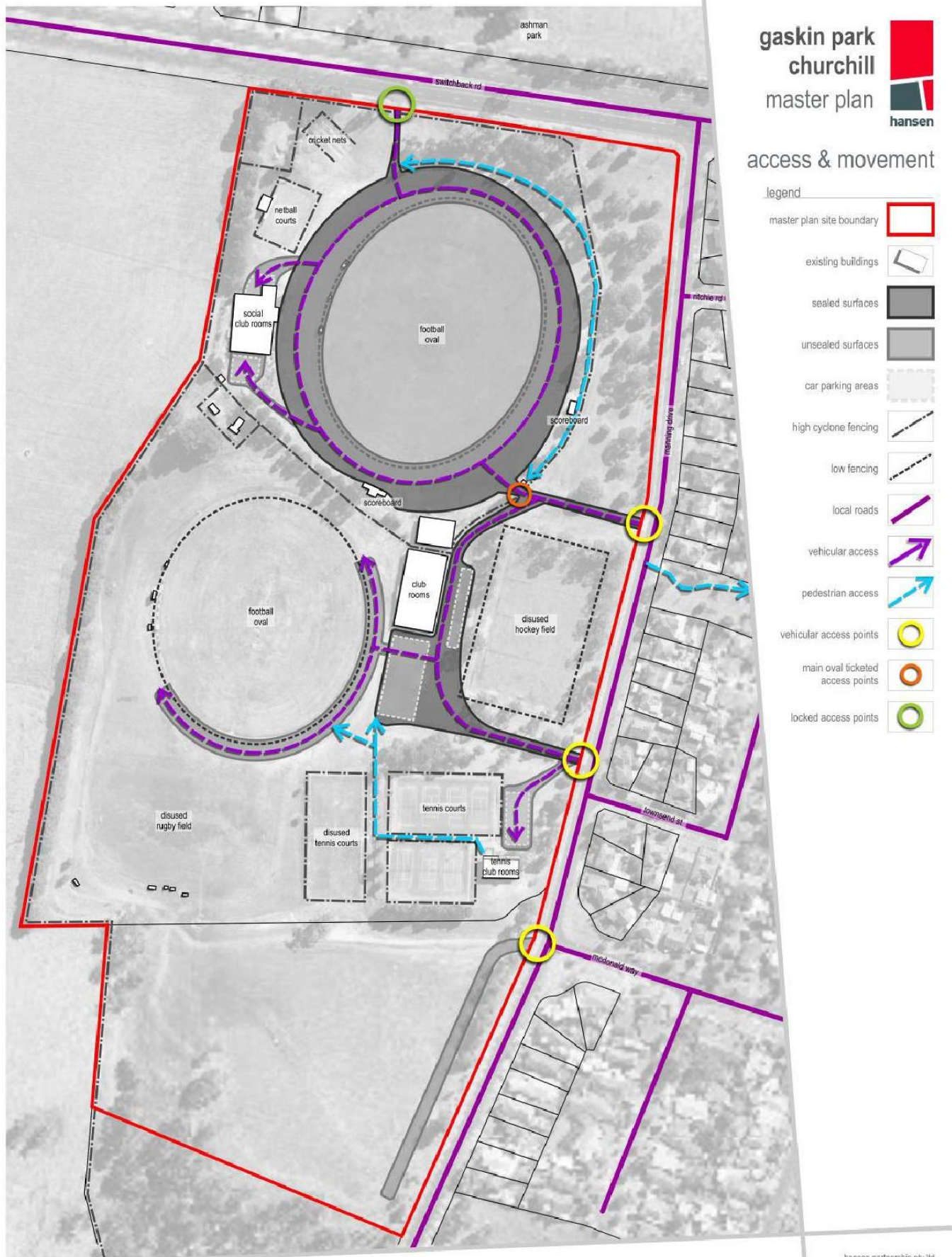


Figure 24:



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2.4 landscape and environment

The analysis of landscape and environment at Gaskin Park identified a number of key areas, described as follows, and identified in the accompanying landscape and environment analysis diagram (Figure 29).

2.4.1 open space

- The adjacent areas of open space, including Ashman Park and Andrews Park West to the north, and the bushland area to the south create a landscape setting for Gaskin Park that is connected to the broader open space network.
- The rural land to the west of the reserve which is separated from the park through fencing and screening vegetation presents a boundary to the reserve.



Figure 25: Bushland area around Scouts Hall

2.4.2 vegetation

- Existing vegetation on the site is primarily in the form of native canopy vegetation around the edge of the reserve, particularly to the north east, which is in good condition and is to be retained to present the landscape character of the park to the streetscape. The location of further areas of native canopy trees should be considered across the park to provide shade for spectators; however it needs to be ensured that views to the sporting fields are not interrupted.
- There is an exotic hedge along the western boundary of the site which screens Gaskin Park from the adjacent rural area.
- The remnant native vegetation on the southern side of Gaskin Park creates a bushland interface to the reserve as well as a wildlife corridor that connects through to the reserve. The impact of any development of the habitats of local wildlife is an important consideration within the Master Plan.



Figure 26: Native canopy vegetation

2.4.3 views

- Areas for spectating around the reserve should be enhanced to create safe and high amenity spaces that facilitate clear view lines to the sporting fields and surveillance across the park. Existing view points are located at high points across the site, including those from the social rooms across the main oval and the view across the southern oval from the existing club rooms. The embankment to the west of the active tennis courts also provides a well located viewing platform, which with the removal of the disused tennis courts, could become a key spectating location.

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- Major access points to Gaskin Park should also be located to take full advantage of important views and present the reserve to the community and visitors in a clear and aesthetically appealing manner.

2.4.4 drainage

- There are a number of areas within the reserve that currently have flooding issues after wet weather, particularly along the drainage line along the western edge of the reserve, where we understand that cars can get bogged when parking around the southern oval.
- The reactive clay soils across the site have previously caused structural issues in the area as well as flooding in certain zones. The ground quality is an important consideration for any proposed structures and landscaping treatments, and geotechnical advice will be drawn upon as required.
- The main oval is currently irrigated, and due to the recent removal of the cricket pitch, drainage should be connected across the ground to improve the overall system. The second oval is not irrigated, and the consideration of extending the system to include this surface could allow for a higher quality turf across both ovals.
- There is the opportunity within the Master Plan for the implementation of water sensitive urban design (WSUD) practices, which could include:
 - Minor modification of existing overland flow paths as swales that take advantage of the natural drainage lines from south to north and from the existing embankments.
 - Rain gardens at the lower end of flow paths and around sealed car parking areas.
 - Stormwater harvesting to provide a source of recycled water by capturing run off from the roofs of existing and proposed buildings, new sealed roads and car parking.



Figure 27: View from tennis club embankment



Figure 28: Drainage line along western boundary



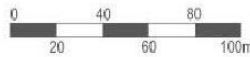
**gaskin park
churchill**
master plan
hansen

landscape & environment

legend

- master plan site boundary
- existing buildings
- open space
- active playing fields
- disused playing fields
- surrounding public open space
- existing rural
- native vegetation
- exotic vegetation
- street trees
- views
- drainage lines
- embankments
- local high points
- local low points
- pedestrian access

Figure 29



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Dwg No.: LCD-004
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3 master plan recommendations

The following recommendations are illustrated in the accompanying master plan diagram

3.1 gaskin 1 oval

- Upgrade existing lighting around the ground to bring it up to accredited standard and allow its usage as a training ground at night to continue.

3.2 gaskin 2 oval

- Shift the oval further towards the south, retaining its north south, to allow for the expansion of the community hub between the two ovals.
- Review the layout of shelters, fencing and spectator seating around the oval to accommodate the ground's revised position.
- Improve the quality of the turf and drainage of the oval in the new layout of the field.
- Provide new lighting around the ground to allow the oval to be used for training purposes. This will assist in taking the pressure off the surface of Gaskin 1.

3.3 netball courts

- Construct two new asphalt netball courts between the two ovals to integrate them with the other sporting clubs and provide direct access to the new change facilities.
- The construction of the new courts will rectify existing draining issues and provide associated shelters, spectator seating and lighting. The two courts will allow additional teams to play at once and offer extended warm up areas for players.
- Retain existing netball court for potential future sealed parking area.

3.4 tennis club

- Install lighting to the four northern courts which are not currently provided with it, to enable the expansion of night competition and training.
- Upgrade the existing tennis clubrooms, including improved disabled access and toilet facilities.
- Provide additional spectator amenities around the courts, including new seating and picnic shelters and security lighting.
- Build a new rebound wall to the south of the existing clubrooms, to provide a practice area as well as activation of this side of the reserve.

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3.5 bowls club

- Construct a bowling green east of the existing Gaskin Stadium, with adequate space to the north to allow for the future addition of a second green. This position will provide bowlers with direct access to Gaskin Stadium and the new change rooms.

3.6 upgraded community pavilion

- Retain the existing Gaskin Stadium and construct a new building directly to the north to provide improved male and female change facilities for players and umpires, public toilets, first aid facilities and a canteen. This extension will provide for a central pavilion which services both ovals, the netball courts, the bowls club and spectators.
- Enhance the new building and create a comfortable and vibrant community precinct through the introduction of a new paved plaza area between the two ovals, which provides for a covered space on either side, as well as additional lighting, seating, shade and landscaping treatments.

3.7 picnic area

- Create a new picnic and playground area between the two ovals which incorporates barbeques, shelters and seating. The new playground will provide a family friendly, safe space for young children to play on busy game days away from access roads and close to community facilities.

3.8 vehicular access

- Retain the existing reserve entrances off Manning Drive into the reserve, which provide access to different car parking areas within the reserve and through to the ticketed gate of the Gaskin 1 Oval.
- Provide a new central asphalt car park area to the south and east of Gaskin Park Stadium to work with the layout of the new bowls facilities and access road.
- Create a new entry point to the south of the reserve, incorporating the proposed east west connection through to McDonald Way, which was identified within the Churchill Structure Plan.
- Retain the majority of the asphalt car parking around the main oval to allow the reserve to continue to cater for large football games, however restrict vehicular circulation to the south to allow for a safe pedestrian zone north of the proposed new pavilion.
- Review the provision of asphalt parking around the Gaskin 2 oval to suit the revised layout, ensuring a secure surface for cars to park on.
- Provide a new formalised sealed car park for the tennis club, to prevent stones scattering on to the courts and allow a greater number of parking bays.
- Establish an open grassed area to the south west of Gaskin 1 which can cater for overflow parking in the event of a large crowd, following the removal of the disused cricket nets.
- Establish a sealed car park to the south of the football social rooms to cater for members as well as a service area that provides access to a new storage shed.

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- Replace the existing cyclone fence around the reserve with palisade fencing and new gates to maintain restricted access to Gaskin 1 on game days and pedestrian access between the ovals.

3.9 pedestrian access

- Create a clear sealed shared path network that connects the different zones within the reserve and links through to open space areas beyond the park, including Ashman Park to the north and Walkley Park to the east of Manning Drive.
- Construct pedestrian pathways to pick up on major spectator points across the reserve to enhance views across the ovals and other sporting fields.
- Introduce gravel shared paths to the south of the reserve to provide linkages through to the bushland area to provide sensitive access through this area of high environmental value.
- Implement lighting along paths to provide increased safety and activation of the precinct at night.

3.10 landscape

- Retain existing native canopy vegetation around the edge of the reserve, particularly to the north east of the reserve, which presents the landscape character of the park to the streetscape.
- Introduce new areas of canopy vegetation around the reserve to provide shade and amenity for spectators. New planting species selection should look at spreading native forms around open spaces and introduce tall canopy trees to frame views, whilst still allow spectating to continue.
- Establish avenues of tall canopy trees along roads to define key access routes and frame ovals.
- Introduce tree planting within car parking areas within the reserve to break up hard surfaces and provide shade for visitors. There is also the potential to incorporate areas of native grasses and rain gardens around proposed car parking areas to provide a potential stormwater harvesting source.
- Retain the open lawn area on the south side of the reserve, which is highly utilised for passive recreational use, including activities such as dog walking and organised school events.
- Protect the remnant native vegetation on the southern side of Gaskin Park, which creates a bushland interface to the reserve as well as a wildlife corridor that connects through to the broader open space network.
- Ensure that new areas of lawn and turf on sporting fields use drought resistant and hard wearing grass species that allow for reduced water use and high impact use.

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gaskin park master plan report

4 conclusion

The key recommendations that have been outlined within this report incorporate both short term and long term strategic directions for Gaskin Park and the surrounding Churchill region, that consider the issues of land use, access and movement and landscape and environment to create a connected and attractive precinct that functions as a recreational destination as well as a local parkland for all users of the local and broader community.

The enhanced layout of the different spaces within Gaskin Park will allow for better and safer pedestrian and vehicular access within the reserve and out to adjacent open spaces and neighbourhoods as well as reserves further afield, including Andrews Park West and the Hazelwood South Reserve. The Master Plan addresses the strategic planning directions for the region which promotes residential development in surrounding areas and the introduction of a new east west road linkage through to the town centre to cater for the current and future population of Churchill.

The document provides a framework for the implementation of the recommendations over time as funding becomes available from within Council or from external sources, and the accompanying implementation schedule identifies the priorities for development within the reserve as well as realistic timeframes and cost implications. These opportunities will enhance Gaskin Park so that it continues to provide for various recreational and community pursuits for a wide range of the population, creating an integrated and accessible destination within the township and broader Latrobe region.



Figure 30: Gaskin Park Manning Drive frontage

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gaskin park
churchill
master plan

legend

- 0.25m interval contours
- existing native trees
- existing exotic trees to be removed subsequent to adjacent development
- existing planter beds
- proposed canopy trees
- proposed avenue trees
- proposed groundcover
- grassed open space
- grass sporting fields
- synthetic sporting fields
- asphalt paving
- pedestrian crossings
- concrete paving
- feature paving
- pedestrian grade granitic gravel
- soft fall mulch
- adjacent residential
- adjacent rural
- adjacent industrial
- surrounding public open space
- existing buildings
- proposed buildings
- building awning / covered walkway
- timber benches
- aluminium spectator benches
- bicycle racks
- shelter with picnic tables, bins, bins & drinking fountains
- 1800mm high boundary fencing
- 200mm high concrete kerb/barrier
- existing timber retaining walls
- existing sports lighting
- proposed sports lighting
- general area lighting
- removable shade structures



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 Date: 15.08.11
 Revision: G

0 15 30 45 60 75 90 105 120 135 150 165 180 195 210 225 240 255 270 285 300 315 330 345 360

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COMMUNITY LIVEABILITY

15. COMMUNITY LIVEABILITY

Nil reports

PLANNING AND GOVERNANCE

16. PLANNING AND GOVERNANCE

16.1 WATERLOO ROAD DEVELOPMENT PLAN

General Manager

Planning and Governance

For Decision

PURPOSE

The purpose of this report is to present the Waterloo Road Development Plan February 2013 to Council for consideration.

DECLARATION OF INTEREST

No officer declared an interest under the *Local Government Act 1989* in the preparation of this report.

STRATEGIC FRAMEWORK

This report is consistent with Latrobe 2026: The Community Vision for Latrobe Valley and the Latrobe City Council Plan 2012-2016.

Latrobe 2026: The Community Vision for Latrobe Valley

Strategic Objectives – Built environment

In 2026 Latrobe Valley benefits from a well planned built environment that is complimentary to its surrounds and which provides for a connected and inclusive community.

Latrobe City Council Plan 2013 - 2017

Theme 5: Planning for the future

- To provide a well planned, connected and liveable community

Strategic Direction – Planning for the future

- Provide efficient and effective planning services and decision making to encourage development and new investment opportunities.
- Plan and coordinate the provision of key services and essential infrastructure to support new growth and developments.

Legal

The discussions and recommendations of this report are consistent with the provisions of the *Planning and Environment Act 1987* (the Act) and the *Latrobe Planning Scheme*, both of which are relevant to this proposal.

BACKGROUND

The draft Waterloo Road Development Plan was lodged with Latrobe City Council by NBA Group on 31 May 2013 it applies to Lot 1 on TP822397 and Lot 1 on LP67416 Desmond Street, Moe, Lot A on LP208976, 19 Mervyn Street, Moe, Lot 3 on TP836437 and Lot 1 on TP674252, 110-120 Waterloo Road, Moe.

The subject land comprises a total area of 46.5 ha and is generally bounded by the Moe Contour Drain to the north, newly developing residential area (Mitchell's Grove) to the east, farmland to the west and Waterloo Road and existing residential to the south. There are four landowners within the precinct. A site plan is provided at Attachment 1.

The Waterloo Road Development Plan precinct is identified in the Moe/Newborough Structure Plan as land for 'future residential' use. This designation is consistent with the Municipal Strategic Statement of the Latrobe Planning Scheme ('the Scheme') at Clause 21.05-4, which seeks to implement the outcomes of the Structure Plan.

To implement the strategic objectives of the Structure Plan and bring forward additional land for residential development, the subject site was rezoned by the Minister for Planning as part of a suite of Planning Scheme Amendments, C47, C56 and C58, which released over 800 ha of residential zoned land within Latrobe City. Amendment C47 rezoned the Waterloo Road area from Farming Zone (FZ) to Residential 1 Zone (R1Z) and introduced a Development Plan Overlay Schedule 5 (DPO5) to the site on 3 March 2011.

The Proposal

The draft Waterloo Road Development Plan includes a concept layout for how the subject land will be developed for residential land use. The Development Plan identifies where future residential lots, roads, pathways, open space and physical infrastructure should be located.

In addition to the draft Waterloo Road Development Plan report, the document incorporates a number of plans and background reports as appendices, these include;

- Appendix 1 - Site Conditions Plan
- Appendix 2 – Development Plan
- Appendix 3 – Implementation Plan
- Appendix 4 – Mobility Plan
- Appendix 5 – Landscape Concept Plan
- Appendix 6 – Cross Sections
- Appendix 7 – Transport Impact Assessment

Appendix 8 – Cultural Heritage Management Plan

Appendix 9 - SWMS Concept

Appendix 10 – Review of Surface Water Management Strategy (concept)

Appendix 11 – Infrastructure Services Report

Appendix 12 – Ecological Features & Constraints

Appendix 13 – Open Space Plan

Appendix 14 – Certificates of Title

A copy of the Development Plan map and Site Conditions Plan is provided at Attachment 2. The complete set of plans and background reports are provided at Attachment 3.

To ensure a comprehensive assessment of the Development Plan, a 'peer review' has been undertaken by the Metropolitan Planning Authority (MPA). The MPA were requested to focus on the urban design aspects of the proposed development.

As a result of the peer review, the Waterloo Road Development Plan has been strengthened in the following areas since it was first submitted:

- Increased percentage of unencumbered public open space (total of 5.6% being provided within the development).
- Improved access via road and pathway connections throughout the Waterloo Road Development Plan precinct.
- Increase in diversity of lots proposed across the site

ISSUES

Requirements of the Development Plan Overlay Schedule 5 (DPO5)

The primary purpose of the Development Plan Overlay is to identify areas which require the strategic outline of the form and conditions of future use and development to be shown on a development plan before a permit can be granted to subdivide, use or develop land.

A Development Plan submitted to Council for approval must show a detailed assessment of both the natural and cultural features of the site, the characterisation of nearby land use and development and a comprehensive assessment as to the justification of how the Development Plan layout has been derived.

In particular, Section 3 of DPO5 (*Requirements for Development Plan*) states that a development plan must be prepared to the satisfaction of the Responsible Authority (Council) and the plan must address the following matters:

- Land Use and Subdivision
- Waterways
- Infrastructure Services

ORDINARY COUNCIL MEETING MINUTES 03 MARCH 2014 (CM431)

- Open Space
- Community Hubs and Meeting Places
- Flora and Fauna
- Cultural Heritage
- Process and Outcomes

The Development Plan has considered the above listed matters and the main issues arising have been outlined below.

Land Use and Subdivision – Lot Density

In accordance with the requirements of DPO5 and Clause 56 of the Scheme, the development layout for the residential component provides for a range of lot sizes and housing density. Table 1 provides an indication of the average lot sizes and corresponding percentage of the development area as submitted by the proponent.

Table 1: Lot Yield by Type

Lot Type	Area	% of developable area	Approximate dwelling yield (based on average size)
Standard Lots (average 600sqm)	23.76 ha	51.1%	396
Medium Density Lots (average 350 sqm)	4.37 ha	9.4%	125
Local Roads	11.06 ha	23.8%	
Open Space	6.79 ha	14.6%	
Local community facility	0.51 ha	1.1%	
		Total Lots	521

Calculations provided in the Development Plan are indicative and have been based on average lot sizes and estimated net developable area.

The *Growth Areas Authority Precinct Structure Plan Guidelines 2009* defines net development hectare as;

Land within a precinct available for development. This excludes encumbered land, arterial roads, railway corridors, government schools and community facilities and public open space. It includes lots, local streets and connector streets. Net Developable Area may be expressed in terms of hectare units (i.e. NDHa).

The *Growth Areas Authority Precinct Structure Plan Guidelines 2009* is included in the *State Planning Policy Framework (SPPF)* as a reference document and applies to all Victorian Councils.

ORDINARY COUNCIL MEETING MINUTES 03 MARCH 2014 (CM431)

The Development Plan identifies a net developable area for the precinct of 39.19 ha. The proponent has designed the Development Plan to incorporate an estimate of 521 lots for the precinct. This equates to a lot yield of 13 dwellings per hectare.

At the Ordinary Council Meeting held on 19 November 2012, Council resolved the following:

That Council's preferred lot density is 11 lots per hectare on unencumbered land and that this foreshadows Council's intention with regard to the Latrobe Statutory Planning Scheme Review.

The proponent's preference is for 13 dwellings per hectare. It is acknowledged that the proposed density for the Waterloo Road Development Plan exceeds Council's preferred lot density.

The proposed dwelling yield for the Waterloo Road Development Plan proposed by the proponent is considered to be acceptable in this instance given the existing opportunities and lack of constraints on this site. The site is relatively flat and unconstrained and offers a mix of densities.

Clause 10.02-2 of the SPPF encourages a residential density of at least 15 dwellings per net developable area for growth areas. The estimated dwelling per hectare total (of 13 dwellings) for the Waterloo Road Development Plan does not meet this guideline, but is a midpoint between Council's preference for 11 lots per hectare and the SPPF's encouraged 15 lots per hectare which is considered in the regional context.

Land Use and Subdivision – Industrial Interface

There are a small number of Industrial 3 Zone (IN3Z) and Mixed Use (MUZ) zoned parcels of land nearby to the site (see Table 2 below). Two of the current uses in the area trigger a 100m threshold buffer, but where this threshold applies, the distances are outside of the development plan area. These thresholds are shown in the Site Conditions Plan (see Attachment 2).

Table 2: Industrial and Mixed Use Zone Uses

Address	Zoning	Existing Use	Threshold
168 Waterloo Road	IN3Z	Joinery	100m
166 & 170 Waterloo Road	IN3Z	Trade supplies & vacant	N
3 Brian Street	IN3Z	Dwelling	N
122 -132 Waterloo Road	MUZ	Junk storage	N
98 Waterloo Road	IN3Z	Vacant (former spinning mill)	N
96 Waterloo Road	IN3Z	Office	N
90 Waterloo Road	IN3Z	Aluminium fabricator	100m
2 - 4 Mena Street	IN3Z	Vehicle storage	N
16 Mitchells Road	MUZ	Mechanic	N

The nearby non-residential zonings do not pose a constraint on the development plan area. The draft Waterloo Road Development Plan indicates a fencing treatment to the satisfaction of Council between the residential areas and the industrial zoned land to provide an appropriate buffer. This will be addressed at permit stage.

Land Use and Subdivision – Contamination

The Environment Protection Authority (EPA) identified in their referral response the potential for contamination of the former Spinning Mill site which forms the eastern parcel of the Waterloo Road Development Plan area. To address this, further detail relating to the site history together with a contamination report will be required as part of a planning permit condition for this site.

This is in accordance with Practice Note 30: Potentially Contaminated Land (June 2005) and may lead to further recommendations of remedial actions that may need to be addressed as a condition of permit.

Concerns were raised with the proponent by Council Officers in relation to the possibility of site contamination at the former Spinning Mill site, due to its prior use of textile manufacturing. Officers have advised the proponent that if contamination is present on site and they choose to wait until planning permit stage to undertake a contamination report, it may result in the Development Plan needing to be amended. The proponent has advised that they are happy to amend the Development Plan at a later time if required as a result of a contamination report submitted in accordance with a condition of permit.

All referral agency responses are enclosed at Attachment 7.

Land Use and Subdivision – Movement and Connectivity

The Development Plan includes a Mobility Plan (see Attachment 3) which clearly shows the proposed road hierarchy, indicative paths, connections and proposed bus routes. It is considered that the Mobility Plan is acceptable.

A gravel crossing is currently across a section of the Moe Contour Drain to allow for access to the north from the central parcel (110-120 Waterloo Road, Moe). This is shown in Attachment 1. Without this access, the northern Lot would be landlocked due to its legal road abuttal currently forming part of the Moe Drain. Advice from the Department of Environment and Primary Industries (DEPI) (see Attachment 4) has informed that the West Gippsland Catchment Management Authority (WGCMCA) are not likely to approve the construction of a road in this area (due to significant erosion). Given that the property technically does have legal road abuttal, the Crown is not obliged to provide additional access. There is no scope within the *Crown Land (Reserves) Act 1978* to create easements across Crown Land.

Given these circumstances, it is considered appropriate to legalise this current crossing as a 'paper road'. This will be done so through the planning permit application for this parcel of land. Council Officers have contacted WGCMA and DEPI in relation to whether they would be supportive of this proposal. WGCMA confirmed that they support in principle the proposal and no comment was received from DEPI. This will be further investigated at the planning permit stage.

The crossing is currently used by agricultural type vehicles, such as tractors, to access the farming land to the north. The implications of continuing this use once residential development has occurred is that these vehicles will be travelling through residential roads/ areas and may increase the likelihood of noise and dirt complaints. The proponent has advised that farming machinery will be stored on the northern parcel and access via the south will not be a frequent occurrence.

Waterways - Buffers

Three designated waterways are located across the subject site (see Site Conditions Plan at Attachment 2.) Of these three designated waterways, only the Moe Contour Drain requires the 30m buffer under the *Water Act* 1989. A buffer zone in excess of 30m is provided.

It was agreed by the WGCMA that the Waterloo Road Drain be piped given its small catchment, therefore no buffer is required to this designated waterway.

The Watsons Road Drain is not a natural waterway as it was man made; therefore the WGCMA has agreed that the 30m buffer isn't required in this instance. A 10m wide reserve, which runs adjacent to a 16 metre wide road reserve, is proposed and agreed by the WGCMA.

There are also two minor non- designated waterways present on the site. Flood studies have been undertaken and have informed appropriate corridor widths for these waterways.

These buffers are acknowledged by the WGCMA in their referral response; see Attachment 7.

Infrastructure Services – Stormwater

A preliminary Surface Water Management Report has been submitted as part of the Development Plan at **Attachment 3**. The Development Plan notes that a detailed Water Sensitive Urban Design analysis will be a requirement prior to certification for any future subdivision of the land.

Latrobe City Council's Infrastructure Planning team have advised that this is appropriate given that onsite stormwater detention and water quality improvements will be requirements of any future planning permit for subdivision.

There is a requirement to provide a general indication of the areas of each facility needed for the treatment of stormwater within the development area on the Development Plan map. All proposed Water Sensitive Urban Design infrastructure must be incorporated in public open space reserves which are to be transferred into Council ownership and shown on the development plan.

This information has been provided by the applicant and is indicated in the Development Plan.

Infrastructure Services – Traffic

A Transport Impact Assessment has been submitted as part of the Development Plan at Attachment 3. Together they provide a traffic engineering assessment of the proposed subdivision layout, including the internal access arrangements as well as the likely impacts on the surrounding road network of the proposed development.

The Transport Impact Assessment has been reviewed by Council's Infrastructure Planning team who has advised that the recommendations of the report were to the satisfaction of Council officers with a minor exception. That is:

1. The provision of roundabouts at all cross-road intersections within the development must be shown on the development plan.

This matter has now been included as part of the updated Development Plan and are shown in the Development Plan documentation at Attachment 3.

Open Space

The Open Space Plan (Attachment 3) shows the location and size of proposed open space. The open space areas proposed each have different roles and functions. Table 3 below indicates the percentages of encumbered and unencumbered open space across the Development Plan area.

Table 3 – Open Space

Encumbered (Wetland, rejuvenated Watsons Drain, Sewer Easements, Native Vegetation Offset area)	4.17 ha	9.0%
Un- encumbered	2.6 ha	5.6 %
Total	6.79 ha	14.6 %

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The area of land set aside for public open space within the Development Plan exceeds the minimum requirements of Latrobe's *Public Open Space Strategy* (2013).

A number of existing open space areas are also located in proximity to the Development Plan site. There is a regional open space area, the Joe Tabuteau Reserve as well as numerous local reserves, including the following:

- Local Reserve with playground on Mervyn Street;
- Olympic Park (Vale Street), which offers soccer and outdoor pool;
- Ted Summerton Reserve (Vale Street), which offers football, cricket & netball facilities; and
- Bristol Hawker Reserve (Bristol Street).

All lots are within 500m walking distance to public open spaces of at least 0.5 hectares, which is consistent with *Clause 21.08 Liveability* of the Latrobe Planning Scheme and Latrobe's *Public Open Space Strategy 2013*. A shared path network will provide accessibility to open space areas within the site and offer links to surrounding areas.

Community Hubs and Meeting Places

The land is zoned Residential 1 Zone whereby a range of community facilities are permitted use.

Latrobe City Council's Community Liveability team have not identified any requirements for new facilities relevant to the Waterloo Road Development Plan.

A possible local community centre is however indicated centrally within the Waterloo Road Development Plan area where it is within 500 metres of all lots and can be developed privately (ie. not Council owned) should the demand arise.

Cultural Heritage

A registered aboriginal place is located within 50 metres of the land within the Gippsland Rail Reserve and as such part of the land within the Waterloo Road Development Plan is considered to be culturally sensitive. A Desktop, Standard and Complex Assessment has been prepared for the land at 110-120 Waterloo Road (the central parcel) and is attached at Attachment 3.

The Complex Assessment, in part concluded that:

No Aboriginal cultural material was noted in the deposits.

And

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The results indicate that there are no Aboriginal cultural remains within the upper soil profile; and hard clay was consistently found below this level.

The complex assessment has revealed that the Activity Area is of low potential sensitivity for Aboriginal cultural deposits.

A Cultural Heritage Management Plan (CHMP) will be required to be prepared for the eastern parcel (98 Waterloo Road) at the time of a subdivision application; however the western parcel is not considered to be culturally sensitive under the *Aboriginal Heritage Regulations 2007*.

Flora and Fauna – Native Vegetation

An Ecological Features and Constraints report has been submitted as part of the Development Plan at Attachment 3. The report concludes that the site does not contain the critical habitat for any threatened species, but notes that there is the potential for both Growling Grass Frog and Dwarf Galaxias.

The Development Plan proposes to encompass the Moe Contour Drain within a large open space reserve to allow for protection of significant fauna species. A Construction Management Plan will be required as a planning permit condition to ensure that any works on the Moe Contour Drain avoid impacting on the environment of the Dwarf Galaxias.

In relation to flora, the majority of the site is cleared and contains degraded treeless vegetation; however it does contain one remnant patch of native vegetation within the northern end of the middle western parcel (Stage 4).

This area of native vegetation can be factored into the detailed design at the time of subdivision of that Lot, to ensure that an appropriate environmental outcome is achieved.

The removal of the remnant patch of vegetation would require offsets equivalent of 0.24 Habitat Hectares of High Conservation Significance Swamy Riparian Complex vegetation or its approved like-for-like equivalent in the Gippsland Plain Bioregion. Council officers believe that this offset area, if required, could be accommodated within the Waterloo Road Development Plan site.

A native vegetation offset area is allocated within the northern end of the central parcel of the Waterloo Road Development Plan site. This is in accordance with the Vegetation Offset Management Plan – Mitchell Grove, Moe which is reflected in a Section 173 Agreement and is on title for this property (110-120 Waterloo Road, Moe).

The Vegetation Offset Management Plan – Mitchell Grove, Moe was recently amended and re-lodged with Council by NBA Group on 13 February 2014. An amendment to this Offset Management Plan was

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necessary to allow for the location of a required Wetland. The updated offset area is reflected in the Development Plan map.

This amended Vegetation Offset Management Plan requires assessment and approval by Council's Environmental Sustainability team and the Department of Environment and Primary Industries. The existing Section 173 Agreement will need to be replaced to reflect the revised arrangements and be shown on title, prior to any planning permit being issued on this parcel of land.

This updated offset area has been constructed on site.

Processes & Outcomes – Consultation

As per Section 3 of DPO 5 (*Requirements for development plan*) the Development Plan has been prepared with an appropriate level of community consultation and consultation with external referral authorities. Comments from referral responses and submissions have been incorporated into the Plan where practical and appropriate to do so.

Issues raised by the community can be summarised into four main themes and these include:

- Quality farming land being used for residential purposes;
- Increase in traffic movements along Waterloo Road;
- Impact on broader physical and social infrastructure; and
- Lack of facilities to accommodate extra people within the town.

The summary of submissions table is provided in the internal / external consultation section of this report.

Quality Farming land being used for residential purposes

Submitter 3 raised concerns regarding good farming land being turned into housing estates.

This land is identified in the Moe/ Newborough Structure Plan as Future Residential. The Structure Plan process looks at balancing the requirement for future residential land supply and the protection of high quality agriculture land. Before farming land is rezoned to residential, investigation in relation to the quality of land for farming purposes is undertaken. The *Assessment of Agricultural Quality of Land in Gippsland* (1984) report identifies this land as Class 2 (with Class 1 being the highest quality,) however there was an identified need through the structure plan process for future residential land. The Moe/ Newborough Structure Plan was subject to a community consultation process and the outcome resulted in the area being identified as future residential.

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The Waterloo Road Development Plan is a result of the Minister rezoning this land to Residential 1 Zone and placing a Development Plan Overlay on this parcel of land in March 2011 (Amendment C47).

A strategic objective of the Moe/ Newborough Structure Plan is to provide for future housing growth as there is a short supply of land available for residential development.

Traffic impacts on Waterloo Road

Submitter 3 raised concerns regarding an increase in traffic movements on Waterloo Road and the railway crossing, across to Lloyd Street.

A detailed Traffic Impact Assessment has been undertaken as part of this Development Plan process which indicated that there is sufficient capacity within the existing road network to accommodate the vehicle movements generated by this development. The report also found that the potential impacts in relation to traffic movements at the Waterloo Road railway crossing are minimal.

There was also a Traffic Engineering report done in 2011 in relation to this intersection to try and identify low cost solutions to improve it. In terms of the amount of traffic, the report found that it is operating well within its capacity, meaning more vehicles could be catered for in it.

In addition to this, there is also no crash history at the intersection, and combined with the current operating capacity, this makes it difficult to justify capital expenditure for major improvements on this intersection.

VicRoads is currently looking at this intersection and investigating different options for it, which they will put through a Road Safety Audit to determine how suitable the options are.

Impact on broader physical and social infrastructure

Submitter 3 raised concerns regarding the increase in waste disposal requirements and an increased need for water for residential use.

The provision of services will be the responsibility of the developer at the time of subdivision. Each new residential lot will be required to pay waste and recycling fees as part of their rates. The contract for waste services will be expanded to allow for the additional services.

Both the WGCMA and Gippsland Water have reviewed the Waterloo Road Development Plan and support 'in principal' the proposal.

Inadequate facilities to accommodate extra people within the town

Submitter 3 raised concerns regarding the lack of community facilities to accommodate additional people in the area.

The requirement for further social and community infrastructure within Moe is to be investigated more broadly by the relevant authorities as the demand presents itself. It is beyond the realms of what can be considered as part of the Development Plan proposal.

Process and Outcomes – Implementation

An Implementation Plan must be submitted as part of the Development Plan. It is provided at Attachment 3 together with the Staging Plan.

FINANCIAL, RISK AND RESOURCES IMPLICATIONS

Risk has been considered as part of this report and it is considered to be consistent with the *Risk Management Plan 2011-2014*.

The Waterloo Road Development Plan will contribute to reducing the following specific risk that is identified within the *Risk Management Plan 2011 – 2014*.

Shortage of land available to support population growth and planning application processes that do not encourage development.

This risk is described as:

...the slow transitioning of structure plans to actual zoned and developable land.

Development plans are identified as an existing control to manage and mitigate against this risk.

INTERNAL/EXTERNAL CONSULTATION

The draft Waterloo Road Development Plan was placed on public exhibition for a period of 28 days from 13 November 2013 – 11 December 2013. It is noted that this exhibition process is not prescribed by the *Planning and Environment Act 1987* however it was considered to be required to ensure awareness of the proposed future development of the site.

Schedule 5 to the Development Plan Overlay states that;

The development plan should be prepared with an appropriate level of community participation as determined by the Responsible Authority.

If a subdivision planning permit application is prepared in accordance with an approved development plan, no notice to affected landowners is required to be given. It is also noted that there is no appeal rights for landowners as part of this process.

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Notice was sent to adjoining and adjacent property owners and occupiers, a range of authorities, community groups and by placing a public notice in the Latrobe Valley Express for three issues during the exhibition period on Thursday 14 November 2013, Thursday 21 November 2013 and Thursday 28 November 2013. A map at Attachment 5 outlines the areas that received direct notification of the draft Development Plan.

The Development Plan documentation was also placed on Latrobe City Council's website on the *'Have Your Say'* page, with provision for receipt of electronic submissions.

An 'Open House' information session was also held on Wednesday 20 November 2013 from 5.00 pm to 7.00pm, to discuss the Waterloo Road Development Plan. A total of eight people attended the 'Open House' information session.

Latrobe City Council received a total of three written submissions to the proposed Development Plan, two submissions did not oppose the Development Plan and one submission raised concerns.

Table 4 below provides a précis of the submissions received, planning consideration of any issues from the consultation with landowners and occupiers and an indication as to whether the plan requires changes as a result of this consideration. A full copy of the written submissions where a letter was received is provided at Attachment 6.

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Table 4: Summary of Submissions Received

Sub No.	Name / Organisation	Support / Objection	Summary of Issues	Planning Comment	Changes to Plan Required? Yes / No
1	Victoria Spinning Mill	-	<p>Have only considered part of our land area for residential land use, leaving behind the balance area in the Industrial Zone.</p> <p>The area left behind will be surrounded on all three sides by residential.</p>	<p>This is not to be considered as part of the Waterloo Road Development Plan project.</p> <p>Part of the land (CP106601) is zoned Industrial 3 Zone (IZ3) and considered in the Moe/Newborough Structure Plan.</p> <p>The Structure Plan and subsequent strategies form part of Clause 21.05-4 of the Latrobe Planning Scheme. It recommends that a detailed assessment of industrial land requirements for Moe/Newborough as part of an industrial strategy be undertaken.</p> <p>The industrial strategy will determine if part of CP106601 is appropriately zoned IZ3 or could be incorporated into surrounding residential developments. The industrial strategy is scheduled to begin in the 2014/15 financial year, subject to municipal wide priorities, funding and resources.</p>	No
2	Market Match Property (on behalf of the Estate of Harry Harrington)	Support	<p>Most part supportive of the Development Plan.</p> <p>Client seeks to reserve the option of their land being developed in isolation and proposes the plan be amended so the land fronting Desmond Street, currently shown as a Lot be changed to a road, allowing access to the land at the rear off Desmond Street.</p>	<p>The extension of the proposed road on to Desmond Street has not been included as part of this Development Plan in order to protect the existing residential amenity for residents in Desmond, Graeme and Bryan Streets, given that once the site is developed in its entirety, there will be other access roads within the precinct.</p> <p>Should the applicant wish to show this road extension in their subdivision application, it would need to be assessed as to whether it would be generally in accordance with the approved development plan at that time. Further community consultation may be required if an amendment to the development plan was necessary. This, together with the extent that the</p>	No

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Sub No.	Name / Organisation	Support / Objection	Summary of Issues	Planning Comment	Changes to Plan Required? Yes / No
				stages could be developed out of sequence, has been detailed within the Implementation Plan.	
3	Joyce Wescombe	Objection	<p>Concerns about good farming land being turned into housing estates. Where are the future food supplies coming from?</p> <p>Extra traffic along Waterloo Road will be a nightmare – the surface and poor drainage needs updating. The railway crossing is bad enough now with its delays – extra traffic would add to the problem.</p>	<p>This land is identified in the Moe/ Newborough Structure Plan as Future Residential. The Structure Plan process looks at balancing the requirement for future residential land supply and the protection of high quality agriculture land. Before farming land is rezoned to residential, investigation in relation to the quality of land for farming purposes is undertaken. The Assessment of Agricultural Quality of Land in Gippsland report identifies the land as Class 2 (with Class 1 being the highest quality,) however there was an identified need through the structure plan process for future residential land. The Moe/ Newborough Structure Plan was subject to a community consultation process and the outcome resulted in the area being identified as future residential.</p> <p>A detailed Traffic Impact Assessment has been undertaken as part of this Development Plan process which indicated that there is sufficient capacity within the existing road network to accommodate the vehicle movements generated by this development. Further studies in relation to the railway crossing were also undertaken, which confirmed that the potential impacts in relation to traffic movements at this railway crossing are minimal.</p> <p>VicRoads are currently looking at this crossing and investigating a couple of different options for it, which they will put through a Road Safety Audit to determine how suitable the options are. It is noted that as there is no crash</p>	No

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Sub No.	Name / Organisation	Support / Objection	Summary of Issues	Planning Comment	Changes to Plan Required? Yes / No
			<p>Where is the extra water coming from? A drought will happen again. How will the extra sewerage, garbage and hard rubbish be disposed of?</p> <p>No provision for medical needs – will there be extra hospital beds? Where will all the extra employment come from? There isn't enough jobs now.</p>	<p>history at the crossing, and combined with the current operating capacity, it may be difficult to justify capital expenditure for major improvements to the crossing.</p> <p>The Waterloo Road Development Plan has been reviewed and considered by all the relevant agencies, such as Gippsland Water and West Gippsland Catchment Management Authority, with no objections or concerns being conveyed. Each new residential lot will be required to pay waste and recycling fees as part of their rates. The contract for waste services will be expanded to allow for the additional services.</p> <p>The requirement of further social and community infrastructure within Moe is to be investigated more broadly by the relevant authorities as the demand presents itself. It is beyond the realms of what can be considered as part of the Waterloo Road Development Plan proposal.</p>	

Overall there was support from the community for the Waterloo Road Development, including support which was verbally expressed at the 'Open House' community consultation evening. The main reason expressed by community members for why they supported the Waterloo Road Development Plan was that they believed it was great to see more development occurring in Moe.

Issues raised from the submission that cited concerns have been discussed in detail in the 'Issues' section of this report.

The draft Waterloo Road Development Plan was provided to Latrobe City Council's Infrastructure, Recreation and Open Space, Environment, Child and Family Services, Environmental Health and Statutory Planning teams for their review and comment. Each of these teams have had input into the draft Development Plan and have advised that the February 2014 Development Plan is to their satisfaction.

A summary of external referral responses received is outlined in Table 5 below and a full copy of these responses is provided at Attachment 7. The

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issues raised in the referral responses have been discussed in the 'Issues' section of this report. It is noted that the draft Waterloo Road Development Plan was also sent to APA Group, Telstra and Aboriginal Affairs Victoria but no written response was received.

Table 5: Summary of Referral Responses Received

Submitter	Summary of Submission	Response/ Change
Country Fire Authority (CFA)	<ul style="list-style-type: none"> • Land is in the designated Bushfire Prone Area. • All development should be at a level of construction of BAL 12.5 and design should be done to ensure that it is achievable to all lots. • Development Plan doesn't respond to bushfire risk or the likely form of bushfire attack. • Vegetation Offset area in the northern end of the site creates vegetation that is greater than 20 metres in depth. This requires more onerous distances. • Staging should be designed so that each stage is ending with a road between the developed land and the undeveloped land. • Consideration of how the lots on the external sides of the subject land (east and west) where the subdivision abuts farming property will be able to construct with a level of construction of BAL 12.5. • Open space where vegetation is to be planted should meet a prescription that does not create classified vegetation. • Consideration that if a timber fence interfaces with the grassland, it will increase the radiant heat and potentially direct flame contact to the building, regardless of the level of construction. 	<p>Noted.</p> <p>Development Plan has since been updated to address bushfire considerations.</p> <p>A 12.5m road and section of the reserve creates a buffer between the offset area and residential area. The offset area is to be planted and maintained in accordance with an approved vegetation management plan to ensure that bushfire risk is reduced to an acceptable level.</p> <p>This has been addressed within the Development Plan report and is shown in Figure 17 on page 39. Staging of individual subdivisions will need to have regard to the grassfire hazard and can be conditioned accordingly at planning permit stage.</p> <p>Comments are noted and will also be considered at planning permit stage.</p>
Department of Transport, Planning and Local Infrastructure (DTPLI)	<ul style="list-style-type: none"> • Cross sections for roads anticipated to accommodate buses should accord with the Department of Transport <i>Public Transport Guidelines for Land Use and Development 2008</i>. • Pedestrian and cycle access to broader networks to be considered and accommodated. 	<p>Comments are noted and will also be considered at planning permit stage.</p>

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Submitter	Summary of Submission	Response/ Change
<p>Department of Environment and Primary Industries</p>	<ul style="list-style-type: none"> • Any areas identified by the report as degraded treeless vegetation have not been mapped or adequately described, nor have they been confirmed by the DEPI. The responsible authority should determine the presence of any areas of native vegetation that do not meet the definition of a remnant patch or scattered trees. • The DEPI considers the proposal may have a significant impact on local populations of Dwarf Galaxias known from within the Moe Contour Drain. • The proposal is not consistent with Clause 12 <i>Environmental and Landscape Values</i>, as it identifies: <ul style="list-style-type: none"> ○ The removal of existing native vegetation, rather than retain and enhance ○ The future creation of a vehicle access/ public road through an offset site associated with development of adjoining property; and ○ Recommended tree species in the Landscape Management Plan may have adverse implications for nearby remnant native vegetation and they do not complement existing ecological values in the general area. • The plan recommends to remove and replace high conservation significance remnant native vegetation within the riparian zone of an existing waterway. It does not describe how the existing biodiversity values of this patch can be retained and enhanced on site, or why 	<p>The majority of the site is classified as degraded treeless vegetation. There is one patch of vegetation within the Development Plan area, which is within Stage 4. Further information relating to the native vegetation on site will be required by the applicant through a condition at planning permit stage.</p> <p>A Construction Management Plan will be imposed through a planning permit condition to ensure the careful management of excavation, demolition and building work within the development area to ensure that Dwarf Galaxias habitat is not compromised.</p> <p>There is scope to avoid or minimise any impacts on native vegetation resulting from this subdivision. It is to be considered in further detail at the time of subdivision. It is noted that this only applies to Stage 4.</p> <p>The offset area has now been updated to ensure that the future connection is not going through the offset area.</p> <p>The comments are noted and will be addressed at the planning permit/development stage.</p> <p>The comments are noted and will be addressed at the planning permit / development stage. Any planning permit application for this land will need to have regard to the three step approach for native vegetation removal.</p>

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Submitter	Summary of Submission	Response/ Change
	<p>removal of vegetation cannot be avoided.</p> <ul style="list-style-type: none"> • The offsets described in the ecological report do not meet the requirements of the Framework. Clearing of high conservation significance native vegetation is generally not permitted, particularly where there are opportunities to avoid and minimise impacts in the planning stages on a proposed development. Where some clearing is permitted, the offsets must satisfy the like-for-like requirements specified in the Framework. • The provision of offsets in an open space reserve needs to consider the long-term management implications for the landowner/manager. A suitable offset strategy must also discuss how offsets will be secured and managed for conservation into the future, and consider and mitigate potential adverse impacts to biodiversity assets around public risk management in designated open space reserves. 	<p>.</p> <p>The comments are noted and will be addressed at the planning permit / development stage. Flexibility exists in the road design to ensure that impacts on native vegetation can be avoided and minimised where possible.</p> <p>The comments are noted and will be addressed at the planning permit / development stage.</p>
<p>West Gippsland Catchment Management Authority (WGCMA)</p>	<ul style="list-style-type: none"> • Flooding - The Authority does not have any official record of flooding for the properties described above on which to base its assessment. There are no Flooding Overlays on the properties however the Authority is aware that there have been some instances of inundation in the area following significant rain events. • Waterways - The Authority notes that the appropriate consideration, through the application of buffer zones and revegetation works, has been given to the waterways, designated and non-designated, found within the development area. • Where the designated waterway is to be piped (Waterloo Drain), special consideration in regards to its connection to the receiving waterway will be needed. Furthermore a Works on Waterways licence will need to be obtained from this Authority before any works that may impact directly, or non-directly, on any designated waterway can proceed. • Stormwater - The Authority notes the Development Plan embraces Water Sensitive Urban Design to a standard as required by Clause 56 of the Planning Scheme. The wetland system will also provide for 	<p>Noted.</p> <p>Noted.</p> <p>The comments are noted and will be addressed at the planning permit / development stage.</p> <p>Noted.</p>

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Submitter	Summary of Submission	Response/ Change
	<p>vegetation offsets as a result of the removal of a small area of native vegetation. This will improve habit for threatened fauna (Growling Grass Frog and the Dwarf Galaxias).</p>	
<p>Environmental Protection Authority (EPA)</p>	<ul style="list-style-type: none"> • EPA notes that details of the site history, particularly in relation to the industrial uses within the eastern section of the site (referred to as the Eastern Section), has not been provided. In order for Council to determine the suitability of the site for residential purposes, EPA recommends that details of site history are provided to determine if this is potentially contaminated. • There are surrounding land uses and zones to the Development Plan area that may have potential to adversely impact on both the amenity of the residents of the proposed development and ongoing operations of these surrounding land uses. EPA recommends that further information on the activities is sought for these locations to determine the industry activity type and definition. 	<p>The Site Conditions plan shows that there is no nearby industrial or commercial land uses for which residential development would encroach into any buffer areas. A table outlining each of the existing uses surrounding the development area has been included within the Development Plan documentation (see page 15).</p> <p>The Development Plan notes the potential for contamination at the former Spinning Mill site and that at the time of subdivision further details regarding the site history, together with a contamination report will be required.</p>
<p>VicRoads</p>	<ul style="list-style-type: none"> • The Traffic Impact Assessment has not explored what possible impacts development will have on rail crossing intersection from Lloyd Street, even though the report suggests that 75% of all movements will be to and from the eastern direction. Combined with the other approved subdivision on Waterloo Road, a large majority of movements will occur there. 	<p>The Traffic Impact Assessment report was updated to include this study. The report found that as a result of this development the potential impacts in relation to traffic movements at the Waterloo Road/ Lloyd Street railway crossing are minimal.</p>
<p>Gippsland Water</p>	<p>Sewer - The development will require two servicing strategies, being;</p> <ul style="list-style-type: none"> ○ A Sewerage Pump Station (SPS) to service the lower half of the development, Stages S5 & S2 and adjoining development north of Discovery Boulevard. ○ Gravity sewer extensions for stages S1, S3 and S4 discharging into the existing gravity network traversing through the centre of the development. ○ All sewer assets will be at the cost of the developer <p>Water – Internal reticulation mains will be required at the cost of the developer.</p> <p>Extension of a 300 mm shared water distribution main will be required from the intersection of Mitchells Rd and Waterloo Rd, to the main entrance of the development on Waterloo Rd.</p>	<p>The comments are noted and will be addressed at the planning permit / development stage.</p>
<p>SP Ausnet</p>	<p>SP AusNet has existing 22kV overhead power lines in Waterloo Road on the south side the development. There are 22kV overhead power lines</p>	<p>The comments are noted and will be addressed at the planning permit / development</p>

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Submitter	Summary of Submission	Response/ Change
	<p>at the start of Mervyn Street. There are low voltage assets in Desmond Street (refer to attached AMFM plot).</p> <p>The 22kV line in Waterloo Road (MOE23 feeder) – can, at present, support the proposed development based on 4kVA per lot.</p> <p>This development would require a number of Kiosk Substations.</p> <p>A Kiosk Substation requires a reserve size of 8m x 5m.</p>	stage.
Baw Baw Shire Council	<p>No strategic planning or engineering concerns with the proposal.</p> <p>There is a proposed future road connection across the Moe Drain to connect to the farm land in Baw Baw Shire Council. This should not be an immediate issue as we do not expect any development in this area in the short to medium term.</p> <p>It is proposed to retard and treat stormwater on site and the outflow will discharge into the Moe Drain. This is all on the Latrobe City Council side of Moe River so will not be a Baw Baw Shire Council maintenance responsibility. The West Gippsland Catchment Management Authority has reviewed the proposal and provided comment. There is no issue here for Baw Baw Shire Council.</p>	Noted.

The CFA, DEPI and EPA were provided with an updated version of the Development Plan for their review to ensure they were satisfied that their concerns had been addressed.

Due to the Waterloo Road Development Plan site being close to the municipal boundary, Baw Baw Shire Council was also provided with the draft Waterloo Road Development Plan for their review.

OPTIONS

The options available to Council are as follows:

1. To endorse the draft Waterloo Road Development Plan February 2014, subject to the approval of the amended Vegetation Offset Management Plan – Mitchell Grove, Moe.
2. To endorse the draft Waterloo Road Development Plan February 2014 subject to changes being made.
3. To not endorse the draft Waterloo Road Development Plan February 2014 and seek further information.

ORDINARY COUNCIL MEETING MINUTES 03 MARCH 2014 (CM431)

CONCLUSION

The draft Waterloo Road Development Plan presents an opportunity for a high amenity residential development in Moe.

An 'Open House' information session was held on Wednesday 20 November 2013 from 5.00 pm to 7.00pm, to discuss the Waterloo Road Development Plan. A total of eight people attended the 'Open House' information session where each of these community members verbally expressed their support for the proposed Development Plan.

The verbal feedback received was that this plan presents a good opportunity for Moe to provide more housing choice.

Latrobe City Council received a total of three written submissions to the proposed Development Plan, two submissions did not oppose the Development Plan and one submission raised concerns.

The issues of concern raised in Submission 3 have been carefully considered, however no changes have been proposed to the Development Plan. The remaining concerns can be adequately addressed at planning permit stage, in particular, the potential for contamination and potential for native vegetation on site.

Comments by Latrobe City Council's Infrastructure, Recreation and Open Space, Environment and Statutory Planning teams have also been incorporated into the draft Development Plan.

Attachments

1. Site Plan (Published Separately)
2. Development Plan Map and Site Conditions Plan (Published Separately)
3. Waterloo Road Development Plan February 2014 (Published Separately)
4. Letter from Department of Environment & Primary Industries - 23 August 2013 (Published Separately)
5. Notification Area (Published Separately)
6. Community Submissions (Published Separately)
7. Referral Agency responses (Published Separately)

RECOMMENDATION

1. **That Council endorse the Waterloo Road Development Plan February 2014, subject to the approval of the amended Vegetation Offset Management Plan – Mitchell Grove, Moe by Latrobe City Council and the Department of Environment and Primary Industries.**
2. **That submitters be notified, in writing, of Council's decision.**

**ORDINARY COUNCIL MEETING MINUTES
03 MARCH 2014 (CM431)**

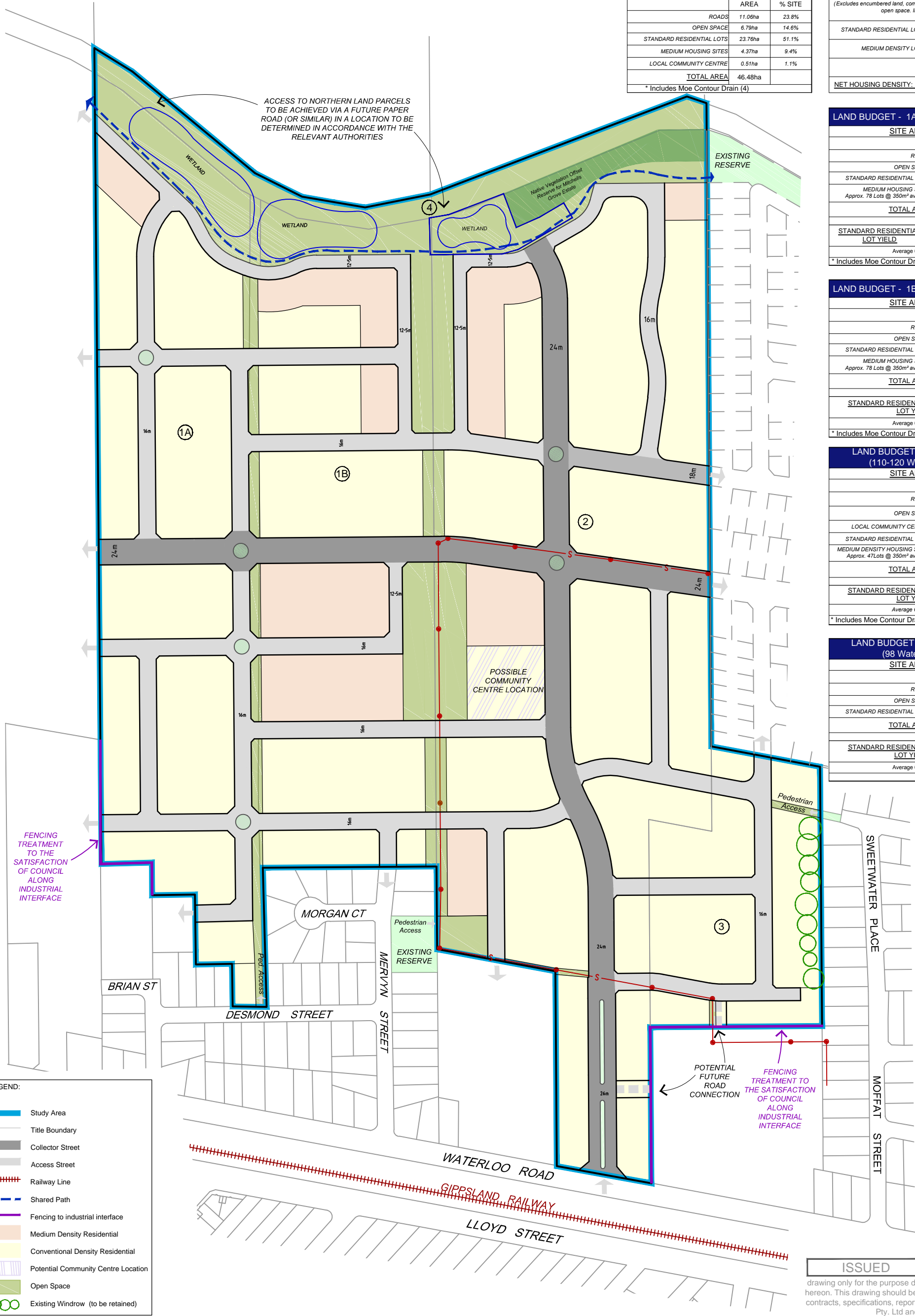
Moved: Cr Gibbons
Seconded: Cr White

That the Recommendation be adopted.

CARRIED UNANIMOUSLY

Gravel crossing
over Moe
Contour Drain





OVERALL LAND BUDGET*		
SITE AREA	AREA	% SITE
ROADS	11.06ha	23.8%
OPEN SPACE	6.79ha	14.6%
STANDARD RESIDENTIAL LOTS	23.76ha	51.1%
MEDIUM HOUSING SITES	4.37ha	9.4%
LOCAL COMMUNITY CENTRE	0.51ha	1.1%
TOTAL AREA	46.48ha	

* Includes Moe Contour Drain (4)

OVERALL LOT YIELD	
NET DEVELOPABLE AREA (Excludes encumbered land, community facility & public open space. Includes lots and roads)	39.19ha
STANDARD RESIDENTIAL LOTS @ 600m ² average	396
MEDIUM DENSITY LOTS @ 350m ² average	125
TOTAL LOTS	521
NET HOUSING DENSITY: 13 DWELLINGS PER HECTARE	

LAND BUDGET - 1A: WESTERN PARCEL*		
SITE AREA	AREA	% SITE
ROADS	2.97ha	25.6%
OPEN SPACE	1.82ha	15.7%
STANDARD RESIDENTIAL LOTS	6.55ha	56.5%
MEDIUM HOUSING SITE - Approx. 78 Lots @ 350m ² average	0.25ha	2.2%
TOTAL AREA	11.59ha	

STANDARD RESIDENTIAL LOT YIELD	No. of Lots
Average 600m ²	109

* Includes Moe Contour Drain (4)

LAND BUDGET - 1B: WESTERN PARCEL*		
SITE AREA	AREA	% SITE
ROADS	2.12ha	20.7%
OPEN SPACE	1.89ha	18.4%
STANDARD RESIDENTIAL LOTS	3.78ha	36.8%
MEDIUM HOUSING SITE - Approx. 78 Lots @ 350m ² average	2.48ha	24.2%
TOTAL AREA	10.27ha	

STANDARD RESIDENTIAL LOT YIELD	No. of Lots
Average 600m ²	63

* Includes Moe Contour Drain (4)

LAND BUDGET - 2: Central Parcel (110-120 Waterloo Road)*		
SITE AREA	AREA	% SITE
ROADS	5.16ha	24.7%
OPEN SPACE	3.06ha	14.6%
LOCAL COMMUNITY CENTRE	0.51ha	2.4%
STANDARD RESIDENTIAL LOTS	10.56ha	50.5%
MEDIUM DENSITY HOUSING SITE - Approx. 47 Lots @ 350m ² average	1.64ha	7.8%
TOTAL AREA	20.92ha	

STANDARD RESIDENTIAL LOT YIELD	No. of Lots
Average 600m ²	176

* Includes Moe Contour Drain (4)

LAND BUDGET - 3: Eastern Parcel (98 Waterloo Road)		
SITE AREA	AREA	% SITE
ROADS	0.79ha	21.3%
OPEN SPACE	0.05ha	1.3%
STANDARD RESIDENTIAL LOTS	2.87ha	77.4%
TOTAL AREA	3.70ha	

STANDARD RESIDENTIAL LOT YIELD	No. of Lots
Average 600m ²	48

LEGEND:

- Study Area
- Title Boundary
- Collector Street
- Access Street
- Railway Line
- Shared Path
- Fencing to industrial interface
- Medium Density Residential
- Conventional Density Residential
- Potential Community Centre Location
- Open Space
- Existing Windrow (to be retained)



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DEVELOPMENT PLAN

Moe Urban Growth Area
Waterloo Road, Moe
Latrobe City Council
16315DP2
Version 5

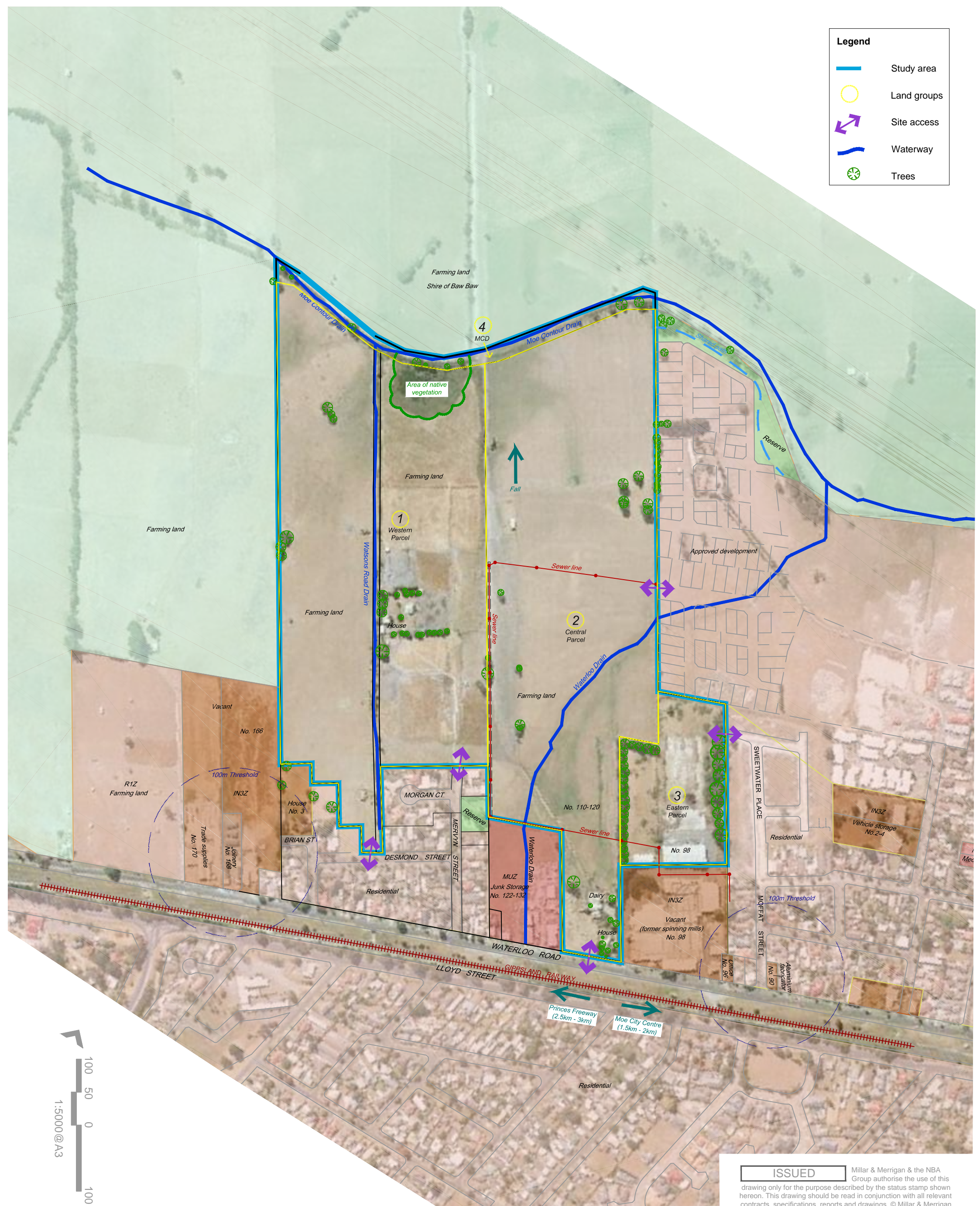


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Legend

- Study area
- Land groups
- Site access
- Waterway
- Trees



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SITE CONDITIONS

Moe Urban Growth Area
 Waterloo Road, Moe
 Latrobe City Council
 16315DP1
 Version 2



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Waterloo Road Development Plan



Lot 1 on TP822397, Lot 1 on LP67416, Lot A on LP208976, Lot 3
on TP836437, Lot 1 on TP674252, Part CP106601 & Allotment
4a Section F Parish of Yarragon

Applicant: Waterloo Grazing Pty Ltd
Version 5
February 2014

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1 Introduction

The Waterloo Road Development Plan (WRDP) comprises this document and the accompanying plans. It has been prepared for land at Waterloo Road, Moe and sets out the form and conditions for future residential use and development.

The Development Plan has been prepared in accordance with the requirements of the Development Plan Overlay (DPO) provisions at Clause 43.04 of the Latrobe Planning Scheme and more particularly Schedule 5 of the Development Plan Overlay – Residential Growth Areas.

A planning permit for the subdivision, use and development of land must be generally in accordance with the Development Plan.

1.1 Supporting Documentation

Accompanying this submission is the following supporting documentation:

Appendix 1	Site Conditions
Appendix 2	Development Plan
Appendix 3	Implementation Plan
Appendix 4	Mobility Plan
Appendix 5	Landscape Concept
Appendix 6	Cross Sections
Appendix 7	Transport Impact Assessment
Appendix 8	Cultural Heritage Management Plan
Appendix 9	SWMS Concept
Appendix 10	Review of Surface Water Management Strategy (concept)
Appendix 11	Infrastructure Services Report
Appendix 12	Ecological Features & Constraints
Appendix 13	Open Space Plan
Appendix 14	Certificates of Title

2 Development Plan Area

The Waterloo Road Development Plan applies to Lot 1 on TP822397, Lot 1 on LP67416, Lot A on LP208976, Lot 3 on TP836437, Lot 1 on TP674252, Part CP106601 and Allotment 4a Section F Parish of Yarragon , which comprises a total area of approximately 46.5 hectares.

This section of the report provides a description of the site’s surrounding context and physical features.

2.1 Site Context

The subject area is located on the north western periphery of the Moe Township some 140km south-east of Melbourne.

The land abuts farming land to the north and west. To the east are established and newly developing residential areas (Mitchell Grove) whilst to the south are established residential areas with some small pockets of industrial land.

There is a single portion of land that abuts Waterloo Road, whilst several further links to existing and approved minor residential streets are available to the north-east and south-east. The Gippsland Railway runs adjacent to Waterloo Road.

The sites northern boundary is aligned with the municipal boundary between Latrobe and the Shire of Baw Baw.

The western boundary of the site corresponds with the limit of future residential development approved under the existing Moe / Newborough Structure Plan.

Refer to Figure 1 – Site Context Plan and Figure 2 – Site Analysis.

2.2 Site Analysis

The subject land is irregular in shape comprising of several titles, which have been divided into four groups for the purpose of this Development Plan.

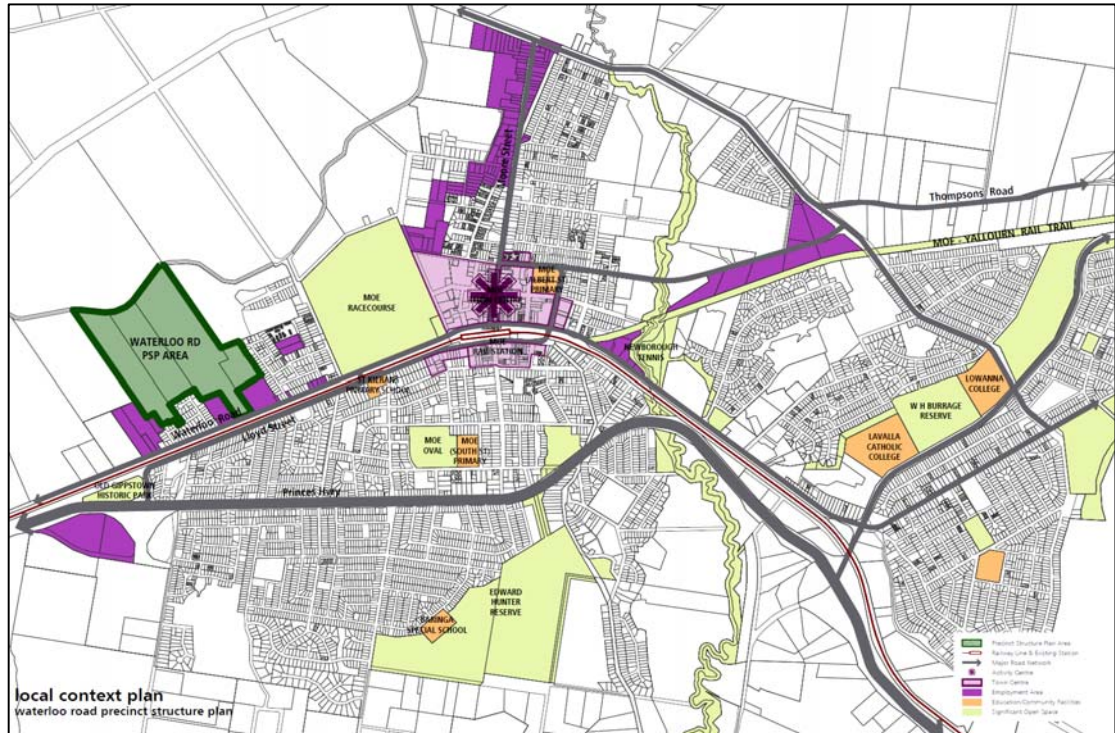
The western parcel comprises of three allotments, one of which is long and narrow and separates the remaining two lots. A single dwelling and various outbuildings are present. Two of these parcels are in the same ownership.

The eastern parcel; 98 Waterloo Rd, comprises ‘part’ of a lot which has split zoning. The area outside the extent of the DPO is zoned industrial whilst that included is zoned residential. The land was home to a former spinning mills, however is now unused.

The central parcel; 110-120 Waterloo Rd, comprises of two lots which are utilised as a single dairy property. A dwelling and various outbuildings are present. Both lots are in the same ownership.

The fourth group comprises a single parcel of crown land at the northern end of the site that contains the Moe Contour Drain (see the Site Conditions at Appendix 1).

Figure 1 | Site Context Plan (prepared by GAA)



Driveway access is available from Waterloo Road and Mervyn Street to each of the dwellings however a gateway is also present at Desmond Street.

As a whole the land is flat to gently undulating with a general slope from southeast to northwest and contains some minor drainage lines in addition to the Moe Contour Drain which runs along the northwest boundary.

The primary site features are its rural outlook to the north across the Moe Contour Drain (MCD), two windrows of established trees in the south-east corner (on the eastern parcel), the variety of interfacing uses and development conditions along the southern boundary as well as its proximity to Moe city centre.

The land comprises mostly of exotic vegetation, being perennial pasture and weeds. The exception is an area of indigenous vegetation adjacent to the MCD. This is identified within the Ecological Features & Constraints report (Appendix 12) as HZ1. The report describes the subject vegetation as follows:

*This area of vegetation is considered to be by definition (DSE 2007a) a remnant patch of native vegetation as the cover of native vegetation exceeds 25%. To enable an assessment of vegetation quality (DSE 2004), the benchmark for EVC 83 – Swampy Riparian Woodland was used as this benchmark was considered a best fit. EVC 83 – Swampy Riparian Woodland has an Endangered Conservation Status in the Gippsland Plain Bioregion. It is considered that this remnant patch has regrown after previously being removed. The remnant patch now has a closed canopy of Prickly Tea-tree *Leptospermum continentale* and is without emergent eucalypts or wattles. It has low structural diversity and low flora species richness and has a Habitat Hectare (Hha) score of 0.19 (Table 3-1). The understorey and fringing Prickly Tea-tree regeneration has been heavily grazed.*

It further states that:

Despite the low quality of the remnant patch native vegetation; this remnant patch has a High Conservation significance on a scale of Very High, High, Medium and Low (DNRE 2002).

In addition to the patch of vegetation approximately 0.77 hectares of land at the northern end of the central parcel has been allocated for vegetation offsetting in the Vegetation Offset Management Plan – Mitchell Grove, Moe which is approved by Latrobe City Council.

A full description of the vegetation and its ecological significance is contained in the Ecological Features & Constraints report (Appendix 12).

A registered Aboriginal place is located within 50m of the land within the Gippsland Rail Reserve and as such the site is considered to be culturally sensitive. A Desktop, Standard and Complex Assessment – Cultural Heritage Management Plan has been prepared by Benchmark Heritage Management for 110 – 120 Waterloo Road and is attached at Appendix 8. The report identified the southern end of the site as an ‘area of moderate archaeological sensitivity’ and the remainder of the site as an ‘area of very low archaeological sensitivity’. As a result of testing it found that:

No Aboriginal cultural material was noted in the deposits.

And

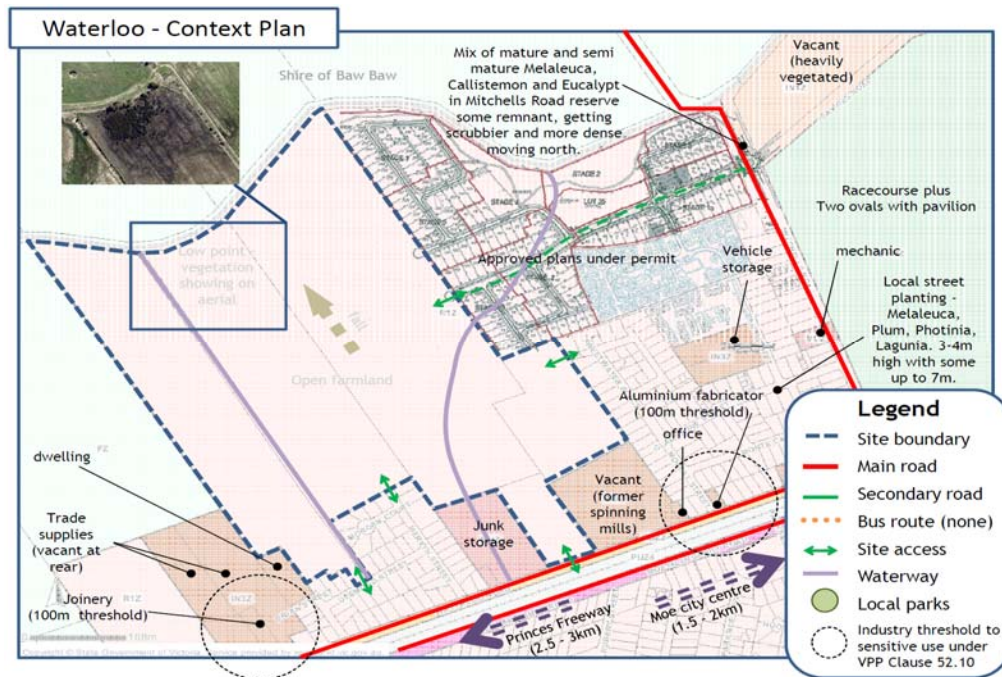
The complex assessment has revealed that the Activity Area is of low potential sensitivity for Aboriginal cultural deposits.

Sewer infrastructure dissects the land in various locations and a number of easements are present. These offer significant constraints to the development as Gippsland Water require their assets to be contained within road or open space reserves.

Overhead power lines are present on the south side of Waterloo Road and advice from SPAusnet indicates that they can support the development plan area. A series of substations will be required and they are to be detailed at subdivision application.

Refer to the Site Conditions Plan at Appendix 1.

Figure 2 | Site Analysis (prepared by GAA)



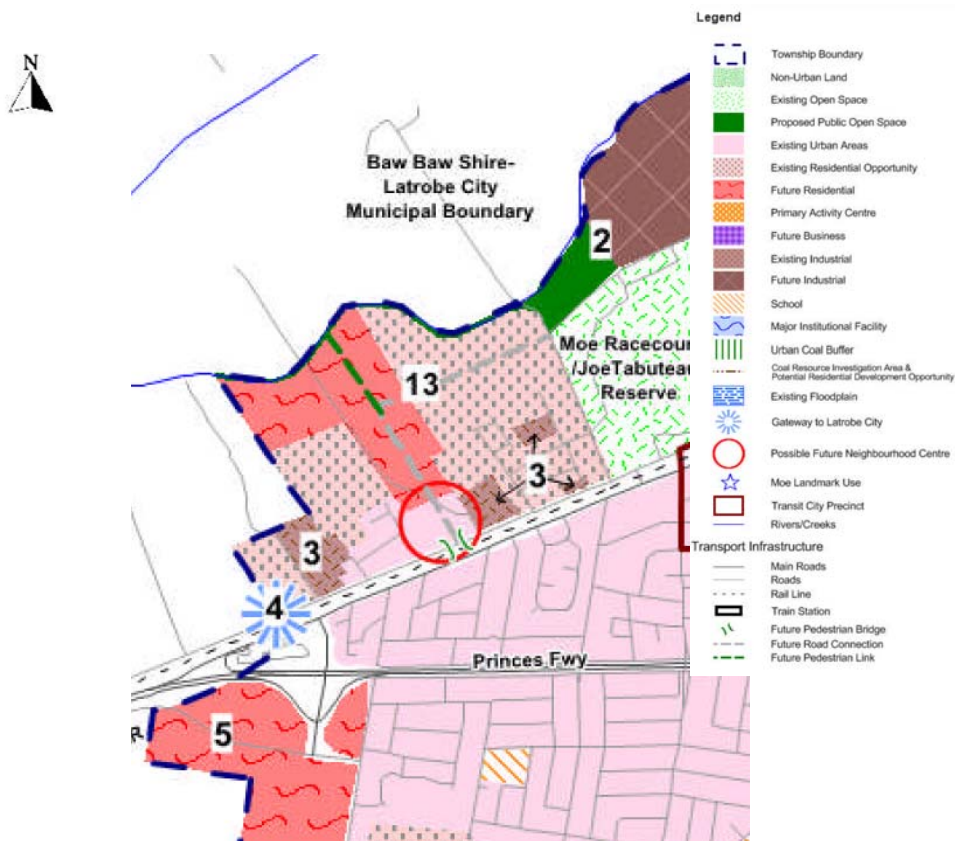
2.3 Key Influences on Development of the Site

The key influences on development of the site are:

- It's limited access to the main road network.
- The Moe/Newborough Structure Plan – identifying the site for residential development with an opportunity for local commercial facilities and a potential pedestrian bridge at Waterloo Road. The Structure Plan also shows a dog-leg connector road through the site, a pedestrian link in the north of the site and a potential pedestrian bridge across the rail line at the site's southern boundary. *Clause 21.05-2* of the Latrobe Planning Scheme seeks development to be facilitated in accordance with the Moe/Newborough Structure Plan.
- Latrobe City Bicycle Plan – shows no existing bike paths/lanes west of the city centre. However 'proposed on road local routes' are shown on Mitchells Road, Waterloo Road and Saviges Road/Discovery Boulevard.
- Latrobe Public Open Space Plan - The majority of houses in residential areas should have access to a minimum of 0.5 hectares of local public open space within a 500 metre radius. The majority of houses in residential areas should have access to district level public open space within a 3 km radius.
- The two waterways/drainage lines crossing the site.
- The location of Discovery Boulevard (Saviges Road extension) and other local road stubs at the site's boundaries.
- Likely medium to longer term land use conversion of scattered industrial sites in surrounding neighbourhood west of Mitchells Road. Particularly the status of the former Spinning Mills land at the southeast corner of the site.

- Existing Farming Zone land to the west which may be identified for residential development in the future.
- The majority of the land is shown as a Bushfire Prone Area under the Building Regulations.
- Bus 11 is located approximately 400-1200m walk to the south assuming a pedestrian bridge is delivered in line with the Moe/Newborough Structure Plan.

Figure 3 | Moe / Newborough Structure Plan (area around site only)



2.4 Site Photographs

Photograph 1 – Looking towards the site from Waterloo Road



Photograph 2 – Looking opposite the site from Waterloo Road



Photograph 3 – Looking east from Mervyn Street across the existing reserve to the site



Photograph 4 – Looking northwest towards the site from Mervyn Street



Photograph 5 – Looking southeast down Mervyn Street



Photograph 6 – Looking south towards the site and windrow from Sweetwater Place



Photograph 7– Looking northwest across the western parcel



Photograph 8– Looking northwest across the central parcel



3 Proposal

The proposed Development Plan seeks for all of the land to be subdivided for residential purposes.

Conventional housing densities are proposed across the majority of the site with medium density lots located abutting or overlooking open spaces. The northern end of the site adjacent to the Moe Contour Drain is indicated as open space that will accommodate wetlands as well as vegetation offsets for the development plan area and that of the adjacent estate (Mitchells Grove).

A local park and linear open space are proposed central to the site and a community facility is shown at the corner of the connector road intersection adjacent this central park. Under the residential Zone it will enable community facilities to be developed if and when required.

A further pedestrian link which encompasses an existing drainage line is proposed at the western side of the site. Open space areas provide excellent links with adjacent open spaces and streets.

Vehicle access is to be provided directly from an extension to Discovery Boulevard from the eastern edge of the site providing access to Mitchells Road. A new north-south connector road links to Waterloo Road and Discovery Boulevard, offering potential for a future road link to the north. A series of access streets offer good circulation within the development area, links to existing roads and allow for potential connections to the west in future.

The location of existing major sewerage infrastructure has informed the road and open space layout.

The proposal meets State and Local planning policy in relation to urban growth and development whilst integrating with existing and possible adjacent neighbourhoods.

4 Development Plan Overlay Requirements

Schedule 5 to the Development Plan Overlay requires the following:

A development plan must be prepared to the satisfaction of the Responsible Authority.

The plan must show the following:

4.1 Land Use and Subdivision

- ***The proposed boundaries of the development area, and provide the strategic justification for those boundaries.***

The Development Plan (see Appendix 2) identifies the boundary of the proposed development area – Waterloo Road Development Plan (WRDP). It corresponds with the extent of the DPO5 for land on the northern side of Waterloo Road in this vicinity and is a logical boundary. Connections are provided through to undeveloped adjacent parcels to assist in the future urban expansion of the area as required.

- ***The overall subdivision of the area, including where possible, the proposed size and density of allotments which provide opportunities for a diverse range of housing types.***

The Development Plan (see Appendix 2) indicates an overall subdivision layout for the development area. The design can be described as a grid pattern that offers flowing circulation, excellent pedestrian links and appropriate integration with open space areas whilst responding to the location of existing sewerage infrastructure and drainage lines.

A lengthy design process has been undertaken for the site that has included consultation with the Growth Areas Authority (GAA). The evolution of the design has resulted in best practice urban design outcomes ensuring that the development responds to site features and constraints together with the aims of the planning scheme.

The final development plan layout offers a mix of densities to cater for the varying needs of the population. It has the potential to offer 396 standard residential lots based on an average lot size of 600sqm, as well as 4.37 hectares of medium density land. Medium density sites are strategically located adjacent to public open space areas. A density of 1 dwelling per 350sqm has been assumed for the medium density sites and as such will offer 125 lots. The approximate total number of lots offered in the development plan area is 521.

Land use percentages (of the entire site area) are as follows:

Standard lots	51.2%
Medium density lots	9.4%
Local community centre	1.1%
Open space	14.6%

The development will offer a new lifestyle precinct based on best practice urban design principles to ensure high levels of amenity and sustainable development.

- **The overall pattern of development of the area, including any proposed re-zoning of land and proposed land uses.**

The entire land is zoned Residential 1 and there are no rezoning's sought. The land is to be developed for residential purposes. It is noted that varying uses are permitted in the Residential Zone and as such ample scope is available for future development of a local community centre if the demand presents.

There are a small number of nearby Industrial (IN3Z) and Mixed Use (MUZ) zoned parcels of land. The Site Conditions Plan (Appendix 1) indicates the zoning and current land uses as well as applicable thresholds distances (determined from Clause 52.10 of the Latrobe Planning Scheme). These are summarised in the table below:

Address	Zoning	Existing Use	Threshold
168 Waterloo Road	IN3Z	Joinery	100m
166 & 170 Waterloo Road	IN3Z	Trade supplies & vacant	NA
3 Brian Street	IN3Z	Dwelling	NA
122-132 Waterloo Road	MUZ	Junk storage	NA
98 Waterloo Road	IN3Z	Vacant (former spinning mills)	NA
96 Waterloo Road	IN3Z	Office	NA
90 Waterloo Road	IN3Z	Aluminium fabricator	100m
2-4 Mena Street	IN3Z	Vehicle storage	NA
16 Mitchells Road	MUZ	Mechanic	NA

As demonstrated there are few existing uses with threshold distances and where applicable the distances are outside of the development area. Land conditions change over time, however it is noted that the onus is on industrial land to acknowledge the sensitivity inherent in being adjacent to residential land. Industry is a section 2 use in the IN3Z, whereby a planning permit is required and all the section 1 uses which are as of right, are inoffensive.

The nearby non-residential zonings do not pose a constraint on the development plan area however the WRDP indicates a fencing treatment to the satisfaction of Council between the residential areas and the industrial zoned land to provide appropriate buffering.

It is noted that part of the former spinning mills site is already zoned for residential purposes and forms the Eastern Parcel of the WRDP area. This site has the potential for contamination due to the past land use and at planning permit application, further details regarding the site history together with a contamination report will be required at the time of subdivision. This is in accordance with Practice Note 30: Potentially Contaminated Land (June 2005) and may lead to further recommendations of remedial actions that may need to be undertaken following the granting of a planning permit.

- **Street networks that support building frontages with two way surveillance.**

The Development Plan (see Appendix 2) offers a street network and development density that encourages future buildings to overlook public spaces.

Lots are designed in varying fashions, all of which support high levels of surveillance and avoid dwellings backing onto public areas.

They are described as follows;

Road interface– these lots front roads and generally abut other residential lots to the sides and rear. It is intended that future dwellings overlook streets.

Road & reserve interface– where appropriate, medium density housing sites are located adjacent to public open space areas to ensure that future built form addresses roads and open space areas. Development of these lots would be subject to separate town planning approval following the initial subdivision.

In some instances the sides of standard residential lots abut narrow sections of public open space, however it may be appropriate for design guidelines to be developed and implemented as planning permit conditions should the need arise. Such guidelines will enable control of the built form and in particular will ensure that houses offer a habitable interface to reserves and appropriate fencing treatments where applicable.

- ***An accessible and integrated network of walking and cycling routes for safe and convenient travel to adjoining communities (including existing and future areas included in the DPO), local destinations or points of local interest, activity centres, community hubs, open spaces and public transport.***

The layout caters for an integrated pedestrian and cyclist network that offers external connections where considered appropriate.

The internal street network offers a mix of collector roads and access streets, both of which are intended to cater for pedestrians and vehicles. Road reserves are narrowed adjacent to open spaces where the intention is that the path network be contained within the reserve, creating a pleasant and safe environment for users.

A dedicated shared path runs through the large reserve at the northern end of the development to create a path network with adjacent Mitchells Grove as well as offering a potential future link to the west.

A pedestrian link is provided to Desmond Street to ensure connectivity for residents of this existing area, with minimal implications for new and increased vehicle movements through the established neighbourhood.

A further off road path meanders within the linear reserve running centrally through the land in a north south direction linking the large reserve at the north to an existing reserve to the south. Additional linkages are provided to existing public open space adjoining the site.

Public transport is available to the south of the land and new paths offer suitable links. To enable access over the Gippsland Railway and ensure consistency with the Moe/Newborough Development Plan a future bridge is indicated.

The Mobility Plan (see Appendix 4) provides a visual representation of the integrated pedestrian and cycling network.

- **The provision of any commercial facilities and the extent to which these can be collocated with community and public transport facilities to provide centres with a mix of land uses and develop vibrant, active, clustered and more walkable neighbourhood destinations.**

In accordance with the Moe / Newborough Structure Plan the entire area of land is dedicated to residential purposes with the exception of a local community centre which is co-located with an open space area and medium density housing site. It would be suited to a variety of uses to provide support to the community such as a child care centre, neighbourhood house, place of worship or aged care complex. Development of this site would be subject to a future development application and design objectives could be considered at that time.

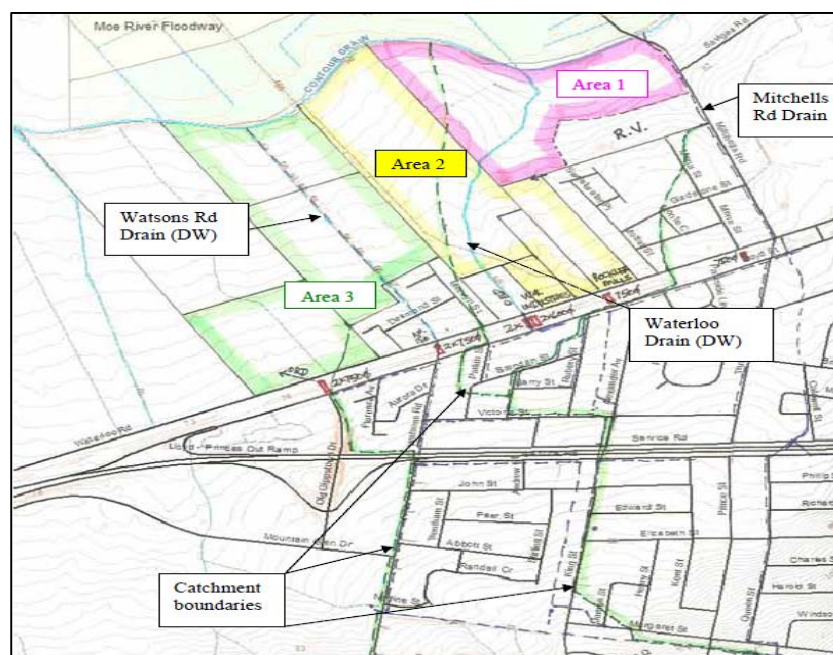
The site layout offers a modest increase in residential lots and based on the envisaged population for this development, there is not enough demand for any additional commercial facilities. Rather, the development will increase business for existing shops. Should commercial facilities prove feasible in the future, opportunity exists on the mixed use zoned land adjacent to the precinct.

4.2 Waterways

- **A buffer zone of 30 metres each side of waterways designated under the Water Act 1989 or a buffer based on a flood study which identifies the 100 year flood extent must be set aside for ecological purposes.**

The Moe Contour Drain (MCD) traverses the northern portion of the site and two minor designated waterways feed into this drain from the south. There are also minor non designated waterways present (see Figure 4). The location of the designated waterways have informed the extent of the development area and where appropriate the proposed layout offers a minimum 30 metre buffer zone, elsewhere flood studies have informed appropriate corridor widths.

Figure 4 | Waterways & catchment areas within the land (Craigie 2010)



The MCD is a designated waterway under the *Water Act 1989* and was constructed to divert minor flood flows from the southern hillslopes away from the productive agricultural flats along the Moe River floodplain. All stormwater from the subject land will also drain to the MCD. A buffer zone in excess of 30m is provided.

The other primary waterway requiring consideration as part of the development is un-named but is a designated waterway. It has been referred to as the Waterloo Drain. In consultation with the WGCMA, it is proposed that this waterway be piped given its small catchment and as such no buffers are proposed or required.

A further un-named designated waterway is present at the western end of the land and is referred to herein as the Watsons Road Drain. It is piped through the existing Desmond Street/Mervyn street residential development and then passes through the subject land as a straight open earth drain to the MCD. The Watsons Road Drain will be redirected and rehabilitated as part of the development. For the most part, it is encompassed within a 10m wide reserve which runs adjacent to a 16m wide road reserve and is consistent with the recommendations of the Surface Water Management Strategy (SWMS) (Craigie 2010) which offers the following comment:

20m minimum reserve suggested for Watsons Road Drain – alignment is flexible.

The small northern section of the reserve which abuts residential lots on both sides is 14m in width. The Cross Sections (Appendix 6) demonstrate that there is ample space to accommodate the rehabilitated drain, a footpath and landscaping.

4.3 Infrastructure Services

- ***An integrated stormwater management plan that incorporates water sensitive urban design techniques which provides for the protection of natural systems, integration of stormwater treatment into the landscape, improved water quality, and reduction and mitigation of run-off and peak flows, including consideration of downstream impacts.***

A Surface Water Management Strategy (SWMS - Concept - Craigie 2010) and a review of the SWMS (Water Technology 2013) have been undertaken for the DPO5 area. The reports provide recommendations to ensure best practice environmental outcomes in relation to stormwater.

The WGCMA have advised that designated waterways are to be protected and enhanced wherever possible, as open waterways. Piping of designated waterways would only be considered in instances where overall environmental benefits can be shown to be sufficiently positive for the development as a consequence of such action.

Discussions have been held with Mr Adam Dunn of the WGCMA to determine likely requirements for the subject waterways. The Infrastructure Services Report (Appendix 11) includes the following discussion:

It was confirmed that the Moe Contour Drain must be retained and protected as part of any development proposal. Ecological investigations completed to date support the proposition that aquatic and terrestrial values of the Drain and its vegetation should be protected, via appropriate setbacks, weed control and effective stormwater quality treatment.

In regard to Waterloo Drain, it was agreed that piping would be considered given the relatively small catchment area, provided that (a) an effective wetland system was created in or adjacent to the Contour Drain floodplain area to ensure best practice stormwater treatment standards were achieved and (b) that such wetland design was arranged to enhance and protect the values of the Contour Drain as well.

The Watsons Road Drain was not discussed with Mr Dunn at the time because Area 3 was not then known to be part of the investigation area. It might be expected that with its large upstream urban catchment, piping of the Drain will not be acceptable to the WGCMA. However with the protection afforded by the Freeway and Railway it may prove to be feasible to do this whilst complying with floodway safety standards, provided that environmental 'pluses' still outweigh the detriments of piping.

Given the known sensitivity of downstream rural lands to flooding issues along the Moe River flats it follows that the development plans for Areas 1-3 must incorporate sufficient retarding storage to prevent increase in peak discharge as a consequence of urban development.

The proposed development layout encompasses the Moe Contour Drain within a large area of public open space where it will not be impacted. A wetland will be developed to ensure that best practice water quality stormwater management objectives are met. The wetlands are not to be developed until stages 4 and 5 of the development. The Surface Water Management Strategy (SWMS - Concept - Craigie 2010) identifies three catchment areas as identified in Figure 4. Area 1 is the Mitchell Grove Estate, Area 2 generally covers the eastern side of the development plan and Area 3 generally covers the western side of the development plan. The report found that:

The summary features of the Area 1 wetlands listed in Table 5 show that a wetland area of 9,600 m² is proposed with total increased flood storage volume of 10,890 m³. Compared with the requirements for Area 1 listed in Tables 3 and 4 it can be seen that the proposal will provide significantly greater area and volume. This can be used to offset requirements for the balance Area 2 lands as set out in Table 6.

Table 6, indicated that a total wetland area of 8,900sqm is required to treat and retard stormwater from area 1 and 2. An area of 9,600sqm has been supplied in area 1 – Mitchell Grove Estate and as such there is no additional wetland area required for proposed stages 1, 2 or 3 of the WRDP. Refer to the Implementation Plan at Appendix 3 for further details.

The Watsons Road Drain will be redirected and rehabilitated as part of the development. It will form part of the open space network.

The Waterloo Drain is proposed to be piped given its small catchment. The development of the wetland adjacent to the MCD will enable treatment of the runoff to best practice levels.

Figure 7 shows the strategy prepared by Craigie which identified the following integrated wetland retarding vegetation protection areas:

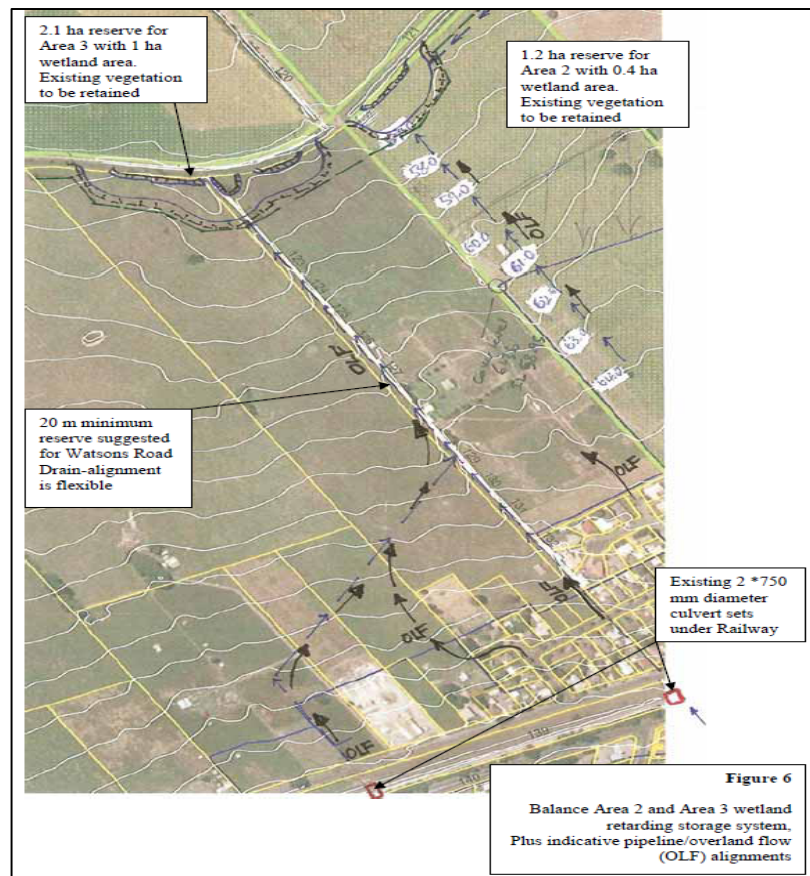
A 1.2 ha reserve will be required for the balance Area 2 frontage with wetland water surface area of about 0.4 ha;

A 2.1 ha reserve will be required in Area 3, incorporating a 1 ha wetland.

It is noted that these areas may be reduced once survey information is available. In regards to Area 3, it is noted that this can be developed as a stand-alone exercise in the following fashion:

It is suggested that for present purposes a floodway reserve of not less than 20m width should be assumed to be required in Area 3 along the current Watsons Road Drain alignment north of Desmond Street. If the integrated wetland retarding storage shown is provided, I am confident that the WGCMA would see the benefits for the Moe Contour Drain corridor and treatment of stormwater from the major upstream catchments as being sufficient benefits to offset the piping of the drain in Area 3. However my expectation is that overland flow magnitudes will exceed the safe capacity of a roadway acting as a floodway.

Figure 5 | Surface Water Management Strategy (Craigie 2010)



A MUSIC model was set-up to check the overall quality performance of the proposed integrated wetland retarding storages detailed above and reflected in the Development Plan. The system was shown to greatly exceed best practice management requirements with:

- 161% Total Suspended Solids (TSS),
- 139% Total Phosphorus (TP),
- 95% Total Nitrogen (TN) and
- 265% Gross Pollutants (GP)

This clearly shows that:

...the proposed management system offers substantial benefits for receiving environmental values compared with existing conditions.

Water Technology commented on the proposed development of the site as follows:

The reduction in study area in Zones 2 and 3 has reduced both the water quality and flood storage requirements by approximately 20% (overall). If the additional area identified by NMC is to be developed as part of this overall development then the original wetland area and storage volume figures nominated by NMC should be applied.

The SWMS concept report developed by Neil M Craigie Pty Ltd was found to be a quality strategy covering off all the main requirements of a document pitched at the concept level. Overall Concept Plans developed by Millar Merrigan and the NBA Group have adequately addressed overland flow paths water quality requirements (footprints) as identified by Neil M Craigie Pty Ltd. Flood storage requirements were not shown on the Overall Concept Plan but are assumed to be able to be accommodated in the reserve area available at the site.

The central basin location (Zone 2) was found to be at a location which would be difficult to serve the requirements of the drainage area. Moving the basin to the southern side of the Moe Contour Drain would make the feature more functional.

If the overall development area is to be restricted to that shown in the Overall Concept Plans reviewed in this study, then storage and water quality requirements can be reduced by approximately 20%. This is primarily due to the significant reduction in the size of Zone 3.

All drainage elements previously shown to be on the northern side of the Moe Contour Drain have been relocated to the south side as shown in the Development Plan (Appendix 2). Input from AKS industries has also allowed for the reduction in required stormwater treatment area through the use of floating wetlands. The Infrastructure Services Report (Appendix 11) notes that:

AKS industries have been engaged to assess the viability of stormwater treatment alternatives. A floating wetland has been proposed and MUSIC modelling has been undertaken to determine the area requirements. Zones 2 and 3 have been analysed and the model is shown. This shows that a total area of 1,500m² floating wetland is required within a body of water approximately 3,000m² (50% coverage).

Floating wetlands have a number of advantages over conventional shallow or fringing wetlands, the biological elements utilised are self-cleaning, which results in significant cost savings over its lifetime, and the floating wetland can deal with large fluctuations in water level (as it is located on the water surface) leading to high nutrient removal efficiency (as the microbes are consistently operating in optimal conditions). AKS industries advise that scientific trials over numerous installation sites show that floating wetlands have consistently achieved all the necessary bacteria counts and oxygen levels in treated water. By utilising floating wetlands an adequate area has been set aside in the Development Plan to accommodate the required water quality treatment.

Figure 6 | Proposed stormwater treatment



In addition to offering beneficial WSUD, floating wetlands provide habitat restoration and bring about a natural wetland / riparian look. The introduction of indigenous riparian plants offers a clear biodiversity benefit, not only with the introduction of indigenous plant species, but in that it creates habitat both above and below the water level for fauna. AKS Industries brochure *The Benefits of Floating Treatment Wetlands* states in part that:

The Riparian Edge...this is where the transition of land to water occurs and this contains some of the most species and diversity rich ecosystems in the world.

It is the riparian edge that attracts the wildlife. Floating Treatment Wetlands provide large areas riparian edge and are really a magnet for wildlife.

Fish gravitate to the Floating Treatment Wetlands for both food and protection.

The Surface Water Management Strategy (Craigie 2010) concludes in part:

The SWMS concept report developed by Neil M Craigie Pty Ltd was found to be a quality strategy covering off all the main requirements of a document pitched at the concept level. Overall Concept Plans developed by Millar Merrigan and the NBA Group have adequately addressed overland flow paths water quality requirements (footprints) as identified by Neil M Craigie Pty Ltd. Flood storage requirements were not shown on the Overall Concept Plan but are assumed to be able to be accommodated in the reserve area available at the site.

The Development Plan enables implementation of water sensitive urban design to achieve Best Practice Environmental Management Guidelines for urban stormwater as required by Clause 56 of the Planning Scheme. A detailed WSUD analysis will be a requirement post permit for any future subdivision of the land.

- ***The pattern and location of the major arterial road network of the area including the location and details of any required:***
 - ***road widening***
 - ***intersections***
 - ***access points***
 - ***pedestrian crossings or safe refuges***
 - ***cycle lanes***
 - ***bus lanes and stops***

The Development Plan (Appendix 2) indicates a proposed road network for the subject land. It offers a logical and safe circulation network for both vehicles and pedestrians/cyclists.

GTA Consultants have prepared a Transport Impact Assessment (see Appendix 7) that provides a detailed traffic engineering assessment of the proposed subdivision layout, including the internal access arrangements as well as the likely impacts on the surrounding road network of the proposed development.

The traffic assessment concluded that:

There is sufficient capacity within the existing road network to accommodate the additional traffic movements.

The indicative street network has been designed in accordance with Clause 56 of the Latrobe Planning Scheme and the Latrobe City Design Guidelines.

It also notes that a channelised right turn short treatment is required for the proposed intersection of Waterloo Road / site access. This treatment can be provided within the existing Waterloo Road carriageway by modifying existing line marking.

The development plan also indicates that access to the land parcels north of the MCD (not subject to the Development Plan Overlay and within Baw Baw Shire) is to be achieved via a carriageway easement or paper road in a location to be determined in accordance with the relevant authorities.

The proposed road layout offers a functional and safe environment for internal access and creates acceptable impacts on the surrounding road network. Detailed design will be undertaken at subdivision stage in accordance with the requirements of the Responsible Authority.

Pedestrian/cyclist networks and public transport are discussed throughout this report.

- ***The pattern and location of any internal road system based on a safe and practical hierarchy of roads including safe pedestrian and bicycle connections and crossing points in accordance with Latrobe City Bicycle Plan 2007-2010 (as amended).***

The proposed road layout is indicated on the Development Plan (Appendix 2) and has been designed in a practical fashion to ensure traffic and pedestrian/cyclist safety. The Traffic Impact Assessment (Appendix 7) discusses road hierarchy and notes the following:

It is envisaged that the internal road network within the site will include a combination of Major Access Streets (reserve frontage, 16m Road Reserve and 18m Road Reserve) and Collector Roads, in accordance with the requirements of Clause 56.06-8 of the Latrobe Planning Scheme and the Latrobe City Design Guidelines.

The Latrobe City Design Guidelines define a Major Access Street as:

A street providing local residential access where traffic is subservient to local amenity. Traffic volumes are permitted to a higher level and speed limit is set to the default urban limit of 50 km/hr. Serves no external through traffic function. Traffic volumes generally up to 2,000 vehicles per day.

A Collector Road is defined as a road that:

Collects traffic from the access places and access streets and connects to an Arterial road or another Collector road. Should not provide an attractive alternate route for through traffic on Arterial roads. Services traffic generated only within the Local Traffic Area. Speed limit is generally at least 60 km/hr. Traffic volumes generally up to 6,000 vehicles per day.

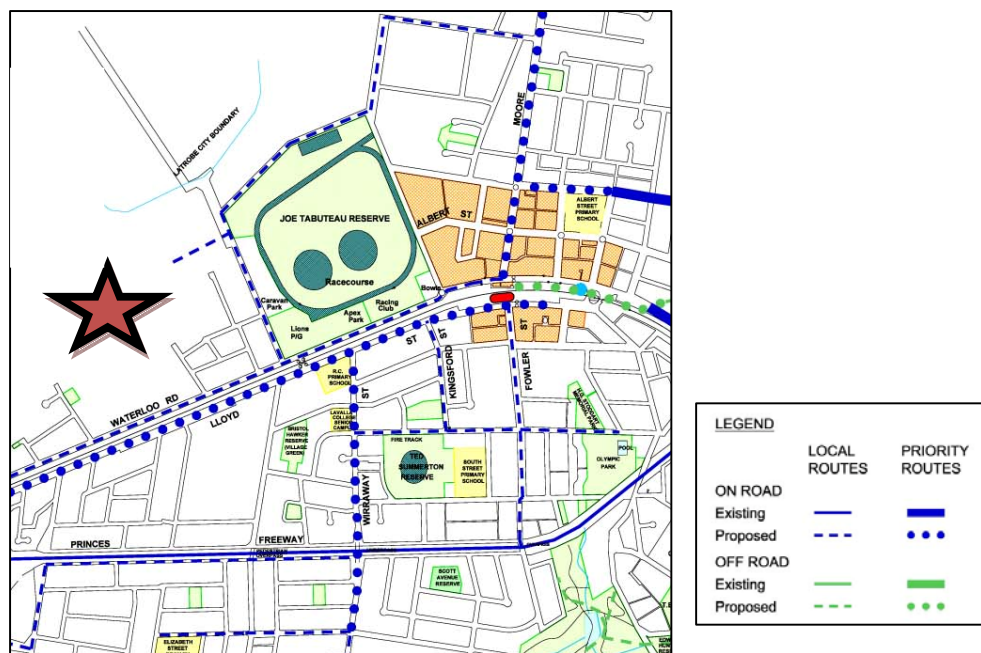
A potential road hierarchy is shown at Figure 9 below.

The street types utilised throughout the development facilitate pedestrian and bicycle movements and each will be designed in accordance with the applicable standards at subdivision stage. Footpaths are proposed on both sides of roads except where roads abut reserves; in this circumstance pathways are located within the open space areas (see Mobility Plan at Appendix 4). The Cross Sections (Appendix 6) demonstrate that ample space is available for footpaths, roads and street trees.

In addition, designated shared pathways are proposed within the large northern reserve to link with Mitchells Grove to the east and potential future developments to the west. The pedestrian access reserve linking with Mitchell Grove towards the southern end of the development area connects to an existing reserve and the width is consistent between the two estates.

Links to Waterloo Road will allow for connection to future on road bicycle routes planned under the Latrobe Bicycle Plan, see Figure 9 below. Links to the existing and proposed network are available via roads as well as open space areas throughout the precinct.

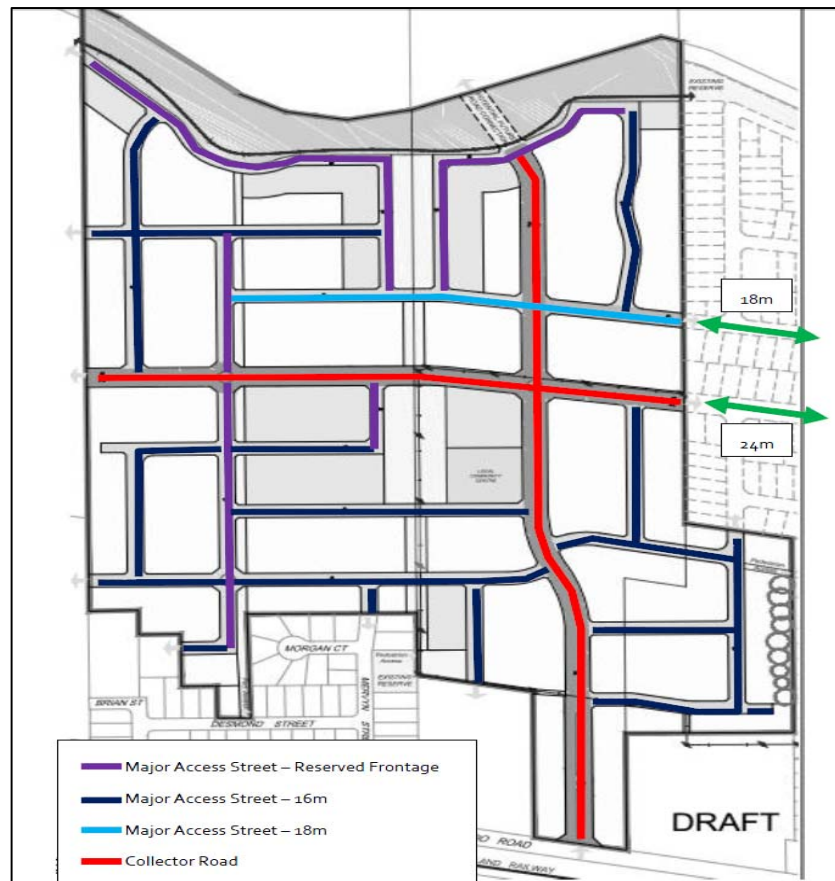
Figure 7 | Latrobe Bicycle Plan – Moe/Newborough Bicycle Network (plan cropped)



The nominated road hierarchy (Figure 8) has been designed to be consistent with the road hierarchy outlined within the Latrobe City Design Guidelines. It will be generally capable of accommodating the traffic volumes expected to be generated by the subject site.

The road network shown on the Development Plan (Appendix 2) allows for a waste collection vehicle to circulate throughout the subdivision in a forward direction. Temporary arrangements may be imposed by Council as a condition of permit for areas where collection may be challenging. (Refer to the Cross Sections (Appendix 6) for typical treatments of road reserves, including footpaths and landscaping).

Figure 8 | Road Hierarchy Plan (GTA Consultants)



- ***In consultation with relevant agencies and authorities, provision of public transport stops where appropriate within easy walking distance to residential dwellings and key destinations. Stops should also be located near active areas where possible.***

Various existing bus routes are present in Moe (see Figure 9). The Moe West route runs along Victoria Street and Lloyd Street a minimum of approximately 200m south of the site however the Gippsland Railway prevents access. A pedestrian crossing is present approximately 600m east of the land.

The Moe/Newborough Structure Plan indicates a 'future pedestrian bridge' over the Gippsland Railway. This has been removed from the Development Plan at the request of Council however once constructed will provide reasonable access to existing bus routes. The Moe – Newborough Structure Plan, see Figure 10, indicates a possible future bus route through the subject site and east through Mitchell Grove. The road network of the WRDP offers a north-south and east-west collector road to accommodate the envisaged bus network.

Figure 9 | Existing Moe Bus Network

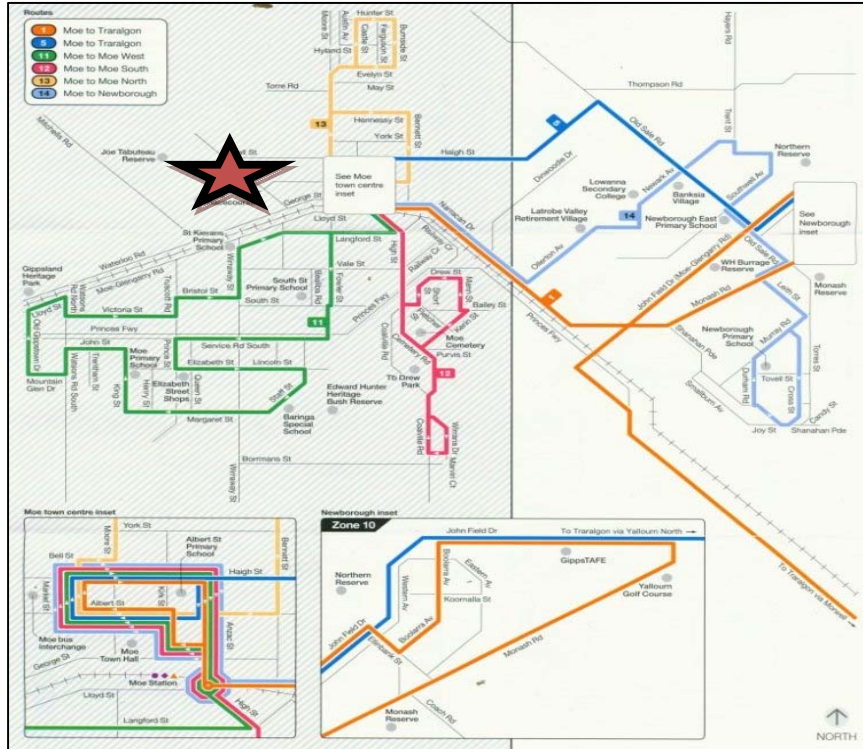
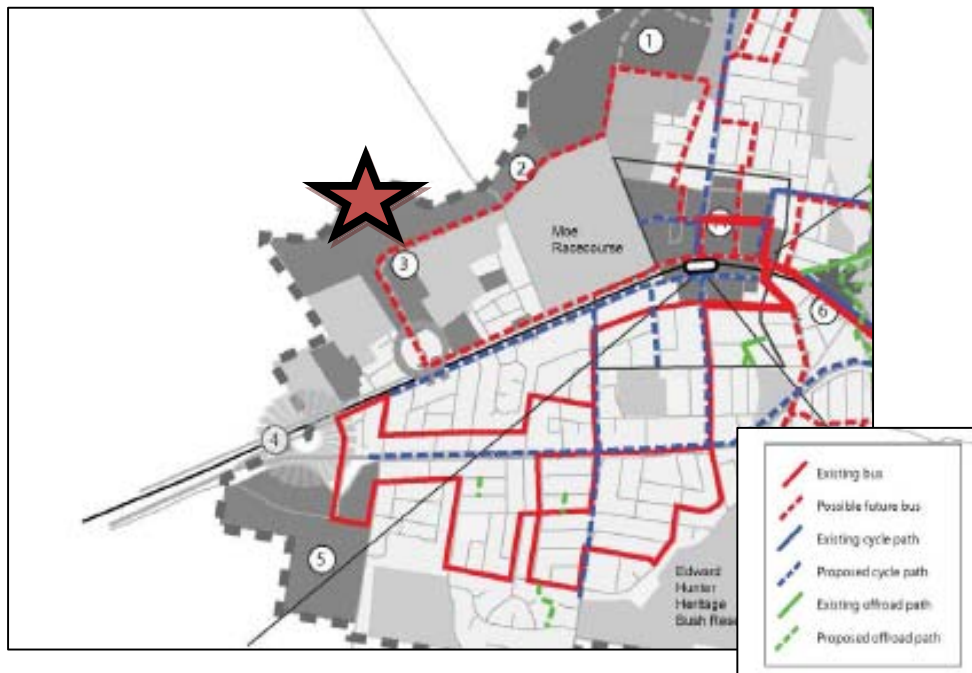


Figure 10: Moe-Newborough Structure Plan – Transport Access & Mobility, August 2007 (zoomed to site)



4.4 Open Space

- ***The location and size of the proposed open spaces that cater for a range of user groups and provide a variety of functions that perform both an active and passive role for recreation, as appropriate.***

The Open Space Plan (Appendix 13) shows the location and size of proposed open space areas. There is a total of 6.79ha of public open space offered across the development plan area, which equates to 14.6% of the overall development area.

Council's adopted Public Open Space Strategy (May 2013) defines open space as:

Publically accessible land that is set aside for recreation, leisure, sport, conservation and/or associated environmental and urban design functions.

The strategy aims to employ the following policy:

In residential areas, new subdivision be levied at 10% of the net developable area as total open public space, of which a minimum of 5% must be unencumbered and where required, suitable for active open space development.

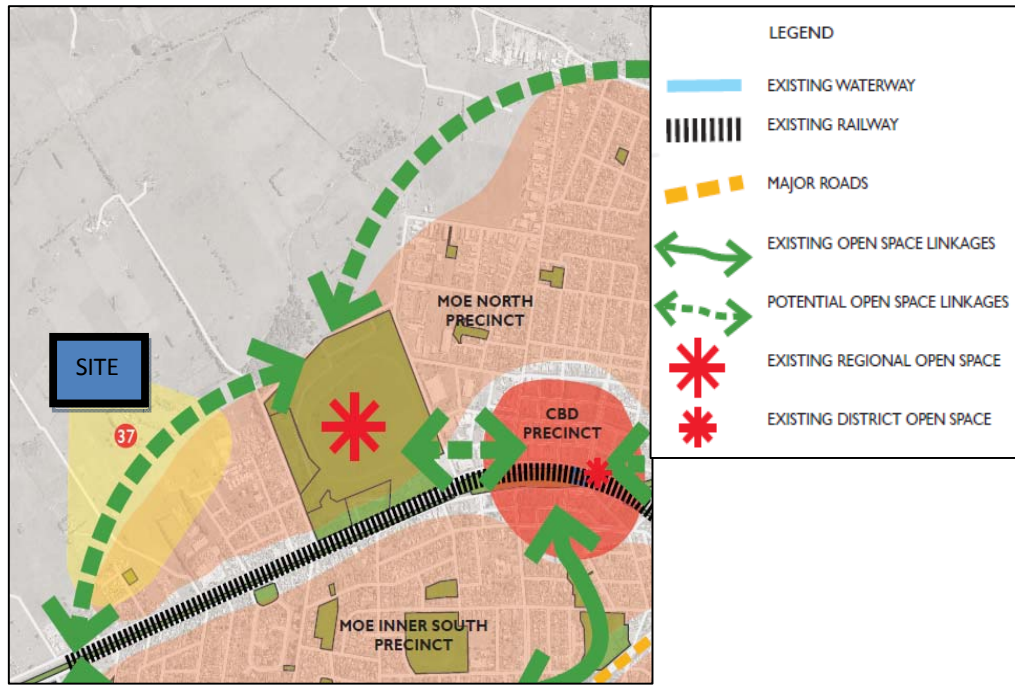
Specifically in relation to Moe, the strategy states the following:

- *Moe/Newborough has considerably more open space than the residential average (i.e. 31.65ha/1,000 people compared to the average of 17.62ha/1,000 people). However, a large portion of this is accounted for by Lake Narracan.*
- *Parkland – General Use and Waterway/Drainage reserves account for a large proportion of total sites provided in Moe/Newborough (i.e. combined 71.1% of all sites), however this contributes only 40.5% of the total area provided.*
- *Sports open space accounts for only 9.4% of the total number of sites, which is below the City as a whole (i.e. 13%), however Sports open space in Moe/Newborough accounts for 25.1% of the total land area provided (compared to 17.6% for the City as a whole).*
- *There are 7 Conservation and Environment sites in Moe/Newborough which account for around one quarter of all hectares of open space (23.8%).*
- *Waterway/drainage reserves account for 10% of the total size of open space available, which is significantly higher than the average for the City as a whole (i.e. 4.1%).*
- *Northern Reserve lacks a strategic plan (i.e. Master Plan) to guide the future development and enhancement of the precinct.*
- *There are limited open space linkages providing connections to the CBD.*

The proposed open space areas create corridors and links in accordance with the intent of the Public Open Space Strategy (May 2013) and the associated Moe/Newborough – Recommendations Plan (see Figure 13). Recommendation 37 aims to:

Ensure open space in future residential growth areas contributes to an integrated network of linear trails and local parks (refer to attached maps). Contributions to be guided by the draft Open Space Policy.

Figure 11| Moe/Newborough – Recommendations Plan (Public Open Space Strategy (May 2013, zoomed to subject site and surrounding area)



Latrobe City Council’s *Public Open Space Strategy* (2013) discusses open space hierarchies and recognises that:

Not all reserves can, or should, be developed to the same standard and that it is desirable to provide a selection of higher quality parks and reserves that provide an enhanced level of amenity, appeal and infrastructure available for community use.

The hierarchy and desired distribution for residential areas is defined in the strategy as follows:

- **Local** - The majority of houses in residential areas should have access to a minimum of 0.5 hectares of public open space within a 500 metre radius.
- **District** - The majority of houses in residential areas should have access to district level public open space within a 3 km radius.
- **Regional** - Each town with a population of over 10,000* people should have access to regional standard public open space venue/s.

The existing open space areas located in proximity to the site are identified in Figure 12. There is a regional open space area, the Joe Tabuteau Reserve as well as numerous local reserves, including the following:

- Local Reserve with playground on Mervyn Street;
- Olympic Park (Vale Street), which offers soccer and outdoor pool;
- Ted Summerton Reserve (Vale Street), which offers football, cricket & netball facilities;
- Bristol Hawker Reserve (Bristol Street)

To ensure that all residents have ready access to public open space areas the Development Plan (Appendix 2) offers a mix of reserves that cater for a range of uses.

The Open Space Plan (Appendix 13) indicates the percentages of encumbered and un-encumbered open space areas across the WRDP area as follows:

Encumbered (MCD, Wetlands, Existing Easements, Approved Native Veg Offset area)	3.99 hectares	8.6%
Un-encumbered	2.80 hectares	6.0%

The area of land set aside as public open space within the WRDP exceeds the minimum requirements of Latrobe's *Public Open Space Strategy* (2013) and will enable a quality subdivision with high levels of amenity to be achieved.

The proposed reserves are intended as local reserves that create corridors and links in accordance with the intent of the Open Space Strategy. They will not only cater for excellent circulation through a series of interlinked paths and trails, but will also be developed into attractive and useable spaces for residents to enjoy. The reserve along the Moe Contour Drain has potential to develop into a significant linear district open space that provides connections back to Moe CBD with possible future development of adjacent land.

The vegetated areas along the MCD provide opportunity for habitat connections and improvements to the existing landscape character of the MCD.

The landscape treatment will include seating areas and shade structures as well as grassed areas for ball kick-around as demonstrated in the Landscape Concept Plan (Appendix 5).

There is an existing playground to the south of the site in a local reserve on Mervyn Street and the open space network will provide links to this reserve as well as enlarge its size.

Where public open space has not been provided, Council may consider a cash in lieu contribution in accordance with the requirements of Section 18 of the *Subdivision Act 1988*.

The Landscape Concept Plan (Appendix 5) indicates the intended overall landscape treatments for public areas to guide future development. The detailed design of these facilities should be considered in detail at the subdivision stage, as this will assist in informing the interface treatment where public open space is shared across different site boundaries.

- **Public open spaces designed to provide:**
 - **Public spaces of a minimum of 0.5 hectares within a 500 metre walking distance of all residents in accordance with Latrobe City Public Open Space Plan 2007, (as amended).**
 - **The inclusion of pedestrian and cycle paths and play equipment, that encourage active recreational opportunities.**

The proposed central reserve offers almost 9000sqm of open space and is located well within 500 metres walking distance to all lots. A series of pedestrian and cycle paths provide accessibility to open space areas within the site and offer links to surrounding areas. There is ample space for play equipment and other forms of active recreation within and proximate to the site. Council's *Public Open Space Strategy* (2013) provides guidance as to the types of facilities to be constructed in the various different types of reserves.

- ***Opportunities for visual surveillance to promote safety of users, through encouraging active frontages, using buildings to frame public spaces and locating open spaces within or adjacent to activity centres where possible.***

Best practice urban design principles have been employed to create a development with excellent levels of visual surveillance over the public realm. The layout offers a mix of reserve interfaces that utilise a combination of perimeter roads and direct lot abutments. It is intended that all future dwellings be orientated to overlook open spaces to maximise surveillance and create a sense of safety throughout the development. The design of the community facility site can be considered in detail at the time application is made to Council.

- ***A landscape concept plan for all open space areas, indicating the location of plantings, pathways, shade, shelter and seating at activity areas as well as at intervals along pathways.***

The Landscape Concept Plan (Appendix 5) shows an indicative plant schedule for public open space areas. Pedestrian links and possible shelter/seating areas are indicated however landscape details should be considered in more detail at the subdivision stage. It is noted there is a restriction on one parcel which provides for an offset area within that site. The WRDP provides for this area to be contained within a future municipal reserve. It is envisaged that the open space areas will be developed to a quality standard to offer a high quality development with sense of identity and character.

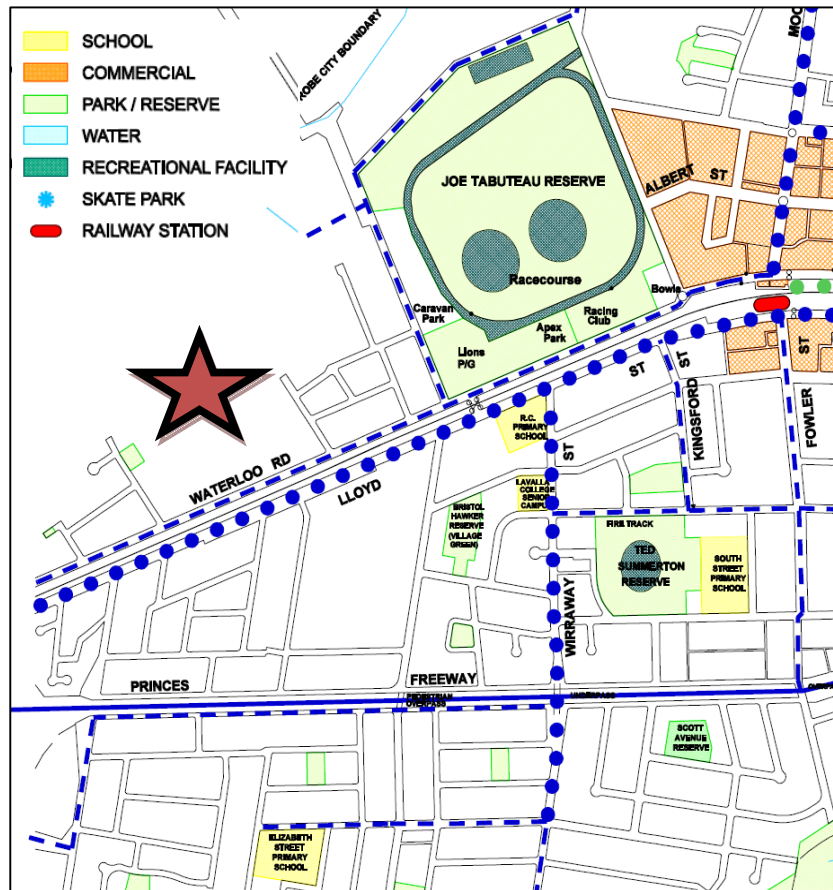
4.5 Community Hubs and Meeting Places

- ***In consultation with relevant agencies and authorities, the provision of appropriate community facilities, including schools, pre-schools, maternal child health centres, senior citizen centres and general community centres within a walkable range of 400- 800 metres across large subdivisions.***

The subject development plan indicates the potential for 521 lots which does not warrant provision of additional major education or community facilities given the location of the site on the edge of the established Moe township. A number of schools are located within close proximity to the site as shown in Figure 12 below.

A possible local community centre is however indicated centrally within the Development Plan area where it is within 500m of all lots and can be developed privately (ie. not Council owned) should the demand arise. The land is zoned Residential 1 whereby a range of community facilities are permitted uses.

Figure 12 | Surrounding Education facilities



- **Provision for access and social interaction, particularly where this encourages physical activity. For example:**
 - Consider the need for public amenities, including toilets and bicycle parking at key destinations in accordance with the Latrobe City Public Toilet Strategy 2006 (as amended) and Latrobe City Bicycle Plan 2007-2010 (as amended).
 - The pattern and location of pedestrian and bicycle paths should provide safe and practical access to and from community hubs and meeting places.
 - Spaces should be designed to accommodate community events and cultural programs including local arts activities and other festivals.

The integrated nature of the proposed residential areas and public open spaces encourages social interaction and physical activity, particularly through the road layout and lot arrangement.

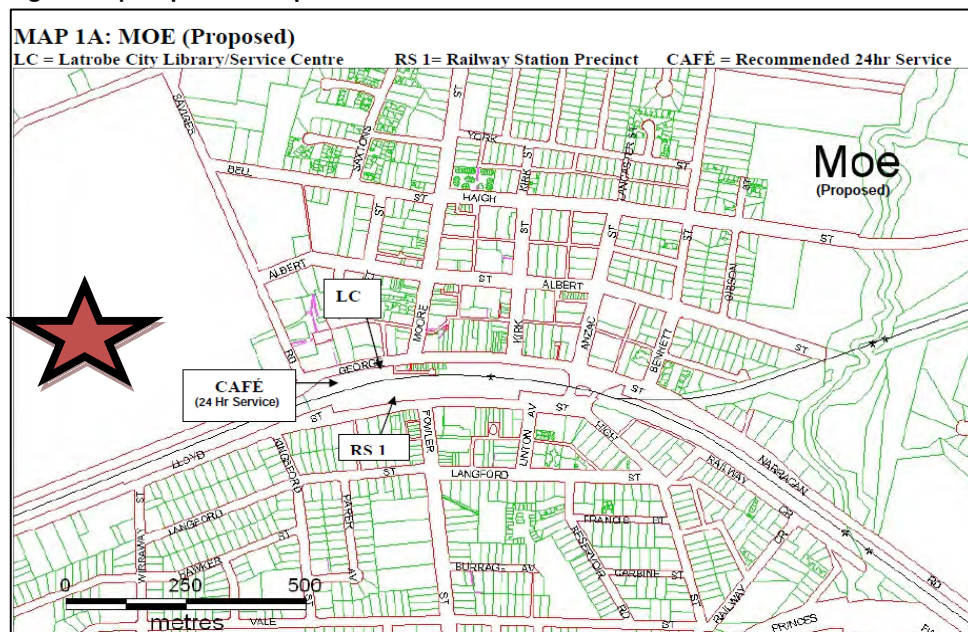
The Mobility Plan (Appendix 4) indicates the envisaged pedestrian/cycle network. It provides links to on road bicycle paths proposed as part of the Latrobe City Bicycle Plan.

The proposed circulation route offers safe and practical access to and from the local community centre site and links it with open space areas. It is co-located with open space and a medium density site to provide a community hub and meeting place.

The proposed shared path network also provides various links to existing areas whereby access to the Moe Township is available.

The Latrobe City Public Toilet Strategy (LCPTS) identifies existing toilet facilities which include the City Library, the Moe Railway Station, Joe Tabuteau Reserve, Ted Summerton Reserve and the Moe Botanical Gardens. Figure 13 indicates proposed toilet facilities, none of which are on the subject land. Given that the proposed open space areas are 'local parks' the LCPTS does not require the installation of facilities.

Figure 13 | Proposed new public toilet facilities



4.6 Flora and Fauna

- *In consultation with the Department of Sustainability and Environment, a flora and fauna survey, prepared by a suitably qualified expert, which includes but is not limited to species surveys for Growing Grass Frog (*Litoria raniformis*) and Dwarf Galaxias (*Galaxiella pusilla*), and measures required to protect the identified species.*

Paul Kelly & Associates have prepared an Ecological Features & Constraints report (EFC) (Appendix 12) for the subject land. The assessment lists the significant fauna species potentially occurring within the area as follows:

Species Name	Common Name	Likelihood of presence on site
<i>Anthochaera phrygia</i>	Regent Honeyeater	Unlikely, habitat absent on site
<i>Botaurus poiciloptilus</i>	Australasian Bittern	Unlikely, sub optimal habitat on site
<i>Galaxiella pusilla</i>	Eastern Dwarf Galaxias	Possibly in Contour drain; recent record from drain downstream. Assume presence in drain.
<i>Rostratula australis</i>	Australian Painted Snipe	Unlikely, sub optimal habitat on site
<i>Prototroctes maraena</i>	Australian Grayling	Unlikely in Moe Contour Drain; no recent records from vicinity.
<i>Potorous tridactylus</i>	Long-nosed Potoroo	Unlikely, sub optimal habitat on site; no records from the vicinity.
<i>Lathamus discolor</i>	Swift Parrot	Unlikely, habitat absent on site
<i>Litoria raniformis</i>	Growling Grass Frog	Unlikely; sub optimal habitat on site. No records from the vicinity. Potential for use of the drain as dispersal passage.
<i>Heleioporus australiacus</i>	Giant Burrowing Frog	Unlikely, habitat grossly modified, majority of moist areas on site extensively pugged.
<i>Isoodon obesulus</i>	Southern Brown Bandicoot	Unlikely, sub optimal habitat on site, no records from vicinity
<i>Pseudomys fumeus</i>	Smoky Mouse	Unlikely, habitat absent on site
<i>Pteropus poliocephalus</i>	Grey-headed Flying-fox	Unlikely, No records for the vicinity may overfly.
<i>Rostratula australis</i>	Australian Painted Snipe	Unlikely incidental visitor. Habitat on site modified

The survey further states that:

No EPBC or FFG listed fauna species were observed during field investigations.

And

*The riparian on the site and aquatic vegetation in the drain adjoining the site is considered to be the most likely site for the presence of any threatened species of fauna. The riparian habitat was highly modified by the dominance of exotic vegetation particularly the introduced Cumbungi *Typha latifolia* but more importantly the extensive pugging and trampling of the vegetation and waterway by cattle. The water of the drain was turbid most likely emanating from catchment runoff and cattle grazing close to the drain.*

It is considered that the site does not contain critical habitat for any threatened species that potentially occur in the vicinity. However, there is potential for both Growling Grass Frog (GGF) and Dwarf Galaxias to utilise the adjoining drain. For the purposes of management it is assumed that both species may at times use the drain.

The development sees provision of a large open space area that encompasses the MCD and as such allows protection of significant fauna species. Revegetation will enhance habitat values and can be implemented as part of the detailed landscape design at the subdivision stage. The offset requirements imposed from the Mitchell Grove development are a relevant consideration for how this area could be vegetated and enhanced. Detailed studies may be required to be undertaken for the Dwarf Galaxias and Growling Grass Frog at the subdivision stage if required, however it should be noted that regardless of whether studies are required, opportunity exists to create suitable habitat along the Moe Contour Drain for these species, similar to the measures required for the adjoining Mitchell Grove development.

- ***An assessment of any native vegetation to be removed having regard to Victoria’s Native Vegetation Management: A Framework for Action, including how it is proposed to protect and manage any appropriate native vegetation.***

The majority of the site is cleared, however it does contain one remnant patch of native vegetation (see Figure 14 below). The EFC states that:

The approved removal of this remnant patch will require an offset of 0.24 Hha of High Conservation Significance EVC 83 – Swampy Riparian Woodland or its approved like-for-like equivalent.

Figure 14 | Area of intact native vegetation



It further states that:

Despite this conservation significance the remnant patch is of low quality and has low species richness and structural diversity. In its current state, it does provide limited sediment management function between the grazed land and the Contour Drain and a refuge for small bush birds. It is considered that the removal and replacement of this remnant patch with a more efficient storm water/drainage facility, preferably utilising indigenous plants, would improve water quality discharge to the Contour Drain.

It further states that:

The revegetation of the reserved area adjoining the drain with indigenous species will complement the conservation values of the storm water/drainage facility. If this vegetation (HZ1) was approved for removal it would require offsets equivalent to approximately 0.24 Habitat Hectares of High Conservation Significance Swampy Riparian Complex vegetation or its approved like-for-like equivalent in the Gippsland Plain Bioregion. It is suggested that the offsets could be met, by agreement with Council, by revegetation works associated with the storm water/drainage facility and the drain reserve.

The presence of Dwarf Galaxias in the Contour Drain is assumed. As such there will be a planning requirement to ensure that Galaxias habitat is not compromised.

A similar assumption was made for the presence of Galaxias habitat in the adjoining Mitchell Run development. The Planning Permit issued for that site (Latrobe 2010/354) includes two conditions that specifically relate to the conservation of Galaxias. In summary these conditions require the preparation and approval of a Construction Management Plan to identify and mitigate impacts on existing populations of Dwarf Galaxias and that the design and construction of wetlands on the site address the specified habitat requirements of the species.

Wetland design which accounts for Dwarf Galaxias could include complementary habitat for a range of amphibians including GGF.

Revegetation works on the site should consider using Strzelecki Gums in the planting mix. An EPBC referral of the development to the federal Minister for the Environment is not considered essential but may provide improved certainty to the construction program.

An area at the northern end of the central parcel is allocated for native vegetation offsetting in accordance with the Vegetation Offset Management Plan – Mitchell Grove, Moe which is approved by Latrobe City Council and registered on the title to that parcel.

The patch of native vegetation can be factored into the detailed design at the time of subdivision of that lot to ensure that an appropriate environmental outcome can be achieved. Flexibility is provided in the layout to investigate the impacts on this patch from either the road network, open space design and wetland design. Any planning permit application for that land will need to have regard to the three step approach for native vegetation removal and the existing offset area.

Opportunity exists at the subdivision stage to ensure that appropriate regard has been given to the three step approach to native vegetation removal. There is adequate flexibility within the Development Plan documentation to ensure that the detailed design of required infrastructure applies this three step approach. Advice should be provided with future subdivision applications as to how opportunities to avoid and minimise impacts on native vegetation have been considered in the design detail.

- **Regard must be had to the West Gippsland Native Vegetation Plan 2003.**

In accordance with the West Gippsland Native Vegetation Plan, the Development Plan will seek an improved environmental outcome, achieved primarily through the improvements to the MCD and works required for the protection and enhancement of habitat for the Dwarf Galaxias and Growling Grass Frog.

- **Any management plan should take into account that the Strzelecki Bioregion is one of Victoria’s most fragmented Bioregions and address this as a consideration.**

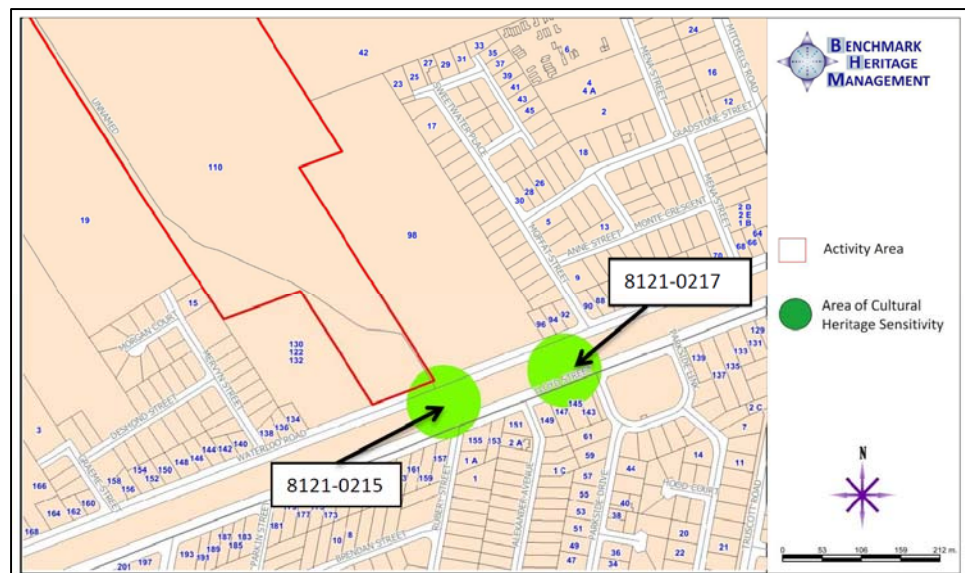
The Development Plan Overlay – Schedule 5 covers a range of areas within the municipality of Latrobe City. It is noted that the subject land is not contained within the Strzelecki Bioregion; rather it is within the Gippsland Plain Bioregion as outlined in the EFC (Appendix 12).

4.7 Cultural Heritage

- **A cultural heritage assessment including how cultural heritage values will be managed.**

A registered aboriginal place is located within 50m of the land within the Gippsland Rail Reserve and as such part of the land is considered to be culturally sensitive (see Figure 15). A Desktop, Standard and Complex Assessment has been prepared by Benchmark Heritage Management for the land at 110-120 Waterloo Road (the central parcel) and is attached at Appendix 8.

Figure 15 | Areas of Cultural Heritage Sensitivity



The Desktop study, in part concluded that:

The local distribution of Aboriginal archaeological sites clearly indicates that Indigenous people established campsites over a wide area of the alluvial plains and adjacent to existing watercourses. The archaeological sites which have been recorded in previous studies are indicative of past campsites, established by Indigenous people exploiting resources in the riverine environments, as well as resources which would have been available on the grassy plains.

Because of the close proximity of the Activity Area to the riverine environments of the Moe Swamp it is possible that Indigenous people would have established campsites in the local area, including the Activity Area, during the past. This is supported by the large number of archaeological sites which have been found in the locality surrounding the Activity Area.

There is, therefore, some potential for remains of past Indigenous campsites to occur within the Activity Area. Archaeological site types are most likely to comprise of surface scatters of stone artefacts and scarred trees. Any surface or near surface archaeological sites within the Activity Area, are likely to be highly disturbed by land clearance, grazing, slope wash and siltation.

The Standard study, in part concluded that:

Due to a lack of ground surface visibility in the Activity Area and the potential for buried archaeological sites within the Activity Area, the standard assessment has determined that there is a requirement to undertake a further complex assessment for this activity, prior to the preparation of a CHMP document.

The Complex Assessment, in part concluded that:

*No Aboriginal cultural material was noted in the deposits.
And*

The results indicate that there are no Aboriginal cultural remains within the upper soil profile; and hard clay was consistently found below this level. The complex assessment has revealed that the Activity Area is of low potential sensitivity for Aboriginal cultural deposits.

A CHMP will be required to be prepared for the eastern parcel (98 Waterloo Road) at subdivision application, however the western parcel is not considered to be culturally sensitive under the *Aboriginal Heritage Regulations 2007*.

4.8 Staging and Implementation

- ***The development plan should be prepared with an appropriate level of community participation as determined by the Responsible Authority.***

The overall Development Plan has undergone a lengthy design process which has involved consultation with the Latrobe City Council, other statutory authorities and the Growth Areas Authority (GAA).

The final Development Plan (Appendix 2) has considered all aspects of applicable policy and responded to site conditions appropriately.

- ***An implementation plan must be submitted as part of the development plan, indicating the proposed staging of the development.***

An Implementation Plan has been prepared and is attached at Appendix 3, it is designed to ensure the outcomes of the WRDP are met logically and effectively.

Latrobe City Council and other project stakeholders are not bound by the Implementation Plan, rather should be guided by the action items. Alterations to the plan would require consent of all stakeholders and Latrobe City Council.

A Staging Plan forms part of the Implementation Plan and indicates large stage areas that may be sub-staged at the time of planning permit application. They factor in existing title boundaries and land ownership, and assume that development of some stages is reliant upon prior development of other stages.

The residential development is proposed to be undertaken in a logical fashion, both in response to market demand and ease of infrastructure provision. Proposed public open space areas are included within the stages to enable their timely creation and development. Where reserves and associated landscaping cross stage boundaries they are to be developed in relevant stages by the developer, with detail provided as to how these reserves will be integrated at the time the adjoining development proceeds.

The development of the Mitchell Grove Estate to the east of the WRDP also has a bearing on the implementation plan, specifically in relation to the drainage strategy. It notes that:

Drainage from stage 1 is to be connected into the Wetlands to be constructed in stage 2 of the Mitchell Grove Estate and is dependent on Stages 3-5 of the Mitchell Grove Estate being constructed. Alternatively if this is not achievable the waterway reserve area abutting the Moe Contour Drain is to be constructed as required to service the development. This is to be generally in accordance with the surface water management strategy prepared by Neil Cragie dated October 2010, and review by Water Technologies dated February 2013. The existing drainage line (Waterloo Drain) within the site is also to be piped where applicable.

And

Drainage from Stage 2 is to be connected into the Wetlands to be constructed in stage 7 of the Mitchell Grove Estate. If the Mitchell Grove Estate wetlands are not constructed at the time of development or detail designs show that minimum grades to these wetlands cannot be achieved the potential wetland indicated within the waterway reserve area abutting the Moe Contour Drain is to be constructed as required to service the development. This is to be generally in accordance with the surface water management strategy prepared by Neil Cragie dated October 2010, and review by Water Technologies dated February 2013.

The wetlands contained within the extent of land covered by the WRDP are not to be developed until proposed stages 4 and 5 in accordance with the Implementation Plan. Given that the is only required to treat and retard runoff from stages 4 and 5 the required works will be funded and undertaken wholly by the owners of the western parcels at the time these stages are developed. The reserve will be transferred to Council and once standard maintenance periods are complete, will become Council's responsibility as the responsible authority to maintain.

- ***The approved Development Plan may be amended to the satisfaction of the responsible authority***

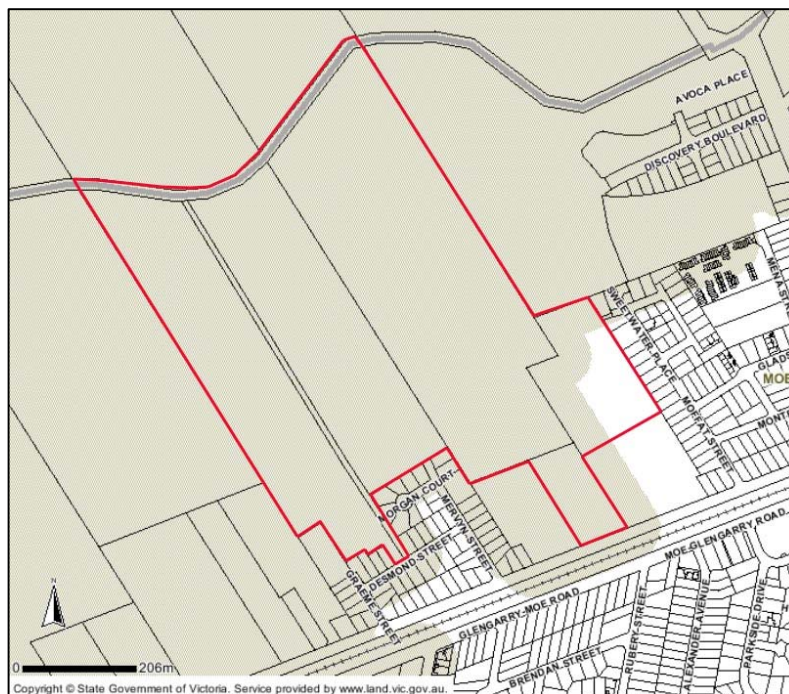
Whilst a range of plans have been prepared to support the WRDP, it is intended that the only plan to be adopted is the Development Plan, at Appendix 2. This outlines the intended development layout without going into too much fine grained detail to avoid the requirement for the Development Plan to be amended for minor variations.

5 Bushfire Considerations

The majority of the development area is designated as a *Bushfire Prone Area* (See Figure 16) whereby special bushfire construction requirements apply. In these areas the minimum construction level imposed by *AS3959 – 2009 Construction of buildings in bushfire-prone areas* is Bushfire Attack Level (BAL) 12.5. The BAL is increased as the bushfire hazard is increased, which in turn increases building cost and as such it is favourable for the lowest BAL possible to be applied.

No bushfire planning requirements are applicable however the WRDP has appropriately considered bushfire hazard to enable ease of future development on each lot post subdivision.

Figure 16 | Bushfire Prone Area Mapping (land.vic.gov.au)



The likely form of bushfire attack to the development plan area is direct from grassfire either to houses or to the elements around housing, particularly whilst areas of the DP remain undeveloped. The staging of the WRDP responds to the potential grassfire hazard as identified in Figure 17. Staging of individual subdivisions will need to have regard to the grassfire hazard and can be conditioned accordingly.

At the completion of the development, a grassland hazard will remain to the west as the development plan area is the urban/rural interface. The residential module along this interface offers suitable depth to enable construction of a future dwelling to an appropriate BAL. Depending on the size of the dwelling, a BAL 12.5 is achievable for these future lots (See Figure 18). In addition the WRDP recommends installation of a Colorbond fence along this interface to aid in reduction of spread of grassfire.

Figure 17 | Bushfire Considerations

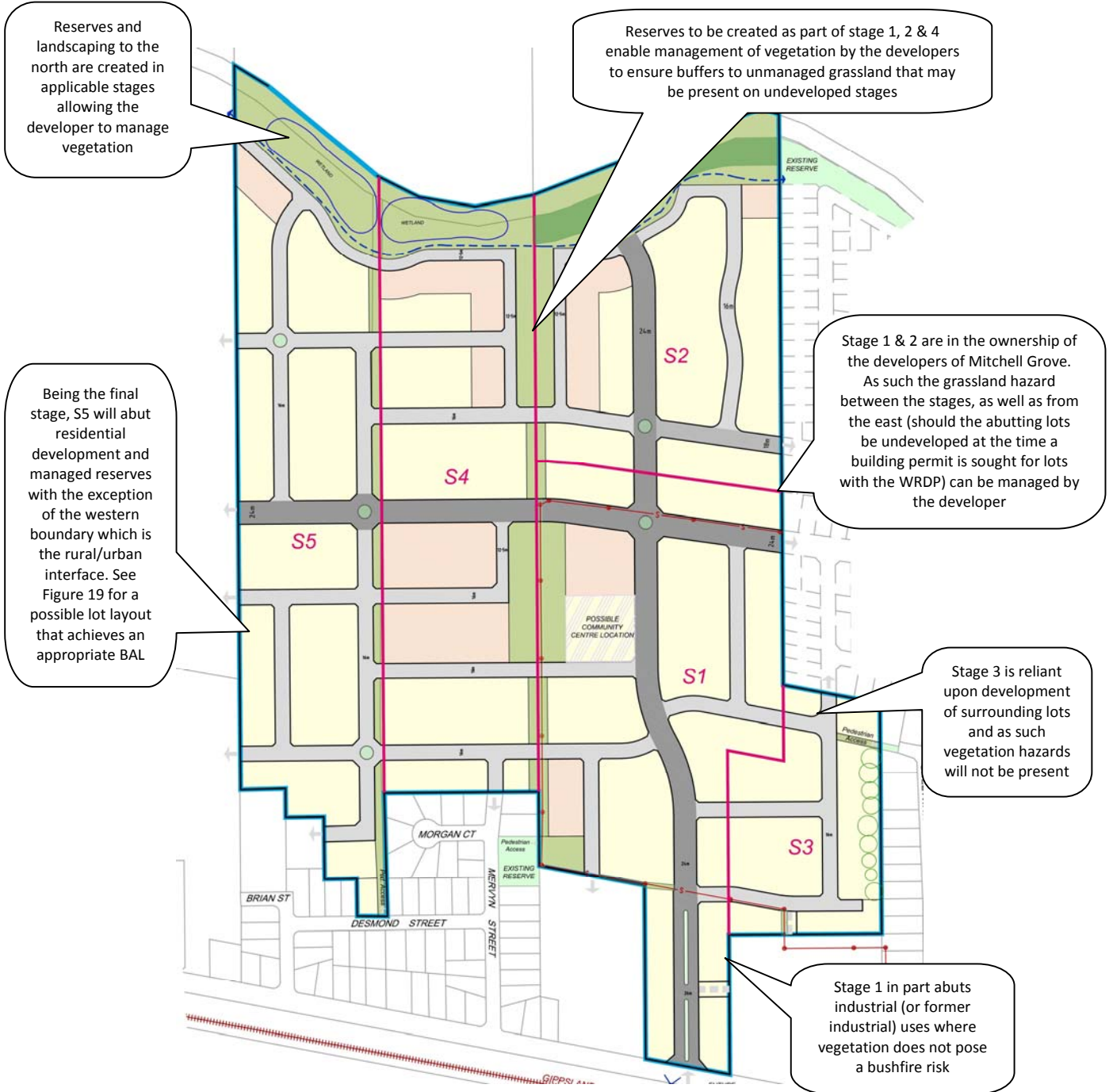
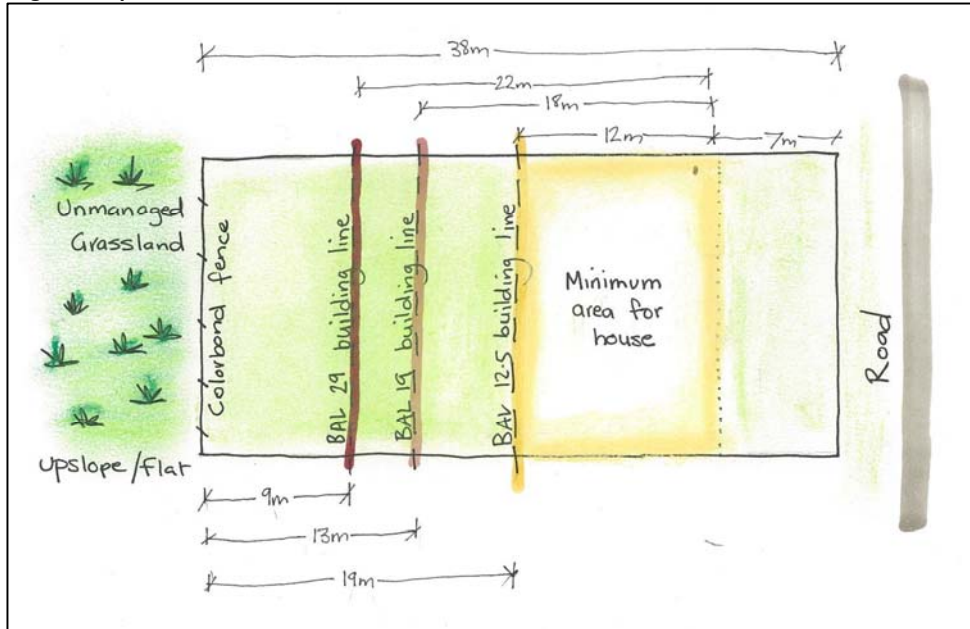


Figure 18 | Urban/Rural Interface BAL Consideration



In addition to grassfire, new landscaping, particularly the native vegetation offset area adjacent to the MCD may present a bushfire hazard to future lots. The offset area is to be planted and maintained in accordance with an approved vegetation management plan to ensure that bushfire risk is reduced to an acceptable level. The offset area within the WRDP, together with the offset area of adjacent Mitchells Grove equate to an isolated patch of vegetation of approximately 1ha in size. Future landscaping within reserves along the northern side of the WRDP must consider bushfire risk. At detailed design, landscaping should offer separation between vegetation and utilise low risk and non-combustible features where possible. These include but are not limited to managed lawn, footpaths, rocks and water bodies.

6 Conclusion

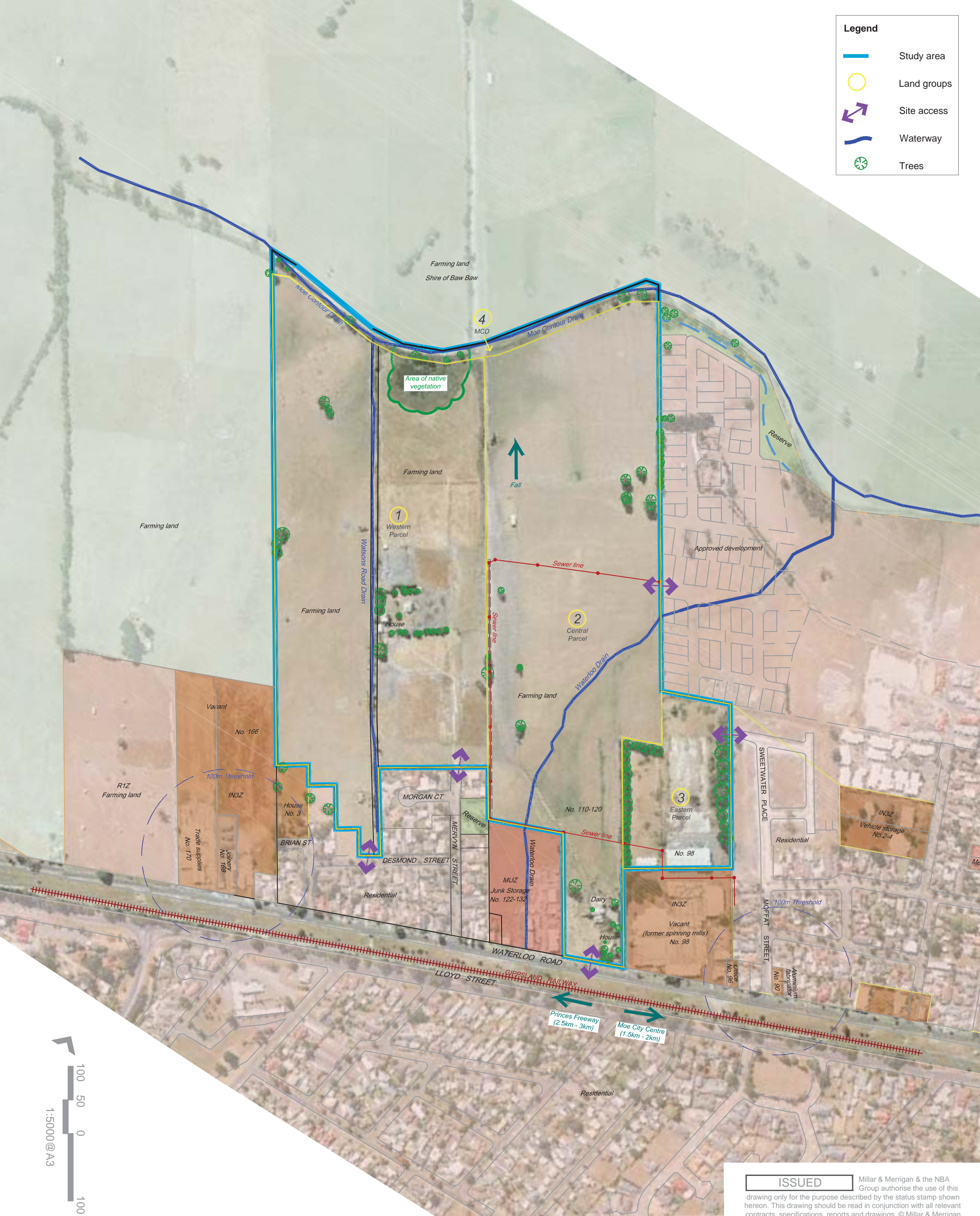
The Waterloo Road Development Plan (WRDP) indicates the form and conditions for future residential use and development. Future subdivision application must consider and be generally in accordance with the WRDP.

NBA Group Pty Ltd

7 Appendix 1 – Site Conditions
Reference: 16315DP1

Legend

- Study area
- Land groups
- ↔ Site access
- Waterway
- Trees



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SITE CONDITIONS

Moe Urban Growth Area
 Waterloo Road, Moe
 Latrobe City Council
 16315DP1
 Version 2

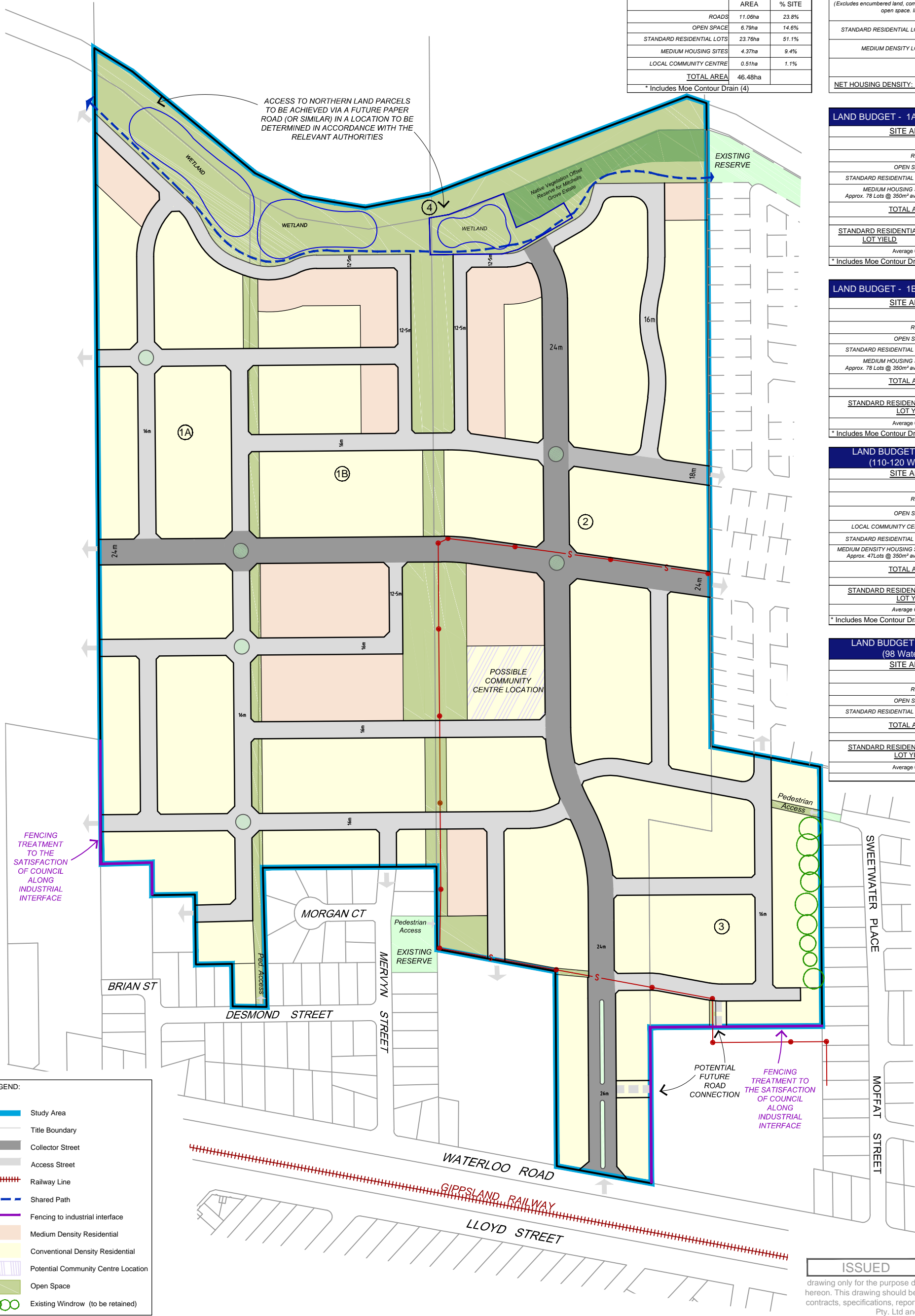
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8 Appendix 2 – Development Plan

Reference: 16315DP2



OVERALL LAND BUDGET*		
SITE AREA	AREA	% SITE
ROADS	11.06ha	23.8%
OPEN SPACE	6.79ha	14.6%
STANDARD RESIDENTIAL LOTS	23.76ha	51.1%
MEDIUM HOUSING SITES	4.37ha	9.4%
LOCAL COMMUNITY CENTRE	0.51ha	1.1%
TOTAL AREA	46.48ha	

* Includes Moe Contour Drain (4)

OVERALL LOT YIELD	
NET DEVELOPABLE AREA (Excludes encumbered land, community facility & public open space. Includes lots and roads)	39.19ha
STANDARD RESIDENTIAL LOTS @ 600m ² average	396
MEDIUM DENSITY LOTS @ 350m ² average	125
TOTAL LOTS	521
NET HOUSING DENSITY: 13 DWELLINGS PER HECTARE	

LAND BUDGET - 1A: WESTERN PARCEL*		
SITE AREA	AREA	% SITE
ROADS	2.97ha	25.6%
OPEN SPACE	1.82ha	15.7%
STANDARD RESIDENTIAL LOTS	6.55ha	56.5%
MEDIUM HOUSING SITE - Approx. 78 Lots @ 350m ² average	0.25ha	2.2%
TOTAL AREA	11.59ha	

STANDARD RESIDENTIAL LOT YIELD	No. of Lots
Average 600m ²	109

* Includes Moe Contour Drain (4)

LAND BUDGET - 1B: WESTERN PARCEL*		
SITE AREA	AREA	% SITE
ROADS	2.12ha	20.7%
OPEN SPACE	1.89ha	18.4%
STANDARD RESIDENTIAL LOTS	3.78ha	36.8%
MEDIUM HOUSING SITE - Approx. 78 Lots @ 350m ² average	2.48ha	24.2%
TOTAL AREA	10.27ha	

STANDARD RESIDENTIAL LOT YIELD	No. of Lots
Average 600m ²	63

* Includes Moe Contour Drain (4)

LAND BUDGET - 2: Central Parcel (110-120 Waterloo Road)*		
SITE AREA	AREA	% SITE
ROADS	5.16ha	24.7%
OPEN SPACE	3.06ha	14.6%
LOCAL COMMUNITY CENTRE	0.51ha	2.4%
STANDARD RESIDENTIAL LOTS	10.56ha	50.5%
MEDIUM DENSITY HOUSING SITE - Approx. 47 Lots @ 350m ² average	1.64ha	7.8%
TOTAL AREA	20.92ha	

STANDARD RESIDENTIAL LOT YIELD	No. of Lots
Average 600m ²	176

* Includes Moe Contour Drain (4)

LAND BUDGET - 3: Eastern Parcel (98 Waterloo Road)		
SITE AREA	AREA	% SITE
ROADS	0.79ha	21.3%
OPEN SPACE	0.05ha	1.3%
STANDARD RESIDENTIAL LOTS	2.87ha	77.4%
TOTAL AREA	3.70ha	

STANDARD RESIDENTIAL LOT YIELD	No. of Lots
Average 600m ²	48

LEGEND:

- Study Area
- Title Boundary
- Collector Street
- Access Street
- Railway Line
- Shared Path
- Fencing to industrial interface
- Medium Density Residential
- Conventional Density Residential
- Potential Community Centre Location
- Open Space
- Existing Windrow (to be retained)



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DEVELOPMENT PLAN

Moe Urban Growth Area
Waterloo Road, Moe
Latrobe City Council
16315DP2
Version 5



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9 Appendix 3 – Implementation Plan

Millar Merrigan – 18th October 2013

Millar | Merrigan

Land Development Consultants



Waterloo Road, Moe

Implementation Plan

Development Plan for land parcel on Waterloo Road, Moe

Municipality: Latrobe City Council

Prepared by: Millar Merrigan in consultation with
NBA Group Pty Ltd

Reference: 16315/8.1

Date: 18 October 2013

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Contents

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2	Implementation Stages and Actions	7

Appendices

Appendix A – Staging Plan

Appendix B – Site Conditions

1 Introduction

Overview

The Waterloo Road Development Plan (the WRDP) has been prepared in accordance with the Development Plan Overlay Schedule 5 of the Latrobe planning scheme to guide future development of the land which is currently Residential Zone 1. The WRDP has been devised with consideration of the following:

- Land use and subdivision
- Infrastructure constraints
- Stormwater Objectives
- Moe Contour Drain and existing waterways
- Open Space
- Flora and Fauna
- Vegetation offsets
- Existing Development
- Cultural Heritage

Refer to Appendix B for site conditions plan. The Development Plan is shown in Figure 1 below.

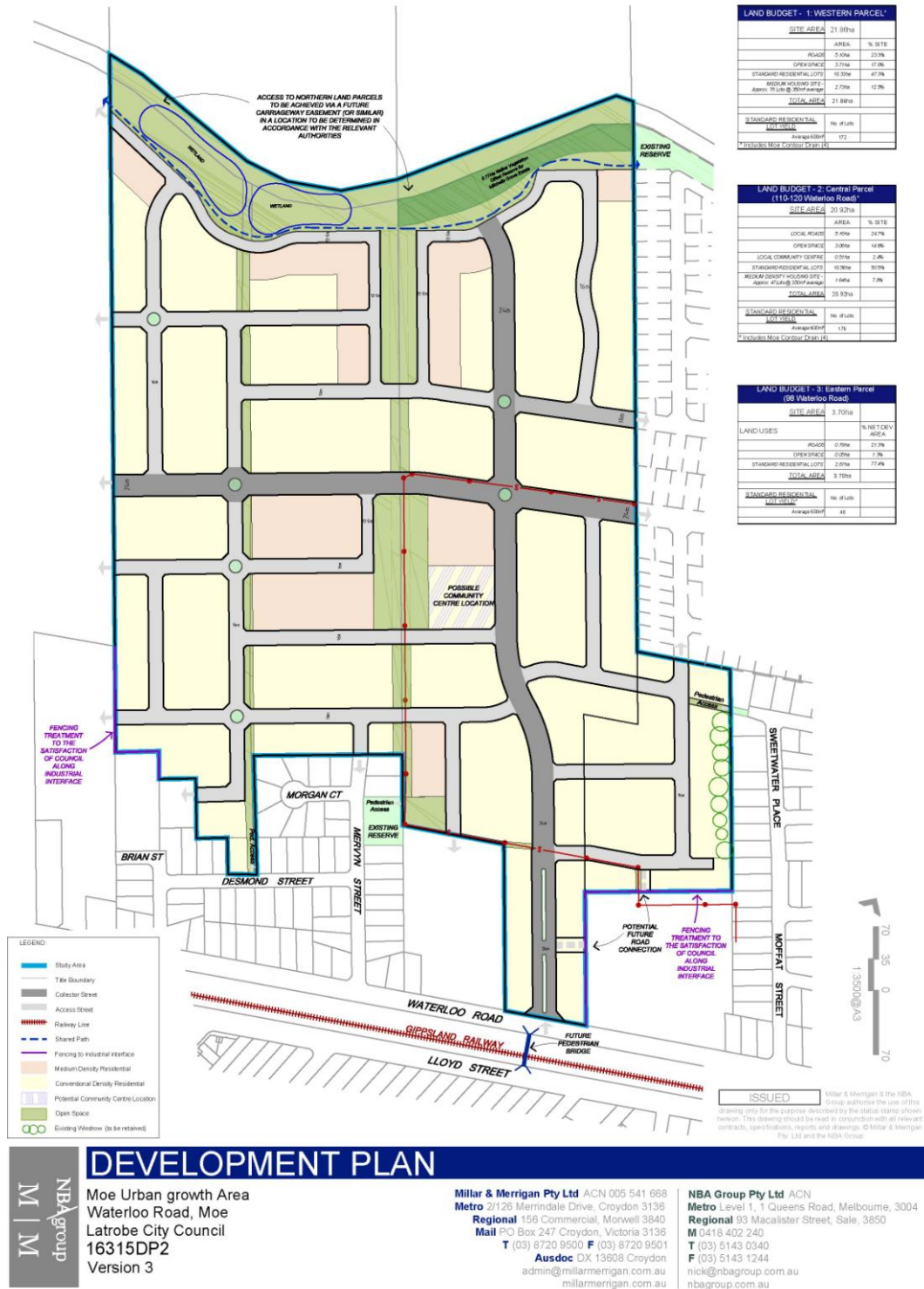


Figure 1 - Waterloo Road Development Plan

Also considered was the Mitchell Grove Estate which is currently under construction immediately to the east of the development plan area. The staging plan is shown in Figure 2.

2 Implementation Stages and Actions

A Staging Plan has been prepared (Appendix A) which illustrates large stage areas that may be sub staged at the time of planning permit application/development. The stages have been developed into 5 (S1 to S5) and factor in existing title boundaries and ownership. It is noted that to an extent these stages could be developed out of sequence to the numbering shown, however it would be expected that S2 and S3 would be dependent on the prior development of S1 and that S5 would be dependent on the prior development of S2 or S1 and S4. If land in the western part of the precinct is to be developed prior to the eastern parcels, and as such additional road linkages are required, this option would need to be further considered by Council. If this change is considered to not be in accordance with the approved Development Plan, an amended Development Plan may be required at this time. The amended plan may also be subject to further community consultation.

The development of the Mitchell Grove Estate immediately to the east of the subject site also has a bearing on the implementation of the WRDP in particular the drainage strategy. This is reflected within the implementation stages and actions below.

Table 1 - Implementation Plan

Action	Stakeholders	Responsibility
<i>S1 – estimated 1 to 3 years</i>		
Residential 1 Zoned Land Developed.	Latrobe City Council Referral Authorities	Land Owners Developers
Sewerage for stage 1 can be connected to the existing trunk main which traverses the site.	Gippsland Water	Land Owners Developers
The development of any land directly abutting designated public open space areas will trigger the construction and delivery of the public open space area (within the stage boundary). Those public open space areas that cross stage boundaries are to be developed in the relevant stage by the relevant developer, at their expense.	Latrobe City Council	Land Owners Developers

Drainage from stage 1 is to be connected into the Wetlands to be constructed in stage 2 of the Mitchell Grove Estate and is dependent on Stages 3-5 of the Mitchell Grove Estate being constructed. Alternatively if this is not achievable the waterway reserve area abutting the Moe Contour Drain is to be constructed as required to service the development. This is to be generally in accordance with the Surface Water Management Strategy prepared by Neil Craigie dated October 2010, and review by Water Technologies dated February 2013. The existing drainage line (Waterloo Drain) within the site is also to be piped where applicable.	Latrobe City Council Mitchell Grove Estate WGCMA	Land Owners Developers
Upon completion of any maintenance period required by the planning permit, open space and reserves are to be transferred to Latrobe City Council.	Latrobe City Council	Land Owners Developers
Industrial Interface; as can be seen in the Site Conditions Plan some of the land abuts light industry. Appropriate fencing will be required at these interfaces.	Latrobe City Council	Land Owners Developers
<i>S2 – estimated 3 to 5 years</i>		
Carriageway easement to provide access to area north of the Moe Contour Drain.	Latrobe City Council	Land Owners Developers
Residential Zoned Land Developed.	Latrobe City Council Referral Authorities	Land Owners Developers
Sewerage for stage 2 will require the installation of a new Sewer Pumping Station within the Mitchell Grove Estate. This will also be utilised in the servicing of stages 4 and 5.	Gippsland Water Mitchell Grove Estate	Land Owners Developers
The development of any land directly abutting designated public open space areas will trigger the construction and delivery of the public open space area (within the stage boundary). Those public open space areas that cross stage boundaries are to be developed in the relevant stage by the relevant developer, at their expense.	Latrobe City Council	Land Owners Developers

Drainage from Stage 2 is to be connected into the Wetlands to be constructed in stage 7 of the Mitchell Grove Estate. If the Mitchell Grove Estate wetlands are not constructed at the time of development or detail designs show that minimum grades to these wetlands cannot be achieved the potential wetland indicated within the waterway reserve area abutting the Moe Contour Drain is to be constructed as required to service the development. This is to be generally in accordance with the Surface Water Management Strategy prepared by Neil Craigie dated October 2010, and review by Water Technology dated February 2013.	Latrobe City Council Mitchell Grove Estate WGCMA	Land Owners Developers
Vegetation Offset Reserve to be created along Moe Contour Drain.	Latrobe City Council DEPI	Land Owners Developers
Upon completion of any maintenance period required by the planning permit, open space and reserves are to be transferred to Latrobe City Council.	Latrobe City Council	Land Owners Developers
<i>S3 – estimated 3 to 5 years</i>		
Residential Zoned Land Developed.	Latrobe City Council Referral Authorities	Land Owners Developers
Sewerage for stage 3 can be connected to the existing sewer constructed as part of stage 1 or directly into the internal sewers of the Mitchell Grove Estate.	Gippsland Water	Land Owners Developers
The development of any land directly abutting designated public open space areas will trigger the construction and delivery of the public open space area (within the stage boundary).	Latrobe City Council	Land Owners Developers
Drainage from Stage 3 is to be connected into the Wetlands to be constructed in stage 2 of the Mitchell Grove Estate.	Latrobe City Council	Land Owners Developers
Upon completion of any maintenance period required by the planning permit, open space and reserves are to be transferred to Latrobe City Council.	Latrobe City Council	Land Owners Developers
<i>S4 – estimated to be 5 years and beyond</i>		
Residential Zoned Land Developed.	Latrobe City Council Referral Authorities	Land Owners Developers

Sewerage for southern half of stage 4 will connect to the existing trunk main which is traverses the site through stage 1. The northern portion of stage 4 will be connected to the western end of stage 2 which relies upon the installation of a pump station within the Mitchell Grove Estate.	Gippsland Water	Land Owners Developers
The development of any land directly abutting designated public open space areas will trigger the construction and delivery of the public open space area (within the stage boundary). Those public open space areas that cross stage boundaries are to be developed in the relevant stage by the relevant developer, at their expense.	Latrobe City Council	Land Owners Developers
Drainage from Stage 4 is to be connected into the Wetlands to be constructed adjacent with to the Moe Contour Drain. This is to be generally in accordance with the Surface Water Management Strategy prepared by Neil Craigie dated October 2010, and review by Water Technology dated February 2013.	Latrobe City Council WGCMA	Land Owners Developers
Upon completion of any maintenance period required by the planning permit, open space and reserves are to be transferred to Latrobe City Council.	Latrobe City Council	Land Owners Developers
Industrial Interface; as can be seen in the Site Conditions Plan some of the land abuts light industry. Appropriate fencing will be required at these interfaces.		Land Owners Developers
Any vegetation offsetting required as part of stage 4 is to be provided for within the waterway reserve abutting the Moe Contour Drain.	Latrobe City Council DEPI	Land Owners Developers
<i>S5 – estimated to be 5 years and beyond</i>		
Residential Zoned Land Developed.	Latrobe City Council Referral Authorities	Land Owners Developers
Sewerage for southern half of stage 5 will connect through stage 4 to the existing trunk main which is traverses the site through stage 1. The northern portion of stage 5 will be connected to the western end of stage 4 which relies upon the installation of a pump station within the Mitchell Grove Estate.	Gippsland Water	Land Owners Developers

<p>The development of any land directly abutting designated public open space areas will trigger the construction and delivery of the public open space area (within stage boundary). Those public open space areas that cross stage boundaries are to be developed in the relevant stage by the relevant developer, at their expense.</p>	<p>Latrobe City Council</p>	<p>Land Owners Developers</p>
<p>Drainage from Stage 5 is to be connected into the Wetlands to be constructed adjacent with to the Moe Contour Drain. This is to be generally in accordance with the Surface Water Management Strategy prepared by Neil Craigie dated October 2010, and review by Water Technology dated February 2013</p>	<p>Latrobe City Council WGCMA</p>	<p>Land Owners Developers</p>
<p>Upon completion of any maintenance period required by the planning permit, open space and reserves are to be transferred to Latrobe City Council.</p>	<p>Latrobe City Council</p>	<p>Land Owners Developers</p>
<p>The installation of Colorbond fencing along the entire western boundary where the lots abut unmanaged grassland to reduce the risk of grass fire.</p>		<p>Land Owner Developer</p>

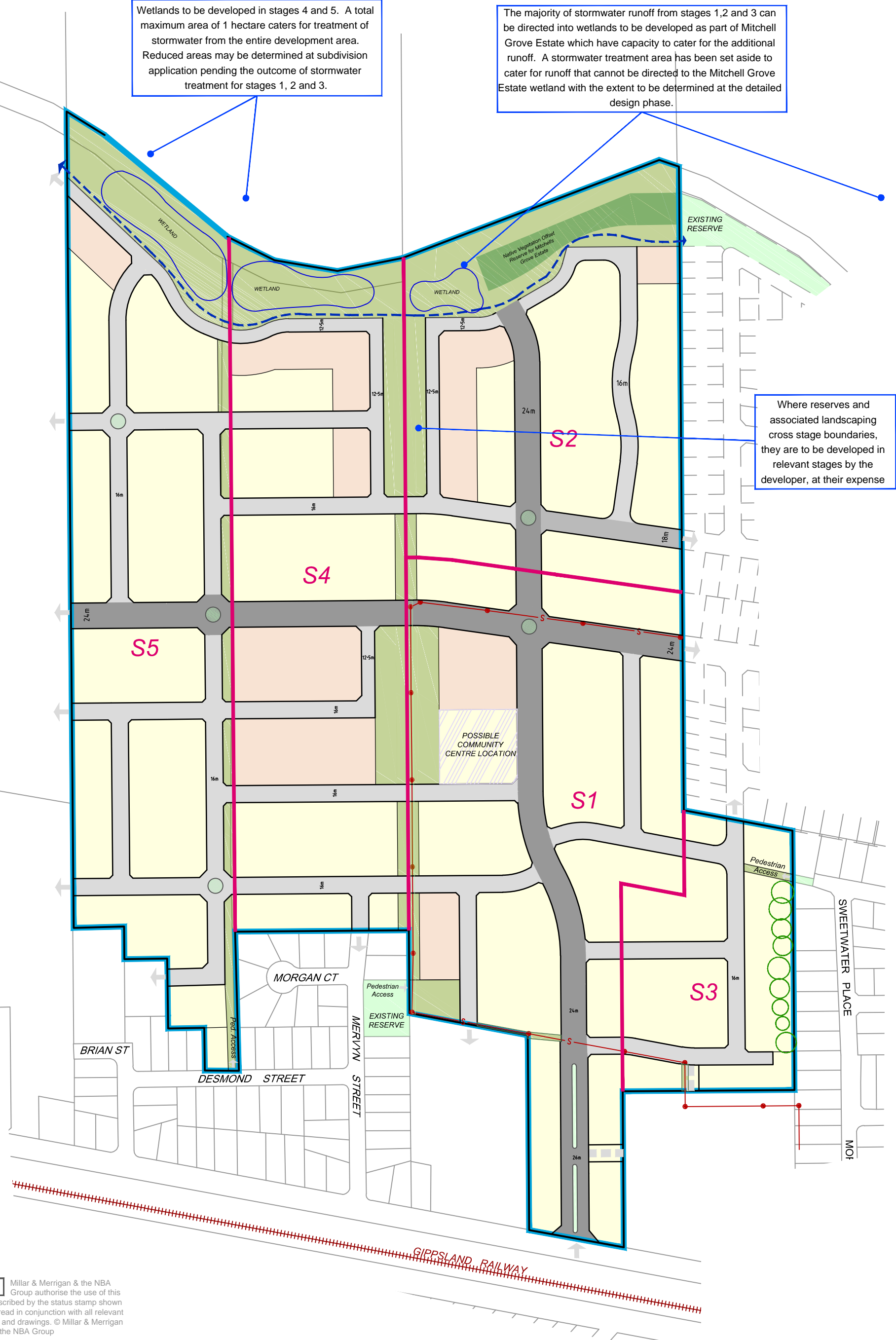
Appendix A – Staging Plan

16315DP3 Version 3 – Millar Merrigan

Wetlands to be developed in stages 4 and 5. A total maximum area of 1 hectare caters for treatment of stormwater from the entire development area. Reduced areas may be determined at subdivision application pending the outcome of stormwater treatment for stages 1, 2 and 3.

The majority of stormwater runoff from stages 1,2 and 3 can be directed into wetlands to be developed as part of Mitchell Grove Estate which have capacity to cater for the additional runoff. A stormwater treatment area has been set aside to cater for runoff that cannot be directed to the Mitchell Grove Estate wetland with the extent to be determined at the detailed design phase.

Where reserves and associated landscaping cross stage boundaries, they are to be developed in relevant stages by the developer, at their expense



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STAGING PLAN

Moe Urban Growth Area
 Waterloo Road, Moe
 Latrobe City Council
 16315DP3
 Version 4

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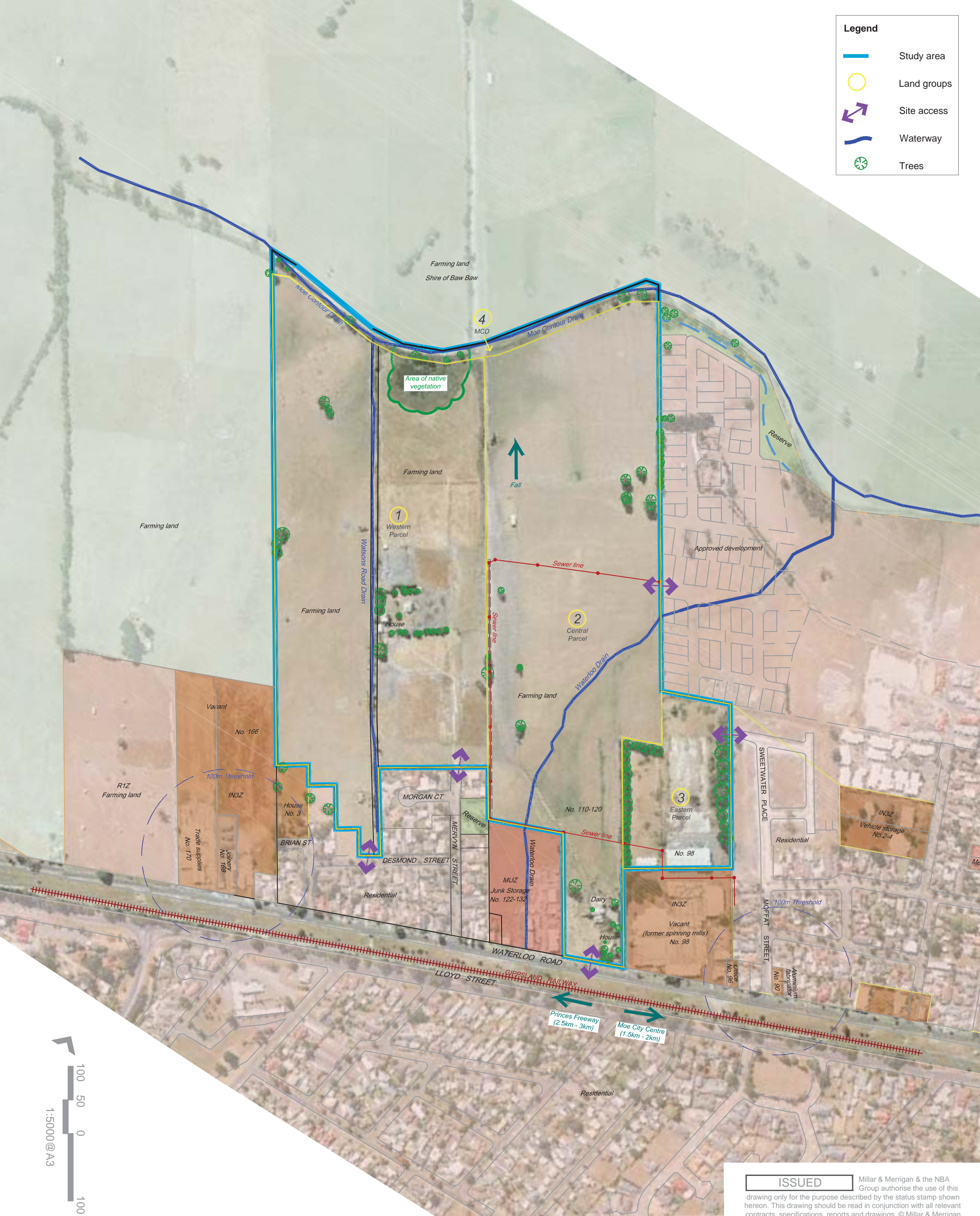


Appendix B – Site Conditions

16315DP1 Version 2 – Millar Merrigan

Legend

- Study area
- Land groups
- ↔ Site access
- Waterway
- Trees



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SITE CONDITIONS

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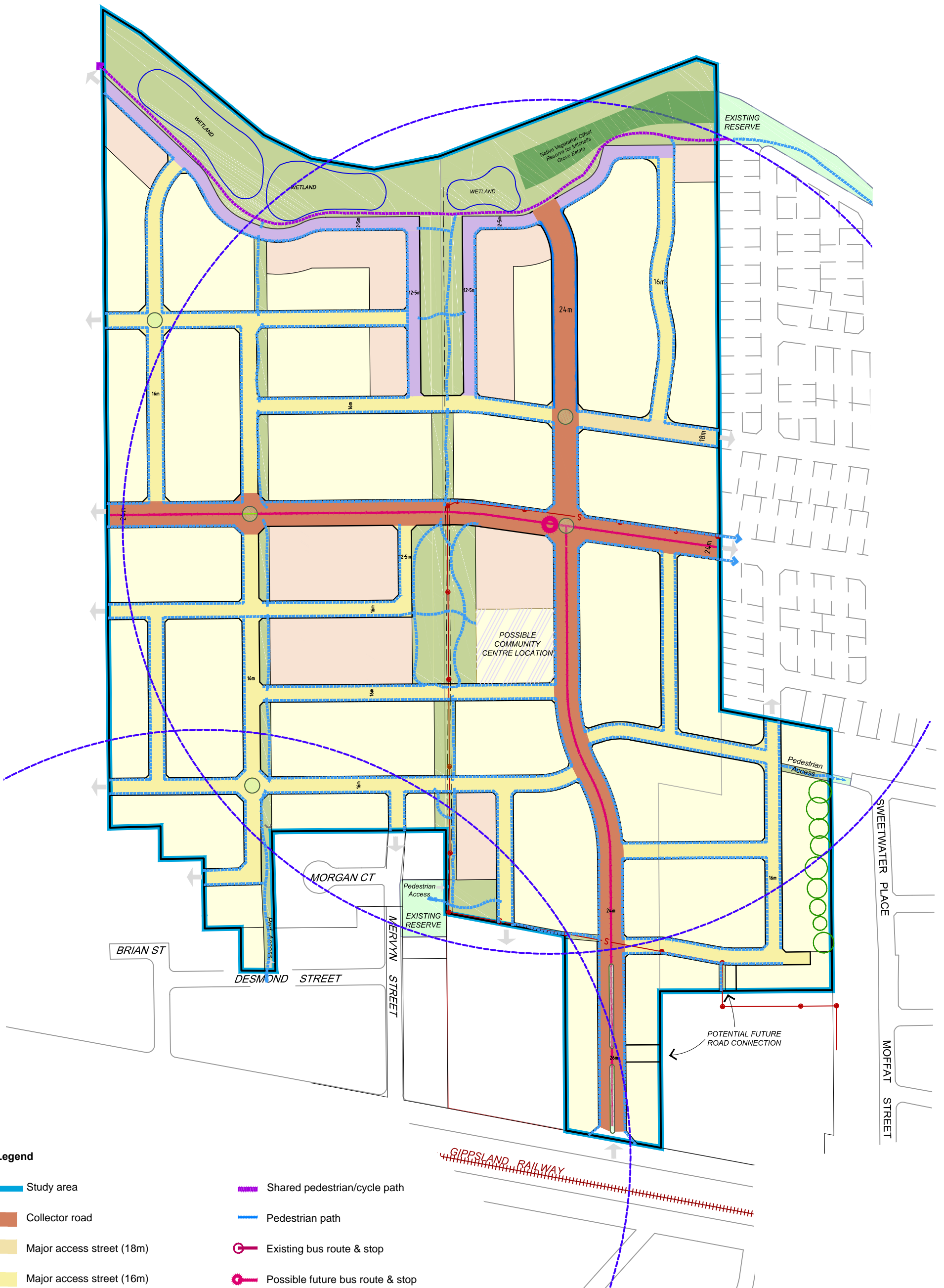
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10 Appendix 4 – Mobility Plan

Reference: 16315DP4



- Legend**
- Study area
 - Collector road
 - Major access street (18m)
 - Major access street (16m)
 - Major access - reserve frontage
 - Common property access
 - Shared pedestrian/cycle path
 - Pedestrian path
 - Existing bus route & stop
 - Possible future bus route & stop
 - 400m radius from bus stop (existing/ possible future)

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MOBILITY PLAN

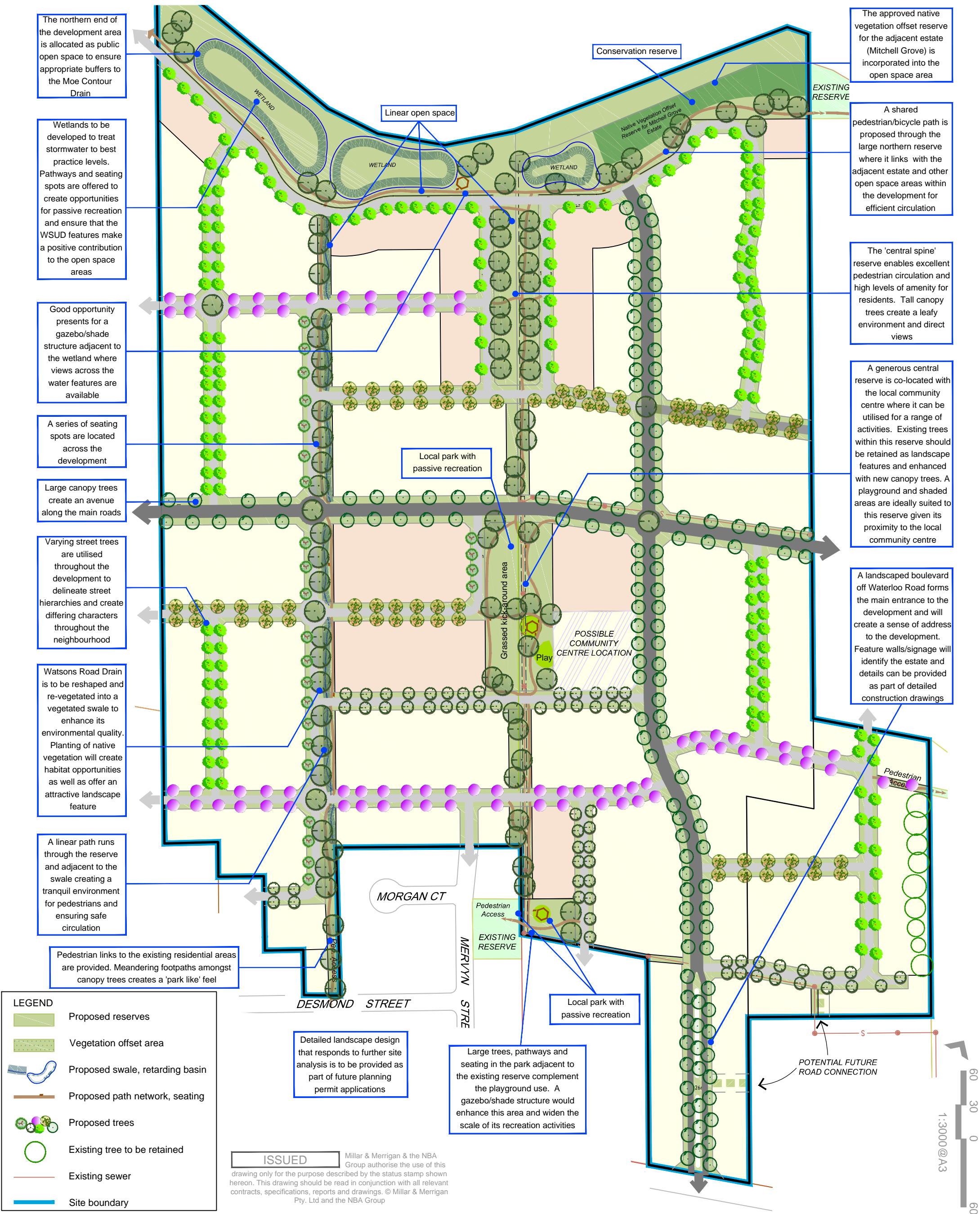
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11 Appendix 5 – Landscape Concept

Reference: 16315DP5



The northern end of the development area is allocated as public open space to ensure appropriate buffers to the Moe Contour Drain

Wetlands to be developed to treat stormwater to best practice levels. Pathways and seating spots are offered to create opportunities for passive recreation and ensure that the WSUD features make a positive contribution to the open space areas

Good opportunity presents for a gazebo/shade structure adjacent to the wetland where views across the water features are available

A series of seating spots are located across the development

Large canopy trees create an avenue along the main roads

Varying street trees are utilised throughout the development to delineate street hierarchies and create differing characters throughout the neighbourhood

Watsons Road Drain is to be reshaped and re-vegetated into a vegetated swale to enhance its environmental quality. Planting of native vegetation will create habitat opportunities as well as offer an attractive landscape feature

A linear path runs through the reserve and adjacent to the swale creating a tranquil environment for pedestrians and ensuring safe circulation

Pedestrian links to the existing residential areas are provided. Meandering footpaths amongst canopy trees creates a 'park like' feel

The approved native vegetation offset reserve for the adjacent estate (Mitchell Grove) is incorporated into the open space area

A shared pedestrian/bicycle path is proposed through the large northern reserve where it links with the adjacent estate and other open space areas within the development for efficient circulation

The 'central spine' reserve enables excellent pedestrian circulation and high levels of amenity for residents. Tall canopy trees create a leafy environment and direct views

A generous central reserve is co-located with the local community centre where it can be utilised for a range of activities. Existing trees within this reserve should be retained as landscape features and enhanced with new canopy trees. A playground and shaded areas are ideally suited to this reserve given its proximity to the local community centre

A landscaped boulevard off Waterloo Road forms the main entrance to the development and will create a sense of address to the development. Feature walls/signage will identify the estate and details can be provided as part of detailed construction drawings

LEGEND

- Proposed reserves
- Vegetation offset area
- Proposed swale, retarding basin
- Proposed path network, seating
- Proposed trees
- Existing tree to be retained
- Existing sewer
- Site boundary

Detailed landscape design that responds to further site analysis is to be provided as part of future planning permit applications

Large trees, pathways and seating in the park adjacent to the existing reserve complement the playground use. A gazebo/shade structure would enhance this area and widen the scale of its recreation activities

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LANDSCAPE CONCEPT PLAN

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Waterloo Road, Moe
Latrobe City Council
16315DP5
Version 4 Sheet 1 of 2

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A large wetland at the northern end of the site enables for efficient management of stormwater runoff whilst making a positive contribution to the open space



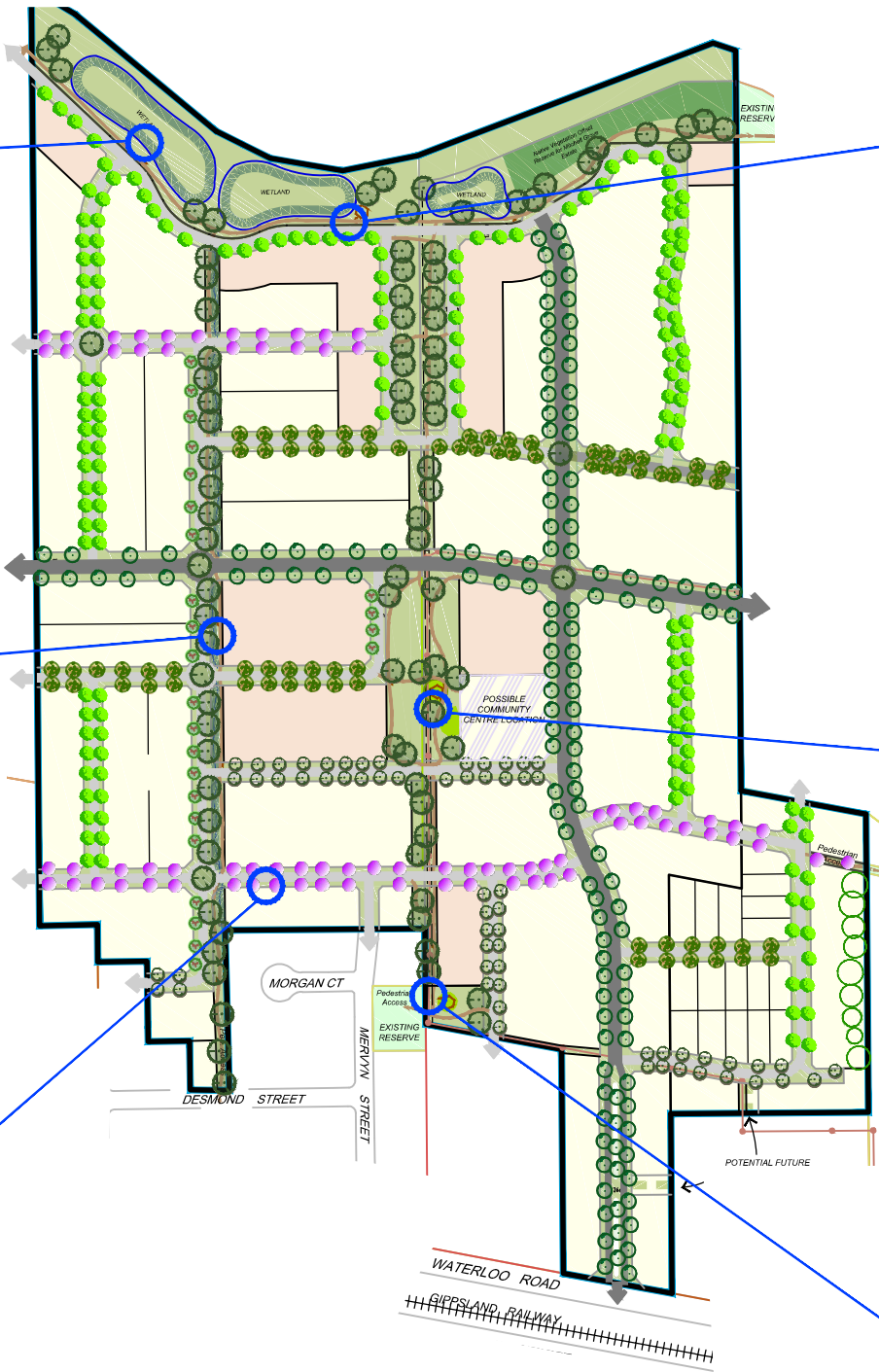
Good opportunity presents for a gazebo/shade structure adjacent to the wetland and in the southern most park where a playground in the adjacent reserve is present



Watsons Road drain to be reworked into a landscaped swale



Large canopy trees create an avenue along the main roads



A generous central square is co-located with the local community centre where it can be utilised for a range of activities



Meandering footpaths create a pleasant environment and excellent circulation



Indicative Planting Schedule

Botanical Name Common Name

Indigenous Trees (Street and reserve trees)

<i>Acacia melanoxylon</i>	Blackwood
<i>Eucalyptus consideriana</i>	Yertchuk
<i>Eucalyptus obliqua</i>	Messmate Stringybark
<i>Eucalyptus ovata</i>	Swamp Gum
<i>Eucalyptus radiata</i>	Narrow-leaf Peppermint
<i>Eucalyptus strzeleckii</i>	Strzelecki Gum

Non-indigenous Trees (street trees)

<i>Acer sp.</i>	Maple cultivar
<i>Angophora floribunda</i>	Rough barked Apple
<i>Callistemon salignus</i>	Weeping Bottlebrush
<i>Corymbia maculata</i>	Spotted Gum
<i>Eucalyptus crenulata</i>	Buxton Gum
<i>Fraxinus sp.</i>	Ash cultivar
<i>Melia azederach</i>	White cedar
<i>Tristaniopsis laurina</i>	Kanooka

Shrubs

<i>Cassinia aculeata</i>	Common Cassinia
<i>Cassinia longifolia</i>	Shiny Cassinia
<i>Epacris impressa</i>	Common Heath
<i>Leptospermum continentale</i>	Prickly Tea-tree
<i>Melaleuca ericifolia</i>	Swamp Paperbark
<i>Olearia lirata</i>	Snow Daisy-bush
<i>Olearia phlogopappa</i>	Dusty Daisy-bush
<i>Pimelea humilis</i>	Common Rice-flower

Groundcovers & Tufted Plants

<i>Clematis aristata</i>	'Mountain Clematis
<i>Lomandra filiformis</i>	Wattle Mat-rush
<i>Lomandra longifolia</i>	Spiny-headed Mat-rush
<i>Microlaena stipoides</i>	Weeping Grass
<i>Poa sp.</i>	Tussock Grass
<i>Poranthera microphylla</i>	Small Poranthera
<i>Viola hederacea</i>	Ivy-leaf Violet
<i>Gonocarpus tetragynus</i>	Common Raspwort
<i>Lagenophora gracilis</i>	Slender Bottle Daisy
<i>Oxalis corniculata</i> s.l.	Yellow Wood-sorrel
<i>Wahlenbergia gracilis</i>	Sprawling Bluebell

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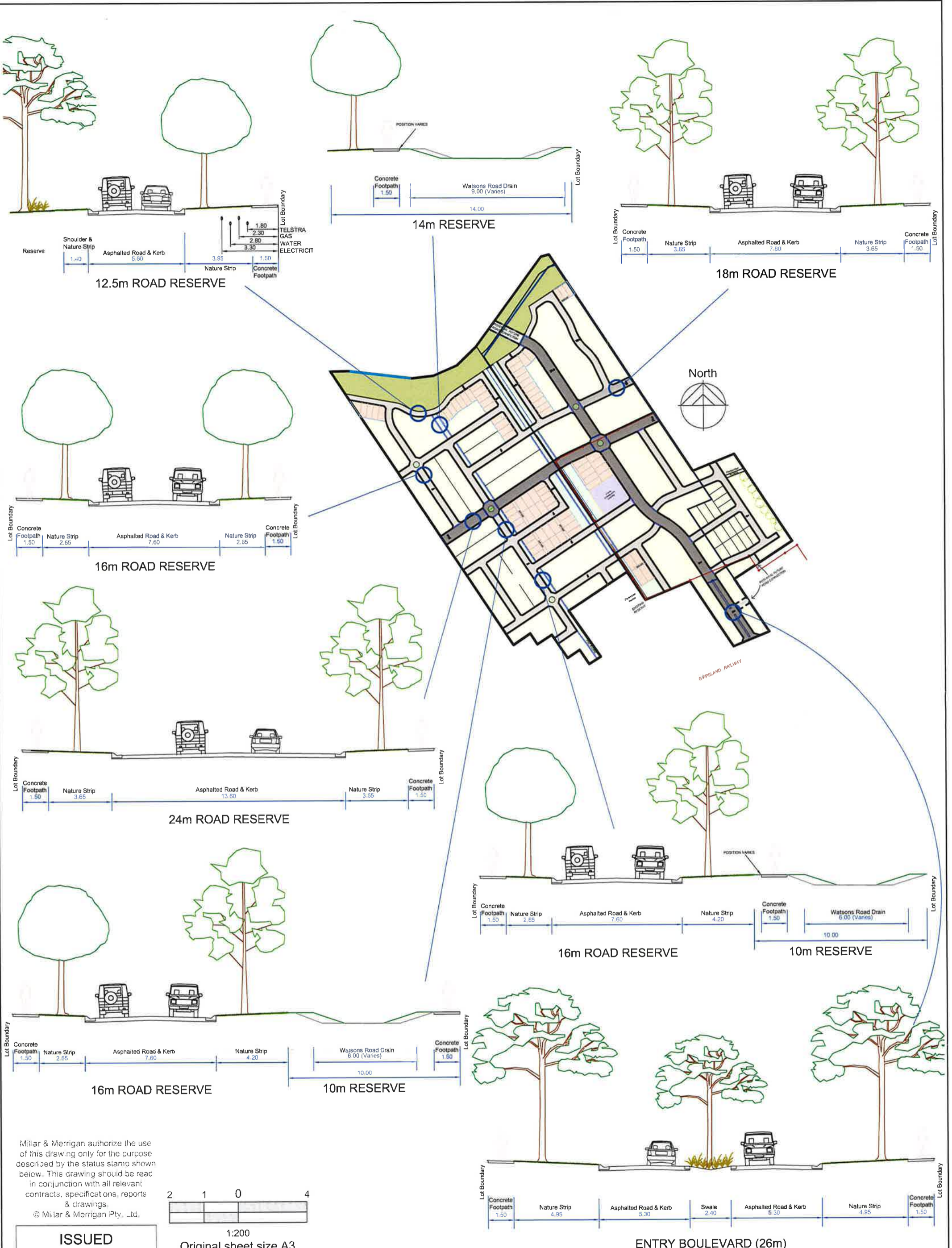
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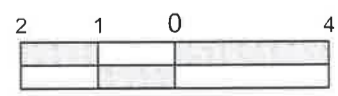


12 Appendix 6 – Cross Sections

Reference: 16315DP6



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CROSS SECTIONS
 MOE URBAN GROWTH AREA
 WATERLOO ROAD, MOE
 LATROBE CITY COUNCIL
 16315DP6
 VERSION 2

13 Appendix 7 – Transport Impact Assessment

GTA Consultants – Revision B 17/9/2013



Development Plan
110-120 Waterloo Road,
Moe
Transport Impact Assessment

transportation planning, design and delivery

Development Plan


110-120 Waterloo Road, Moe

Transport Impact Assessment

Issue: B 17/09/13

Client: NBA Group Pty Ltd
Reference: 13M1594000
GTA Consultants Office: VIC

Quality Record

Issue	Date	Description	Prepared By	Checked By	Approved By	Signed
A-Dr	15/03/13	Draft	Jacob Avery	Andrew Farran	David Graham	DG
A	29/04/13	Submission	Jacob Avery	Andrew Farran	David Graham	David Graham
B-Dr	12/09/13	Revised Submission	Justin Gale	David Graham	David Graham	David Graham
B	17/09/13	Revised Submission	Justin Gale	David Graham	David Graham	

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1. Introduction

1.1 Background

A Development Plan is currently being prepared for the proposed residential development of land located at 14 Desmond Street, 19 Mervyn Street, 98 Waterloo Road and 110-120 Waterloo Road in Moe. Preliminary planning suggests that the site will yield in the order of 521 dwellings.

Current precinct structure planning for the surrounding land indicates that the subject site will form part of a broader development precinct, noting a permit was granted for a residential sub-division located at 42 Mitchells Road in Moe (adjacent the eastern boundary of the proposed site) on 27 September 2011.

GTA Consultants was commissioned by NBA Group Pty Ltd in December 2012 to undertake a traffic impact assessment of the proposed Development Plan.

1.2 Purpose of this Report

This report sets out an assessment of the:

- i existing street network and traffic conditions surrounding the site
- ii accessibility of the site by public transport and other non-vehicular modes of travel
- iii potential road hierarchy within the site
- iv proposed access arrangements for the site
- v impact of the development on the surrounding road network.

Whilst the proposal is currently only at the Development Plan stage, the assessment also compares the development against the relevant sections of Clause 56 of the Latrobe Planning Scheme, which includes a number of provisions made up of objectives and standards for implementation within the design of new subdivisions.

1.3 References

In preparing this report, a number of references have been made, including:

- Latrobe Planning Scheme
- Draft Development Plan prepared by Millar Merrigan, version 2
- Latrobe Planning Permit No. 2010/354 for adjacent site (42 Mitchells Road, Moe), dated 27 September 2011
- 'Transport and Traffic Impact Assessment Report, 42 Mitchells Road, Moe' prepared by SMEC, dated 7 September 2010 ('SMEC Report')
- traffic surveys undertaken on the behalf of GTA Consultants as referenced in the context of this report
- an inspection of the site and its surrounds
- other documents as nominated.

2. Existing Conditions

2.1 Subject Site

The subject site is located to the west of Moffat Street and the north of Waterloo Road in Moe. The site of approximately 46.48ha has frontages to Waterloo Road and Desmond Street. Waterloo Road is located within a Road Zone 2 (RZ2).

The site is located within a Residential 1 Zone (R1Z) and is currently farmland.

The surrounding properties include a mix of residential and industrial land uses. The notable exception is the Moe Racecourse located to the east of the site.

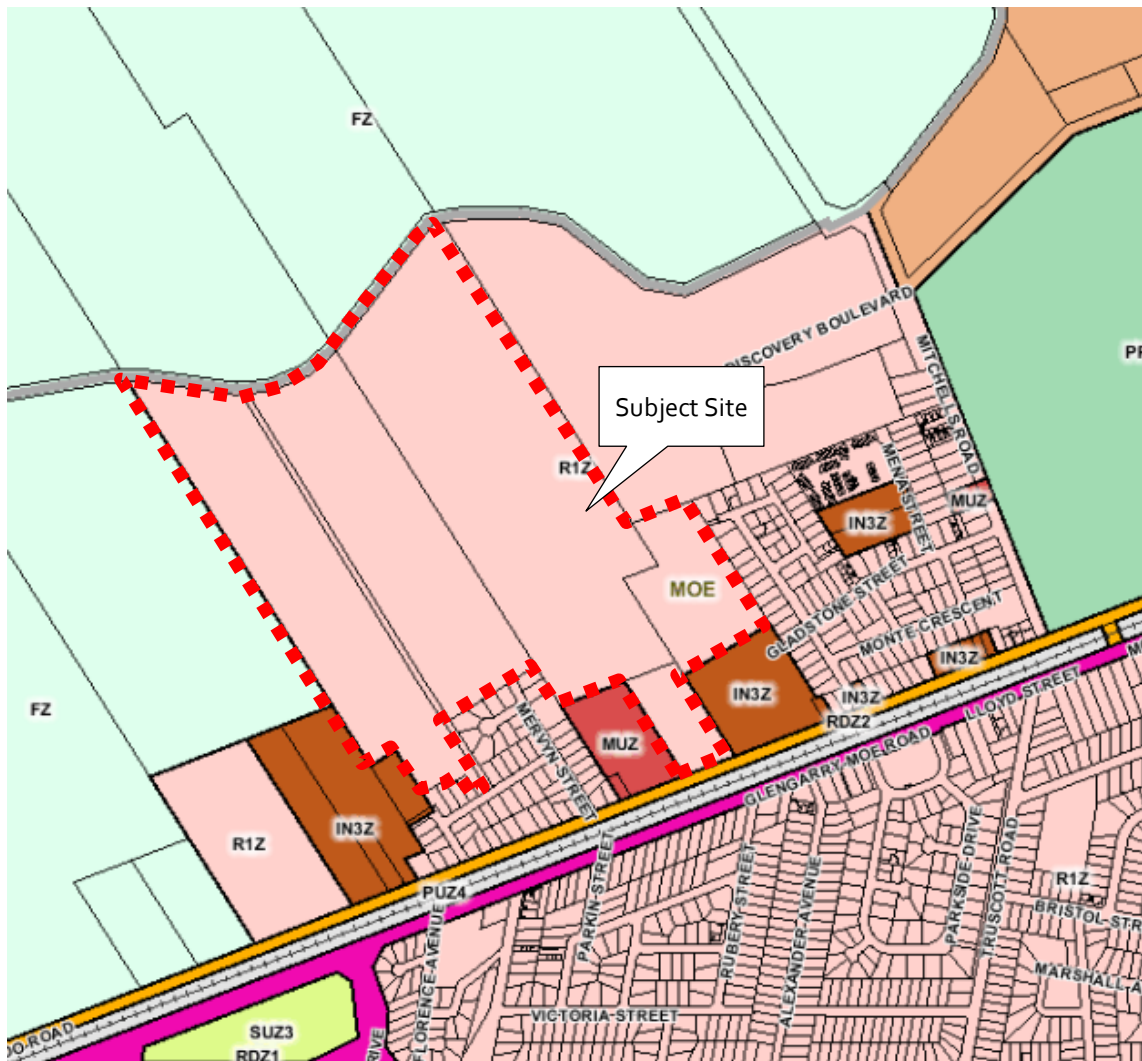
The location of the subject site and the surrounding environs is shown in Figure 2.1, and the land zoning is shown in Figure 2.2.

Figure 2.1: Subject Site and its Environs



(Reproduced with Permission from Melway Publishing Pty Ltd)

Figure 2.2: Land Zoning Map



(Reproduced from Land Channel web site)

2.2 Road Network

2.2.1 Adjoining Roads

Waterloo Road

Waterloo Road functions as a local road and is located within a Road Zone (Category 2) in the Latrobe Planning Scheme. It is a two-way road aligned in an east-west direction and configured with a two-lane, 11 metre wide carriageway set within a 15 metre wide road reserve (approx.). A parking lane is marked along the northern side of Waterloo Road.

Access to the south of the railway line and the Princes Freeway is provided via Waterloo Road and Lloyd Street (to the east of the subject site).

Waterloo Road carries approximately 2,200 vehicles per day¹ adjacent to the site and is shown in Figure 2.3 and Figure 2.4.

Figure 2.3: Waterloo Road
(adjacent to site facing East)



Figure 2.4: Waterloo Road
(adjacent to site facing West)



Mervyn Street

Mervyn Street functions as a local road and is aligned in a north-south direction. It is configured with a two-lane, 7 metre wide carriageway set within a 14 metre wide road reserve (approx.). Kerbside parking is permitted along both sides of Mervyn Street. Mervyn Street in the immediate vicinity of the site is shown in Figure 2.5.

Figure 2.5: Mervyn Street
(adjacent to site facing North)



Moffat Street

Moffat Street functions as a local road. It is a two-way road aligned in a north-south direction and configured with a two-lane, 9 metre wide carriageway set within a 15 metre wide road reserve (approx.). Kerbside parking is permitted along both sides of Moffat Street. Moffat Street is shown in Figure 2.6 and Figure 2.7.

¹ Based on tube count surveys undertaken on behalf of GTA in February 2013

Figure 2.6: Moffat Street
(adjacent to site facing North)



Figure 2.7: Moffat Street
(adjacent to site facing South)



Mitchells Road

Mitchells Road functions as a collector road. It is a two-way road aligned in a north-south direction and configured with a two-lane, 7 metre wide carriageway set within an 18 metre wide road reserve (approx.). Kerbside parking is permitted along the western side of Mitchells Road.

Mitchells Road is shown in Figure 2.8 and Figure 2.9.

Figure 2.8: Mitchells Road (Waterloo Road intersection facing North)



Figure 2.9: Mitchells Road (Waterloo Road intersection facing South)



2.2.2 Surrounding Intersections

Key intersections in the vicinity of the site include:

- Waterloo Road / Moffat Street (unsignalised T-intersection)
- Waterloo Road / Mervyn Street (unsignalised T-intersection)
- Waterloo Road / Mitchells Road (unsignalised T-intersection)
- Mitchells Road / Saviges Road / proposed collector (roundabout).

2.2.3 Traffic Volumes

GTA Consultants arranged for pneumatic tube counts to be undertaken between 18 February 2013 and 24 February 2013 on Waterloo Road between Mervyn Street and Moffat Street. The results of this survey are presented in Table 2.1.

Table 2.1: Pneumatic Tube Count Survey Results

Road	Location	Direction	AM Peak Hour Volumes (veh)[1]	PM Peak Hour Volumes (veh)[1]	Daily Traffic Volumes (veh)[1]
Waterloo Road	Btw Mervyn St & Moffat St	Eastbound	88	86	892
		Westbound	74	127	1,274
TOTAL			162	213	2,166

[1] Weekday Average

Further to the pneumatic tube counts discussed above, turning movement counts were undertaken by GTA Consultants at the intersection of Waterloo Road and the Railway Crossing on 4 September 2013 during the following peak periods:

- 7:30am - 9:15am
- 4:00pm - 6:00pm.

The AM and PM peak hour traffic volumes are shown in Figure 2.10 and Figure 2.11 respectively.

Figure 2.10: AM Peak Hour Volumes

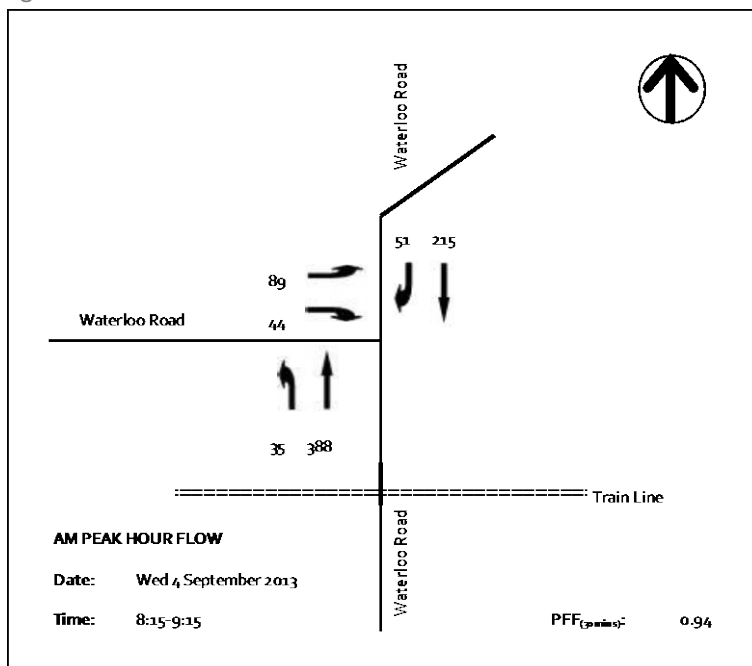
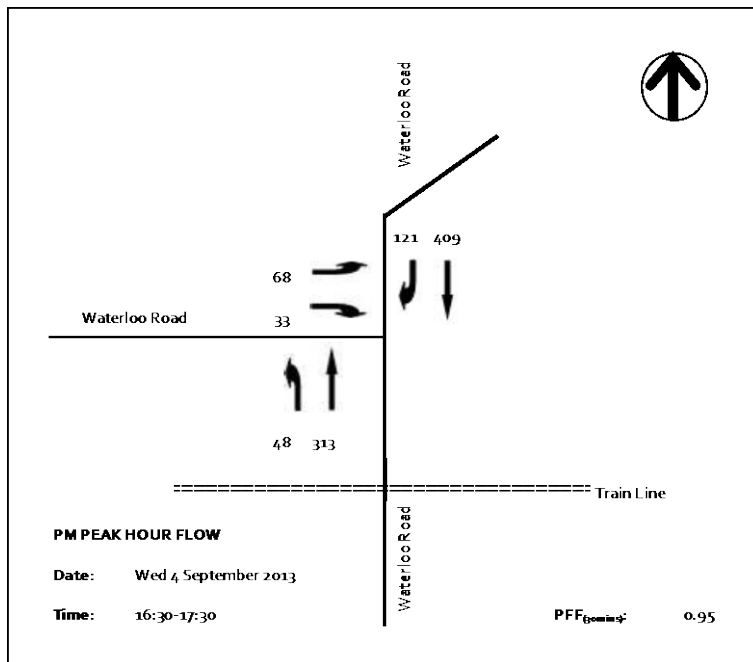


Figure 2.11: PM Peak Hour Volumes



Combining the above traffic volumes with the traffic volumes gathered from surveys quoted in the SMEC Report for the Saviges Road/Mitchells Road and the Mitchells Road/Waterloo Road intersections, the existing AM peak and PM peak hour traffic volumes within the vicinity of the site are represented in Figure 2.12 and Figure 2.13.

Figure 2.12: Existing AM Peak Hour Traffic Volumes

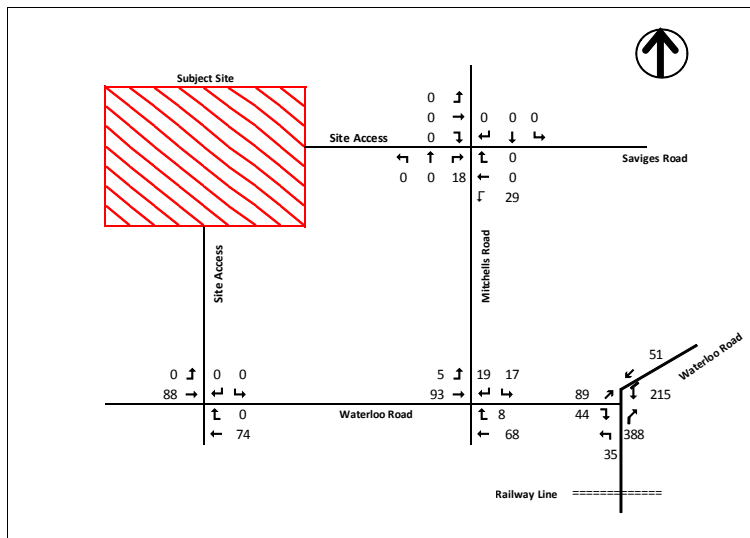
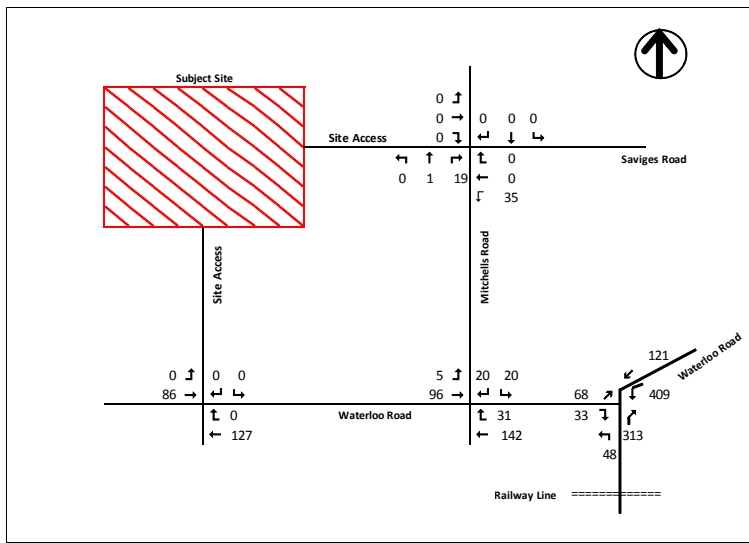


Figure 2.13: Existing PM Peak Hour Traffic Volumes



2.2.4 Accident Statistics

A review of the reported casualty accident history for the roads and intersections adjoining the subject site has been sourced from VicRoads CrashStats accident database. This database records all accidents causing injury that have occurred in Victoria since 1987 (as recorded by Victorian Police) and categorises these accidents as follows:

- Fatal injury: at least one person was killed in the accident or died within 30 days as a result of the accident.
- Serious injury: at least one person was sent to hospital as a result of the accident.
- Other injury: at least one person required medical treatment as a result of the accident.

A summary of the accidents in the vicinity of the site for the last available five year period (January 2008 – December 2012) is presented in Table 2.2.

Table 2.2: Casualty Accident History

Location	Accident No.		
	Fatality	Serious Injury	Other Injury
Waterloo Rd btw Mervyn St and Moffat St	-	1	-
Waterloo Road/Moe-Glengarry Road	-	2	1

Source: VicRoads

Table 2.2 indicates that over the last available five year period there has been four recorded causality accidents within the vicinity of the subject site. Three of these accidents involved right turning vehicles at the Waterloo Road/Moe-Glengarry Road intersection.

2.3 Sustainable Transport Infrastructure

2.3.1 Public Transport

Figure 2.14 shows the subject site in relation to existing public transport routes within its vicinity whilst Table 2.3 summarises the road based routes and major destinations that can be reached using these services.

Figure 2.14: Moe Bus Network Map

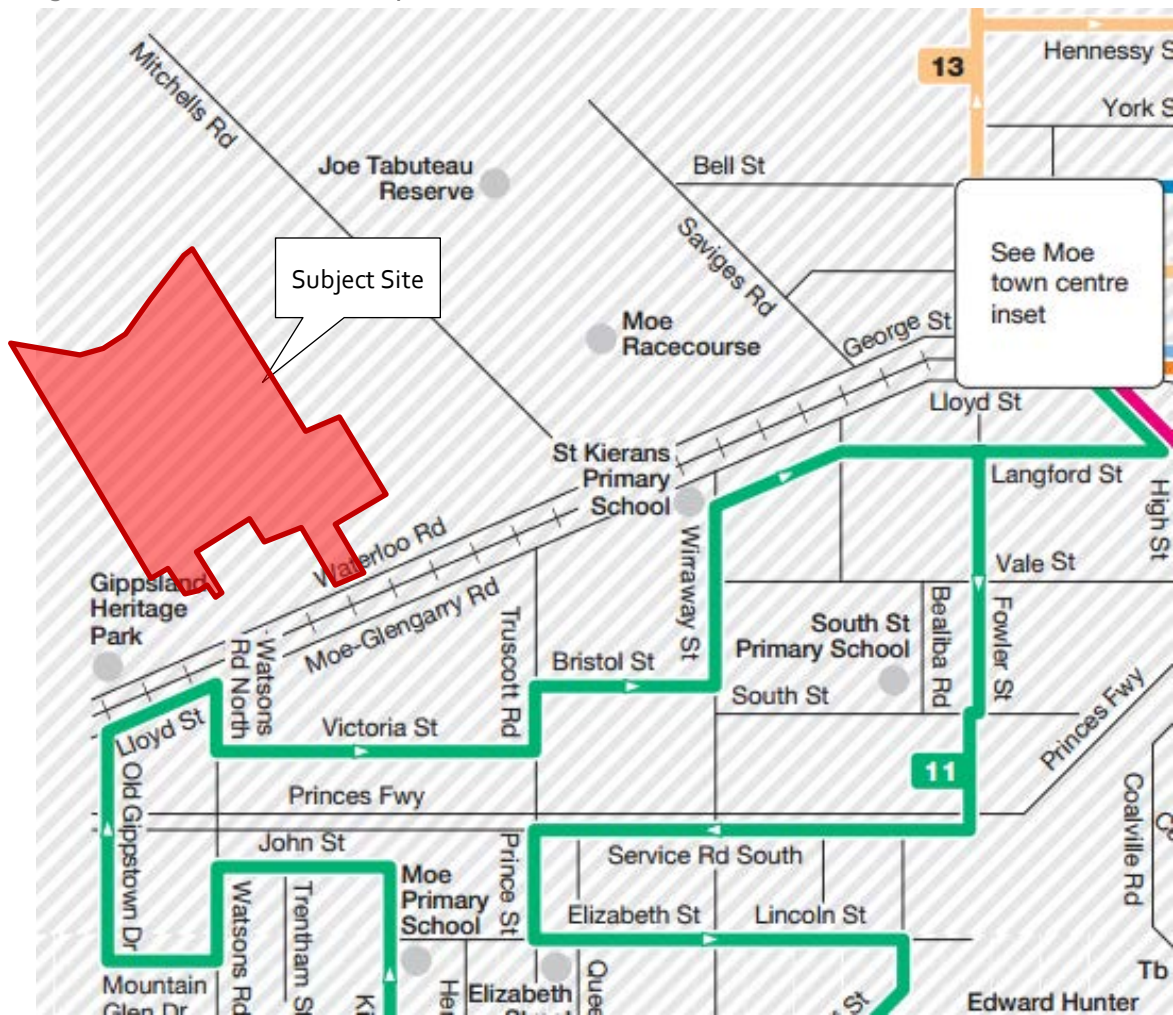


Table 2.3: Road Based Public Transport Provision

Service	Route Nos	Route Description	Significant Destinations On Route	Frequency On/Off Peak
Bus	11	Moe - Moe West	Elizabeth St Shops, Baringa Special School, Moe Primary School & Moe Station	60mins

In addition to road based public transport, Moe rail station which is serviced by the Traralgon – Melbourne (via Morwell, Moe and Pakenham) V/Line service is located approximately 1.5 km from the site.

2.4 Transport Policy Background

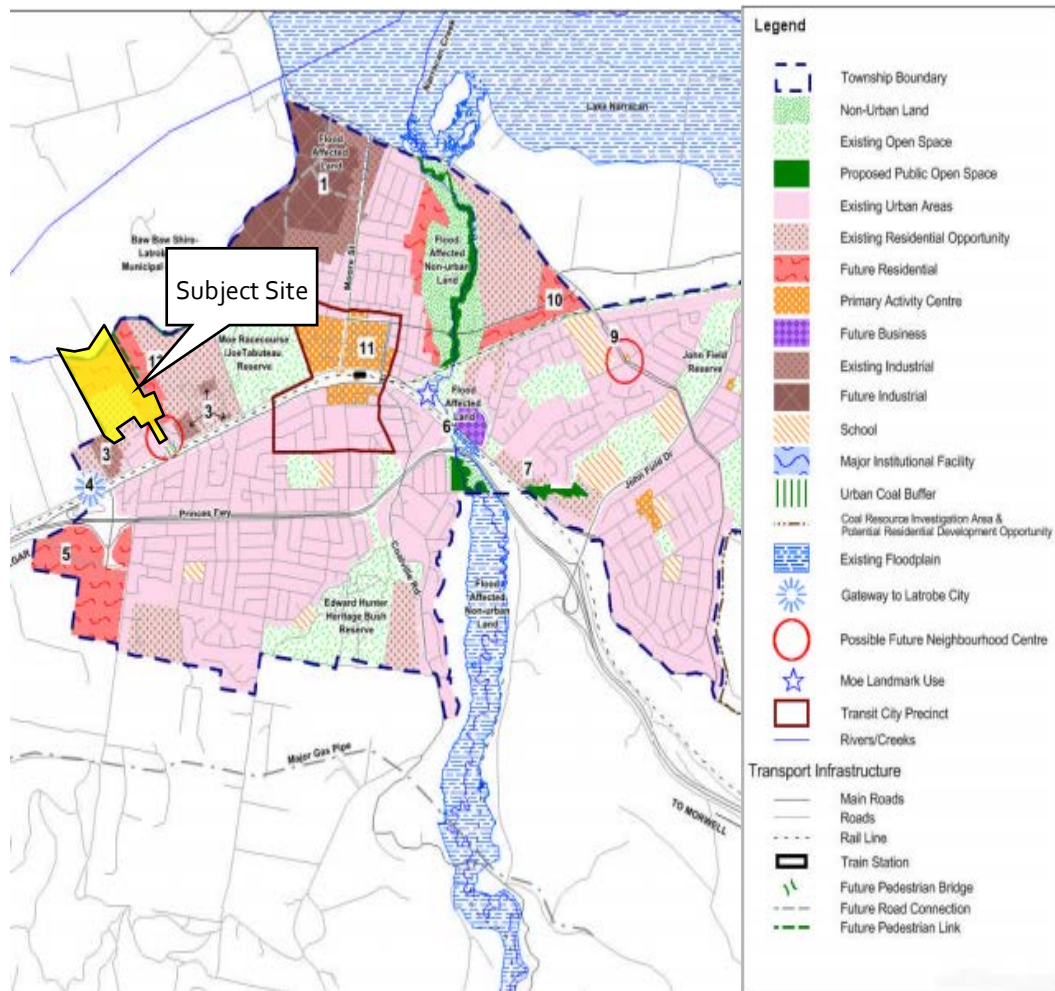
The key policy document applicable to the subject land which provides guidance on the suitability of the proposed development in the context of transport planning is the Moe – Newborough Precinct Structure Plan.

In this regard, the plan identifies the following relevant items in regard to the proposed site:

- provision of a future connector road that runs from Mitchells Road to Waterloo Road
- possible future bus routes along Waterloo Road, Saviges Road and future connector road
- possible future neighbourhood centre adjacent the site’s entry point to Waterloo Road.

Figure 2.15 shows the subject site in the context of the Moe-Newborough Precinct Structure Plan.

Figure 2.15: Moe - Newborough Precinct Structure Plan



2.5 Adjacent Permit (42 Mitchells Road)

A permit was granted on 27 September 2011 for a residential sub-division at 42 Mitchells Road in Moe, adjacent to the eastern boundary of the proposed site. The proposal includes the development of 172 residential lots with access via a proposed collector road to Mitchells Road at the Saviges Road intersection.

As conditions of the permit, a roundabout is to be provided at the intersection of Saviges Road / Mitchells Road / proposed collector road and a channelised right turn intersection treatment is to be provided at the Waterloo Road / Mitchells Road intersection.

The traffic report which accompanied the application notes the potential for future growth immediately west of that site, referring to this site as 'Future Development Site'. The report assumes the potential for 576 lots to be developed within this site (noting that the actual yield for the development site is now expected to be approx. 521 lots).

3. Development Proposal

3.1 Land Uses

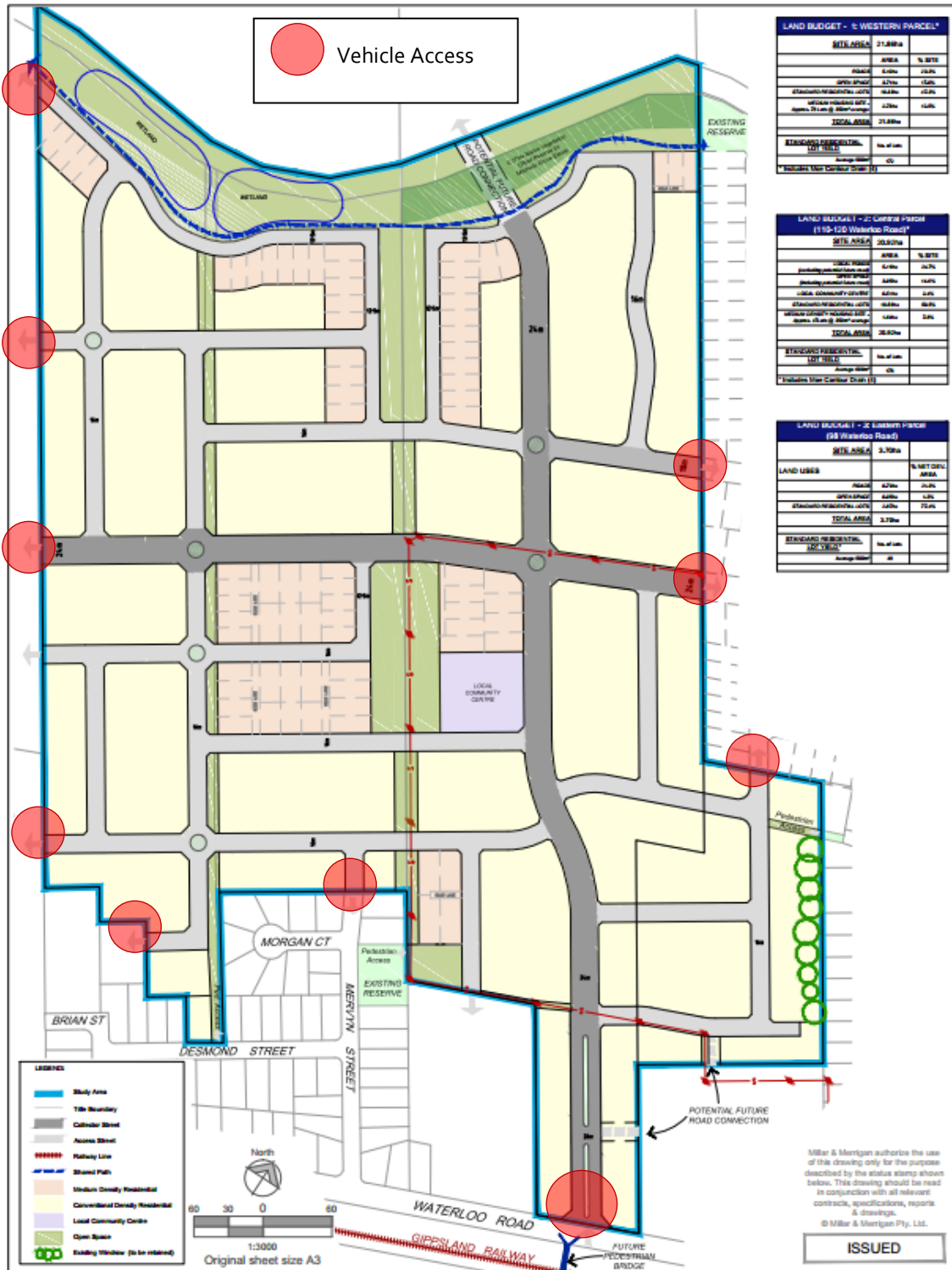
An indicative development yield for the subject site indicates a 521 lot subdivision for residential use and is summarised in Table 3.1.

Table 3.1: Proposed Development Schedule

Site	Total Area	No. of Lots
Western Parcel	21.86ha	250
98 Waterloo Road	3.70ha	223
110-120 Waterloo Road	20.92ha	48
Total		521

In addition to the residential use, the Development Plan anticipates a small local community centre will be developed on the site. The indicative road layout is presented in Figure 3.1.

Figure 3.1: Draft Development Plan



(Prepared by Millar Merrigan)

3.2 Vehicle Access Arrangements

The primary vehicle site access point is via a proposed north-south connector road to Waterloo Road (between Mervyn Street and Moffat Street), with several other local road connections to the permitted residential development immediately to the east of the site and a number of potential connections to future development to the west and north.

4. Traffic Impact Assessment

4.1 Traffic Generation

4.1.1 Design Rates

The RTANSW 'Guide to Traffic Generation' sets out traffic generation rates for a wide variety of land uses. This guide sets out a rate for residential land uses, with dwellings within a residential sub-division generating 0.85 movements during a typical weekday peak hour and 9 movements per day.

It is noted that the above RTANSW rates were applied to the adjacent development located at 42 Mitchells Road.

Application of these rates to the development proposal of 521 dwellings equates to 443 peak hour vehicle movements and 4,689 daily vehicle movements.

The directional split of traffic (i.e. the ratio between the inbound and outbound traffic movements) has been assumed to be 80% out / 20% in for the AM peak hour and 40% out / 60% in during the PM peak hour.

Based on the above, estimates of peak hour and daily traffic volumes resulting from the proposal are set out in Table 4.1.

Table 4.1: Traffic Generation Estimates

Use	AM Peak Hour		PM Peak Hour		Daily
	In	Out	In	Out	
Dwelling	89vph	354vph	266vph	177vph	4,689vpd

vph denotes vehicles per hour
vpd denotes vehicles per day

The community centre is anticipated to mostly service local residents and hence will generate minimal external traffic.

4.1.2 Distribution and Assignment

The directional distribution and assignment of traffic generated by the proposed development will be influenced by a number of factors, including the:

- i configuration of the arterial road network in the immediate vicinity of the site
- ii existing operation of intersections providing access between the local and arterial road network
- iii surrounding employment centres, retail centres and schools in relation to the site
- iv configuration of access points to the site
- v current and proposed development patterns in the area.

Having consideration to the above, for the purposes of estimating vehicle movements, the following directional distributions have been assumed:

- Waterloo Road (westbound) – 5%
- Waterloo Road (eastbound) – 75%
- Mitchells Road (southbound) – 5%
- Saviges Road (eastbound) – 15%.

It is noted that the above distribution differs significantly from that suggested in the traffic report for the adjoining site. However, the above distribution is considered to better reflect the likely future traffic distribution when considering the following:

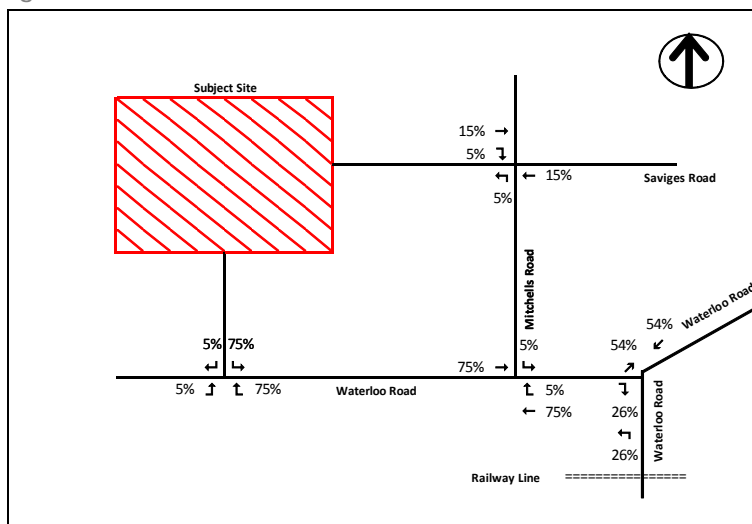
- access to the Moe town centre
- access to the freeway
- future development of the surrounding area.

Assuming the existing distribution remains consistent with the expected site generated traffic distribution, the directional splits for the Waterloo Road/Railway Crossing intersection have been calculated as follows:

- Waterloo Road (eastbound) – 54%
- Waterloo Road (southbound, over railway) – 26%.

Based on the above, Figure 4.1 below shows the estimated distribution of the site generated traffic within the surrounding road network.

Figure 4.1: Estimated Traffic Distribution



From the distribution in Figure 4.1, Figure 4.2 and Figure 4.3 show the increase in turning movements in the vicinity of the subject property following full site development.

Figure 4.2: AM Peak Hour Development Traffic (Subject Site)

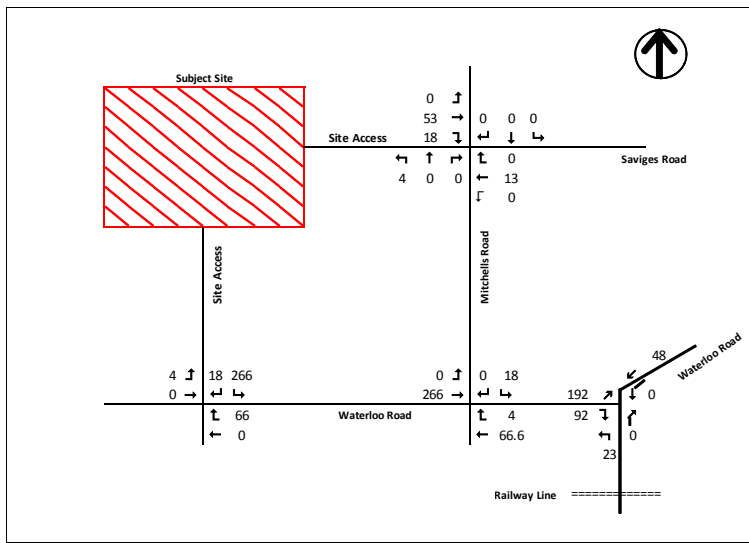
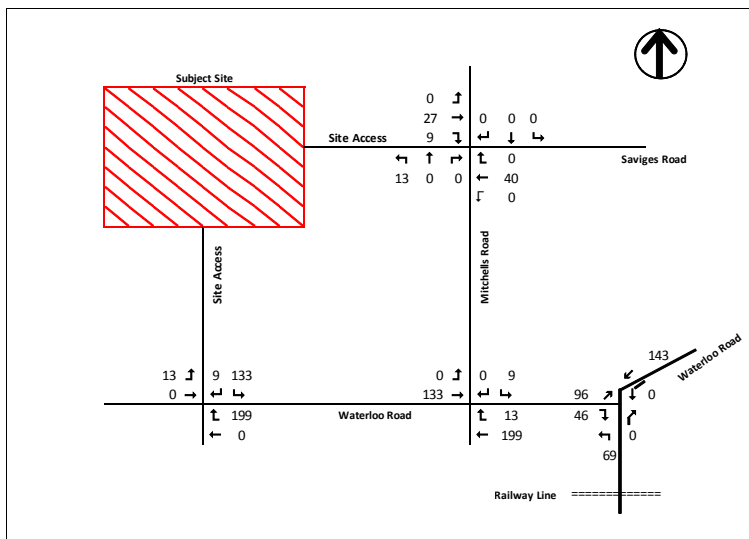


Figure 4.3: PM Peak Hour Development Traffic (Subject Site)



The anticipated traffic generation and distribution due to the approved adjacent residential development located at 42 Mitchells Road also needs to be factored into the analysis. Figure 4.4 and Figure 4.5 show the expected increase in turning movements due to the full development of the adjacent land as estimated in the SMEC report.

Figure 4.4: AM Peak Hour Development Traffic (42 Mitchells Road)

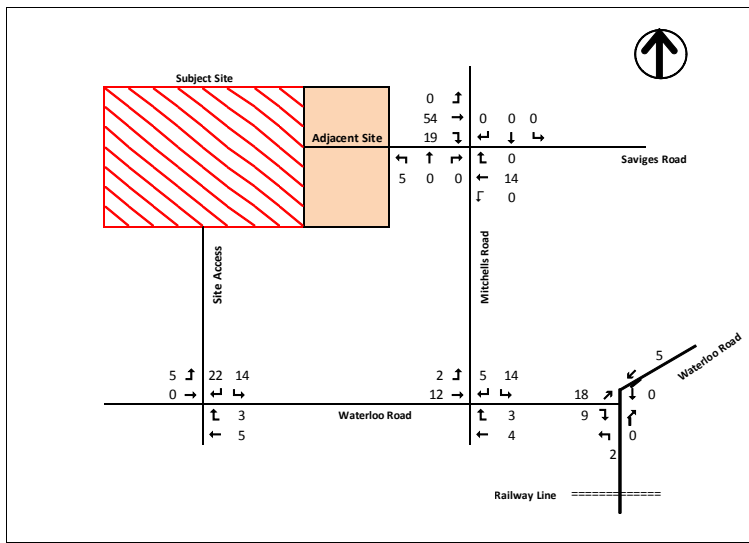
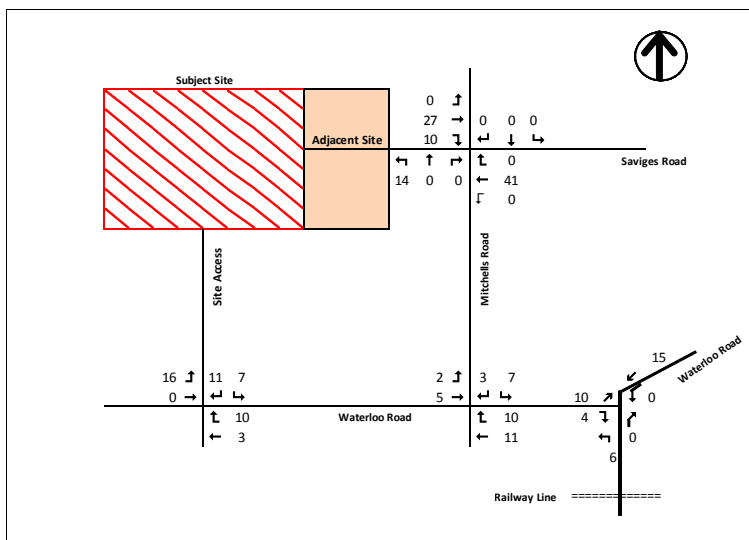


Figure 4.5: PM Peak Hour Development Traffic (42 Mitchells Road)



4.2 Post Development Analysis

4.2.1 Post Development Traffic Volumes

By adding the development traffic (including both the subject site and 42 Mitchells Road developments) to the existing traffic flows we can obtain the Post-Development traffic volumes. These are outlined in Figure 4.6 and Figure 4.7.

Figure 4.6: Post-Development AM Peak Hour Traffic Volumes

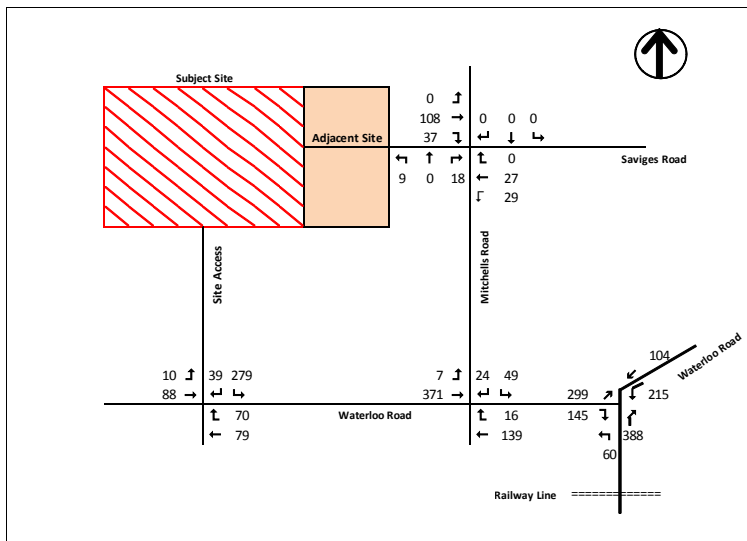
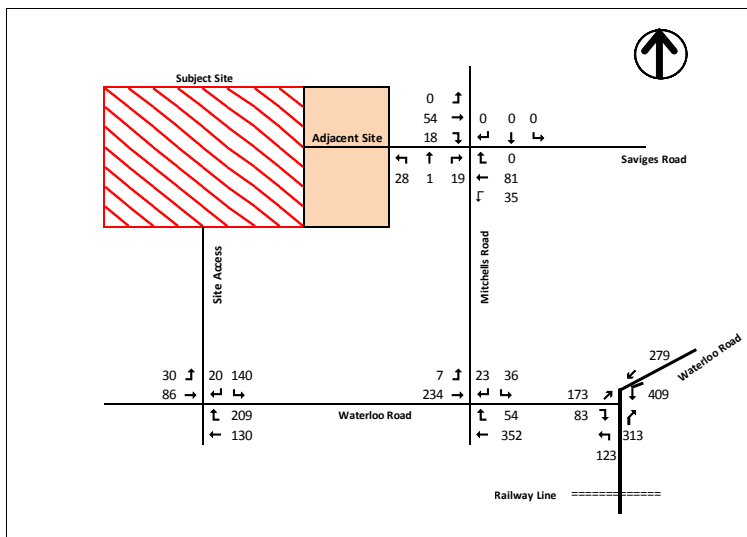


Figure 4.7: Post-Development PM Peak Hour Traffic Volumes



4.2.2 Post Development Traffic Performance – Proposed Site Access

Preamble

A permit has been granted (No. 2010/354) for a staged multi-lot subdivision located at 42 Mitchells Road (located adjacent subject site's eastern boundary). As a condition of permit, the provision of a channelised right turn intersection treatment was required at the intersection of Waterloo Road / Mitchells Road. It is envisaged that a similar condition of permit will be required for the subject site.

Intersection Turn Warrants

Warrants for turn treatments are outlined in Austroads Guide to Road Design – Part 4A: Unsignalised Intersections, Section 4.8. These warrants apply to major road turn treatments, in particular, channelised layouts. Using Figure 4.9(b) of the Austroads guide, a channelised right turn short treatment is required for the proposed intersection of Waterloo Road / site access. This treatment can be provided within the existing Waterloo Road carriageway by modifying existing line marking.

Waterloo Road/Future Site Access

The impact of the development traffic upon the proposed unsignalised site access point from Waterloo Road was assessed using *SIDRA INTERSECTION*. The results of this analysis are set out in Table 4.2, with full details in Appendix A, and indicate the proposed unsignalised access point can be expected to operate satisfactorily with minimal queues and delays.

Table 4.2: Waterloo Rd/Future Site Access – Post-Development Intersection Operation

Peak Hour	Approach	DOS	Average Delay (sec)	95 th Percentile Queue (m)
AM	Waterloo Road (East)	0.06	4 sec	2m
	Site Access (North)	# 0.27	8 sec	9m
	Waterloo Road (West)	0.05	1 sec	0m
PM	Waterloo Road (East)	# 0.19	6 sec	5m
	Site Access (North)	0.14	8 sec	4m
	Waterloo Road (West)	0.06	2 sec	0m

DOS – Degree of Saturation, # - Intersection DOS

4.2.3 Post Development Traffic Performance – Waterloo Road/Waterloo Road-Railway Crossing

The impact of the development traffic upon the unsignalised T-intersection of Waterloo Road/Waterloo Road-Railway Crossing to the east of the site was assessed using *SIDRA INTERSECTION*. The results of this analysis are set out in Table 4.3, with full details in Appendix A, and indicate the intersection can be expected to operate satisfactorily with minimal queues and delays.

Table 4.3: Waterloo Rd/Waterloo Road-Railway Crossing – Post-Development Intersection Operation

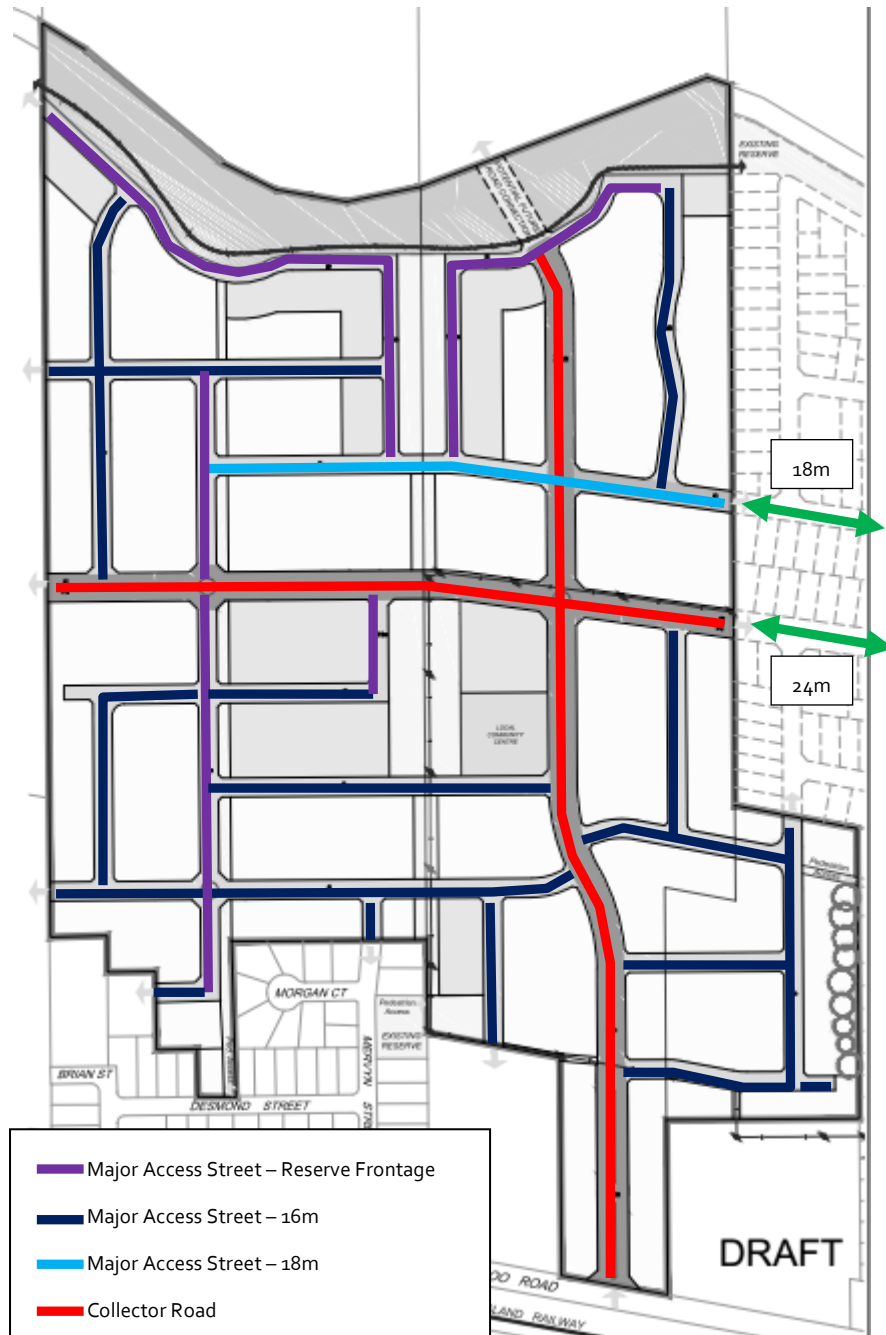
Peak Hour	Approach	DOS	Average Delay (sec)	95 th Percentile Queue (m)
AM	Waterloo Road-Railway Crossing (South)	0.24	1 sec	2m
	Waterloo Road (East)	0.13	4 sec	4m
	Waterloo Road (West)	# 0.60	19 sec	23m
PM	Waterloo Road-Railway Crossing (South)	0.24	2 sec	0m
	Waterloo Road (East)	0.34	5 sec	12m
	Waterloo Road (West)	# 0.69	27 sec	22m

DOS – Degree of Saturation, # - Intersection DOS

5. Internal Road Layout

It is envisaged that the internal road network within the site will include a combination of Major Access Streets (reserve frontage, 16m Road Reserve and 18m Road Reserve) and Collector Roads, in accordance with the requirements of Clause 56.06-8 of the Latrobe Planning Scheme and the Latrobe City Design Guidelines. A potential road hierarchy is shown in Figure 5.1 below.

Figure 5.1: Potential Road Hierarchy



A summary of the characteristics of the proposed road hierarchy is provided in Table 5.1.

Table 5.1: Proposed Internal Road Hierarchy

Street Type	Target Speed	Carriageway Width	Proposed Road Reservation	Parking Provision	Pedestrian and Cyclist Provisions	Anticipated Daily Volume
Major Access Street (Reserve Frontages) (purple on plan)	40km/h	7.0m	12.5m	Kerbside parking on both sides	Pedestrian path on one side of the carriageway	Up to 2,000vpd
Major Access Street (navy blue on plan)	40km/h	7.0m	16m	Kerbside parking on both sides	Pedestrian path on both sides of the carriageway	Up to 2,000vpd
Major Access Street (sky blue on plan)	40km/h	7.0m	18m	Kerbside parking on both sides	Pedestrian path on both sides of the carriageway	Up to 2,000vpd
Collector Street Level 2 (red on plan)	50km/h	13.0m	24m	Kerbside parking on both sides	Shared on-road bicycle lane and pedestrian path on both sides of carriageway	Up to 6,000vpd

The nominated road hierarchy, as illustrated in Figure 5.1, has been designed to be consistent with the road hierarchy outlined within the Latrobe City Design Guidelines.

It is noted that all road reservations should include additional widths at intersections in order to incorporate the visibility splay requirements set out within Standard C20 of Clause 56.06 of the Latrobe Planning Scheme.

The speed targets for the internal street network could be met due to the inclusion of the following:

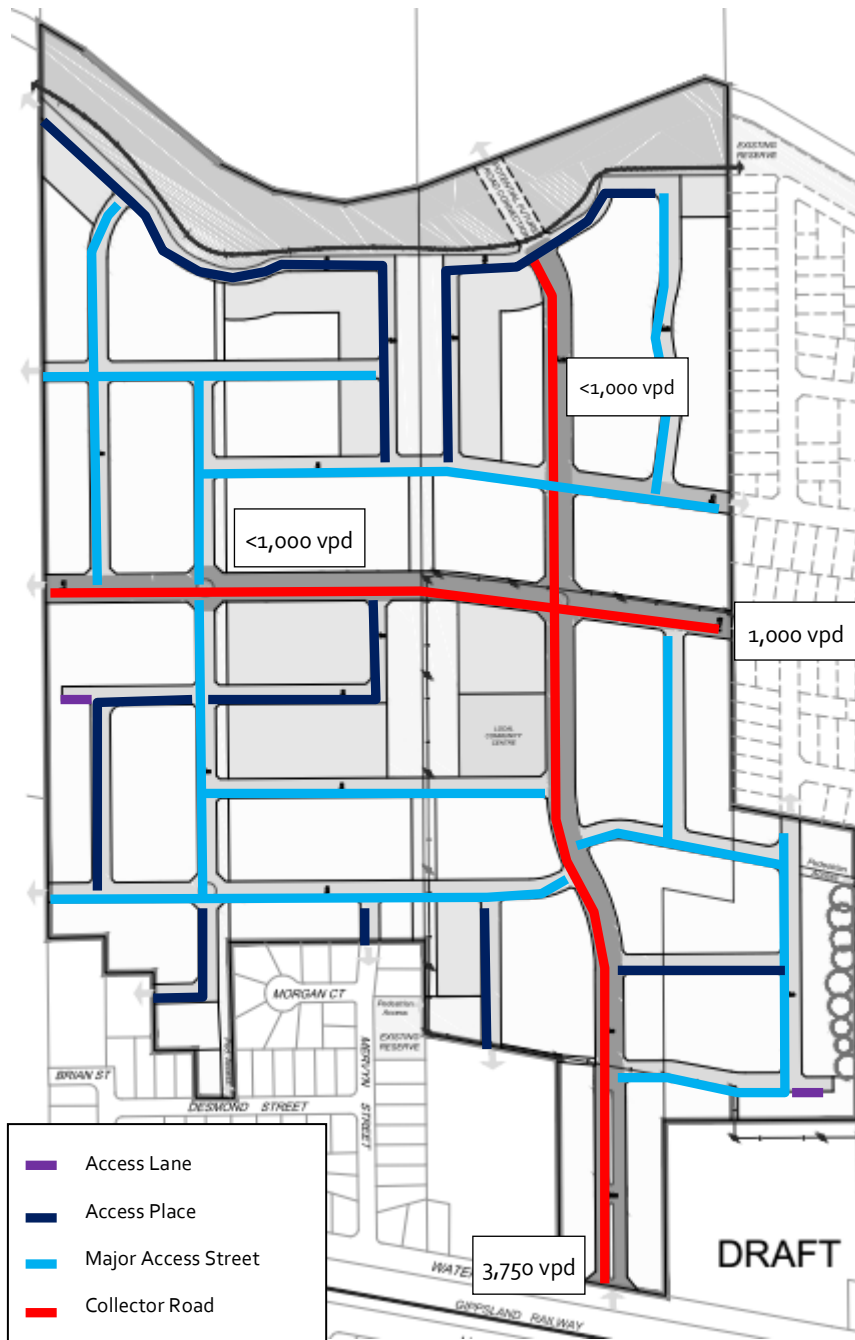
- network design incorporating bends as slow points
- provision of slow points to limit maximum leg lengths to achieve target speed
- roundabouts at key cross-intersections.

The design of the latter would be undertaken as part of the detailed design of the street network and those that would be located on collector roads should be designed to accommodate buses.

The collector roads have been designed to be in accordance with the Department of Transport (DoT) Guidelines (4.2m lane widths, 2.3m indented parking lanes and 5.5m verges) to match the approved plans for the adjacent sub-division located to the east at 42 Mitchells Road.

Based on the anticipated distribution of the internal daily traffic, along with the nominated classification of the internal streets, daily traffic volumes at key locations are presented in Figure 5.2.

Figure 5.2: Indicative Daily Two-Way Internal Road Network Volumes



Based on the hierarchy shown in Figure 5.1, the proposed road network will be generally capable of accommodating the traffic volumes expected to be generated by the subject site.

The road network shown on the Development Plan allows for a waste collection vehicle to circulate throughout the subdivision in a forward direction.

6. Sustainable Transport Infrastructure

6.1 Public Transport

There are currently no public transport services which operate adjacent to the site.

Although the proposed sub division of approximately 521 dwellings is considered large enough to suggest that public transport services through the site could be viable, the implementation of these services is a matter for the public transport operators and the Department of Transport. However the indicative road network on the Development Plan has been designed to allow buses to route along the collector roads through the site, as indicated within Figure 5.1.

6.2 Walking and Cycling

The roads within the site will generally have footpaths on both sides to encourage walking. The proposed road network is relatively linear which allows direct pedestrian and bicycle connections. Pedestrian and bicycle connections are to be provided from the subject site to the adjacent development and existing network via road connections and the dedicated north-south open space area.

7. Conclusion

Based on the analysis and discussions presented within this report, the following conclusions are made:

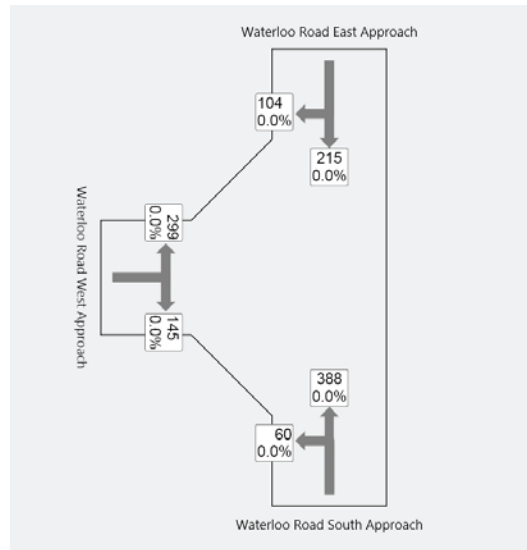
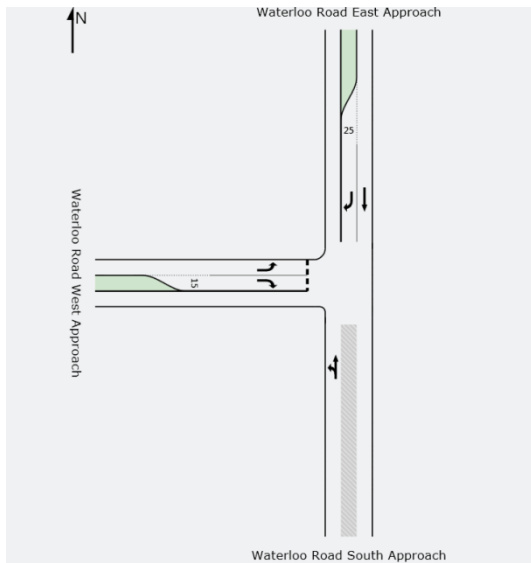
- i The development of the site in accordance with the proposed Development Plan could generate up to 4,689 vehicle movements per day and 443 vehicle movements per hour in the peak periods.
- ii There is sufficient capacity within the existing road network to accommodate the additional traffic movements. In particular, the Waterloo Road/Waterloo Road-Railway Crossing intersection is expected to continue operating satisfactorily with minimal queues and delays.
- iii The indicative street network has been designed in accordance with Clause 56 of the Latrobe Planning Scheme and the Latrobe City Design Guidelines.

Appendix A

Appendix A

SIDRA INTERSECTION Results

AM Peak – Waterloo Road/Waterloo Road-Railway Crossing



LANE SUMMARY

Site: Waterloo Road/Railway Crossing AM

Waterloo Road/Railway Intersection
Giveaway / Yield (Two-Way)

Lane Use and Performance

	Demand Flows			Total veh/h	HV %	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Average Delay sec	Level of Service	95% Back of Queue		Lane Length m	SL Type	Cap. Adj. %	Prob. Block %
	L veh/h	T veh/h	R veh/h								Vehicles	Distance m				
South: Waterloo Road South Approach																
Lane 1	63	408	0	472	0.0	1937	0.243	100	1.1	LOS A	0.0	0.0	500	-	0.0	0.0
Approach	63	408	0	472	0.0		0.243		1.1	NA	0.0	0.0				
North: Waterloo Road East Approach																
Lane 1	0	226	0	226	0.0	1950	0.116	100	0.0	LOS A	0.0	0.0	500	-	0.0	0.0
Lane 2	0	0	109	109	0.0	855	0.128	100	10.8	LOS B	0.5	3.5	25	Turn Bay	0.0	0.0
Approach	0	226	109	336	0.0		0.128		3.5	NA	0.5	3.5				
West: Waterloo Road West Approach																
Lane 1	315	0	0	315	0.0	712	0.442	100	12.9	LOS B	2.5	17.5	500	-	0.0	0.0
Lane 2	0	0	153	153	0.0	254	0.602	100	31.5	LOS D	3.3	23.1	15	Turn Bay	0.0	19.8
Approach	315	0	153	467	0.0		0.602		19.0	LOS C	3.3	23.1				
Intersection				1275	0.0		0.602		8.3	NA	3.3	23.1				

Level of Service (LOS) Method: Delay (HCM 2000).

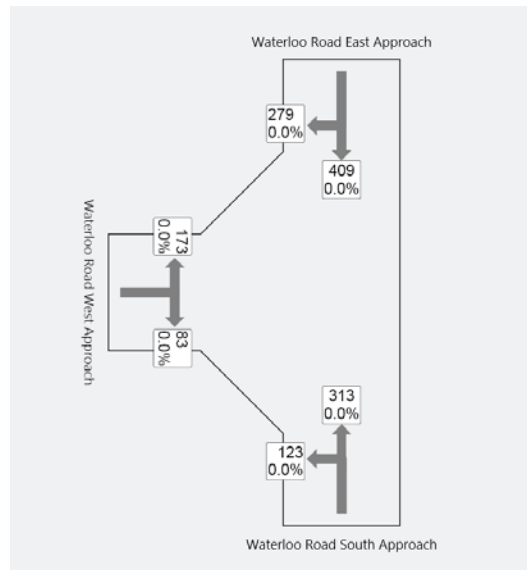
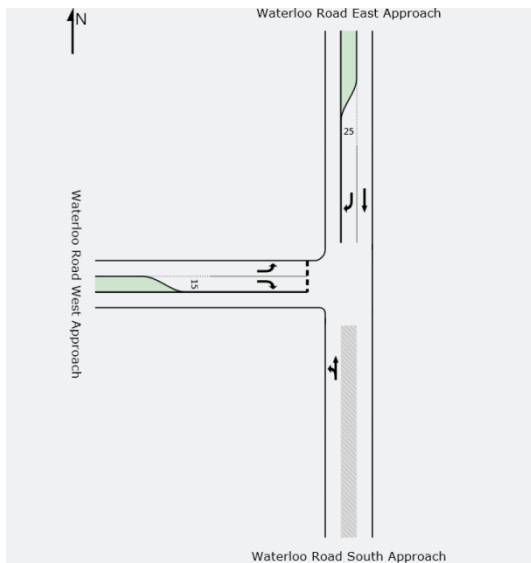
Lane LOS values are based on average delay per lane.

Minor Road Approach LOS values are based on average delay for all lanes.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road lanes.

SIDRA Standard Delay Model used.

PM Peak – Waterloo Road/Waterloo Road-Railway Crossing



LANE SUMMARY

Site: Waterloo Road/Railway Crossing PM

Waterloo Road/Railway Intersection
Giveaway / Yield (Two-Way)

Lane Use and Performance																
	Demand Flows			Total	HV	Cap.	Deg. Satn	Lane Util.	Average Delay	Level of Service	95% Back of Queue	Distance	Lane Length	SL Type	Cap. Adj.	Prob. Block.
	L	T	R													
South: Waterloo Road South Approach																
Lane 1	129	329	0	459	0.0	1923	0.239	100	2.3	LOS A	0.0	0.0	500	-	0.0	0.0
Approach	129	329	0	459	0.0		0.239		2.3	NA	0.0	0.0				
North: Waterloo Road East Approach																
Lane 1	0	431	0	431	0.0	1950	0.221	100	0.0	LOS A	0.0	0.0	500	-	0.0	0.0
Lane 2	0	0	294	294	0.0	870	0.338	100	11.5	LOS B	1.7	11.9	25	Turn Bay	0.0	0.0
Approach	0	431	294	724	0.0		0.338		4.7	NA	1.7	11.9				
West: Waterloo Road West Approach																
Lane 1	182	0	0	182	0.0	760	0.240	100	10.9	LOS B	0.9	6.5	500	-	0.0	0.0
Lane 2	0	0	87	87	0.0	128	0.685	100	61.0	LOS F	3.1	22.0	15	Turn Bay	0.0	17.7
Approach	182	0	87	269	0.0		0.685		27.2	LOS D	3.1	22.0				
Intersection				1453	0.0		0.685		8.1	NA	3.1	22.0				

Level of Service (LOS) Method: Delay (HCM 2000).

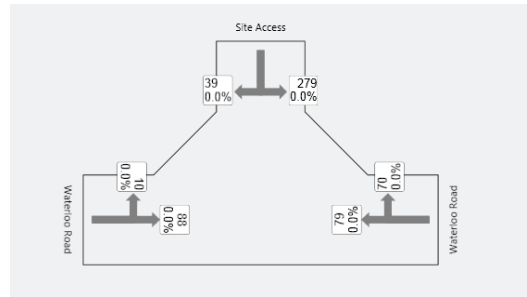
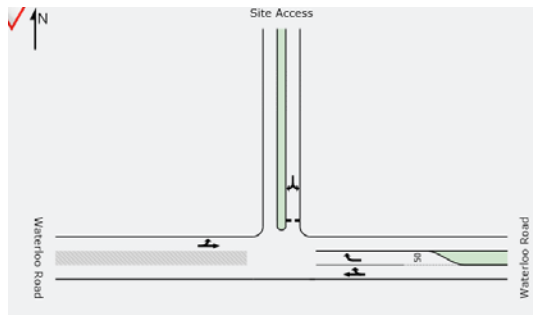
Lane LOS values are based on average delay per lane.

Minor Road Approach LOS values are based on average delay for all lanes.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road lanes.

SIDRA Standard Delay Model used.

AM Peak – Waterloo Road/Site Access



LANE SUMMARY

Site: Post Dev - AM Peak (RTL)

Waterloo Road & Future Site Access
Giveaway / Yield (Two-Way)

Lane Use and Performance																
	Demand Flows					Deg. Satn	Lane Util.	Average Delay sec	Level of Service	95% Back of Queue Vehicles	95% Back of Queue Distance m	Lane Length m	SL Type	Cap. Adj. %	Prob. Block. %	
	L	T	R	Total	HV %											Cap. veh/h
East: Waterloo Road																
Lane 1	0	83	0	83	0.0	1950	0.043	67 ^s	0.0	LOS A	0.0	0.0	500	-	0.0	0.0
Lane 2	0	0	74	74	0.0	1165 ¹	0.063	100	9.2	LOS A	0.2	1.6	50 Turn Bay		0.0	0.0
Approach	0	83	74	157	0.0		0.063		4.3	NA	0.2	1.6				
North: Site Access																
Lane 1	294	0	41	335	0.0	1249	0.268	100	8.3	LOS A	1.3	9.0	100	-	0.0	0.0
Approach	294	0	41	335	0.0		0.268		8.3	LOS A	1.3	9.0				
West: Waterloo Road																
Lane 1	11	93	0	103	0.0	1940	0.053	100	0.9	LOS A	0.0	0.0	500	-	0.0	0.0
Approach	11	93	0	103	0.0		0.053		0.9	NA	0.0	0.0				
Intersection				595	0.0		0.268		6.0	NA	1.3	9.0				

Level of Service (LOS) Method: Delay (HCM 2000).

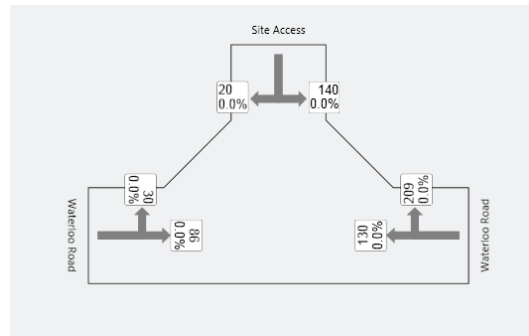
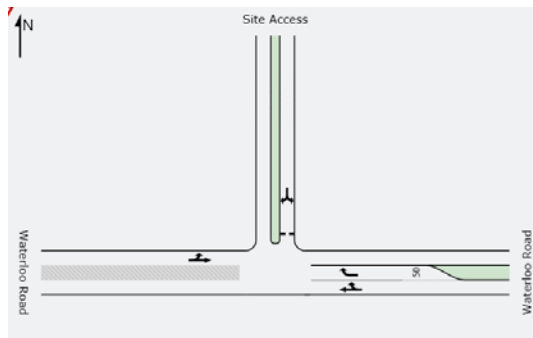
Lane LOS values are based on average delay per lane.

Minor Road Approach LOS values are based on average delay for all lanes.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road lanes.

SIDRA Standard Delay Model used.

PM Peak – Waterloo Road/Site Access



LANE SUMMARY

Site: Post Dev - PM Peak (RTL)

Waterloo Road & Future Site Access
Giveaway / Yield (Two-Way)

Lane Use and Performance																
	Demand Flows			Total	HV %	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Average Delay sec	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance m	Lane Length m	SL Type	Cap. Adj. %	Prob. Block. %
	L veh/h	T veh/h	R veh/h													
East: Waterloo Road																
Lane 1	0	137	0	137	0.0	1950	0.070	37 ⁵	0.0	LOS A	0.0	0.0	500	-	0.0	0.0
Lane 2	0	0	220	220	0.0	1164 ¹	0.189	100	9.4	LOS A	0.8	5.3	50 Turn Bay		0.0	0.0
Approach	0	137	220	357	0.0		0.189		5.8	NA	0.8	5.3				
North: Site Access																
Lane 1	147	0	21	168	0.0	1187	0.142	100	8.4	LOS A	0.6	4.2	100	-	0.0	0.0
Approach	147	0	21	168	0.0		0.142		8.4	LOS A	0.6	4.2				
West: Waterloo Road																
Lane 1	32	91	0	122	0.0	1925	0.063	100	2.3	LOS A	0.0	0.0	500	-	0.0	0.0
Approach	32	91	0	122	0.0		0.063		2.3	NA	0.0	0.0				
Intersection				647	0.0		0.189		5.8	NA	0.8	5.3				

Level of Service (LOS) Method: Delay (HCM 2000).

Lane LOS values are based on average delay per lane.

Minor Road Approach LOS values are based on average delay for all lanes.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road lanes.

SIDRA Standard Delay Model used.

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14 Appendix 8 – Cultural Heritage Management Plan

Desktop, Standard and Complex Assessments
Benchmark Heritage Management – 23rd April 2013

**Proposed Residential Development–
110-120 Waterloo Road, Moe: Desktop Standard and Complex Assessments**

AAV Management Plan Number: 12583

Size of Activity: Medium

Sponsor: Sure Constructions (ABN 51 132 266 061)

Date: 23rd of April 2013

Cultural Heritage Advisors: Matthew Barker and Maya Barker

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Cultural Heritage Management Plan

Title Page

TITLE OF MANAGEMENT PLAN:	Proposed Residential Development, 110-120 Waterloo Road, Moe
AAV MANAGEMENT NUMBER:	12583
SIZE OF ACTIVITY AREA:	20.1ha (Medium)
LEVEL OF ASSESSMENT:	Desktop, Standard and Complex Assessments
SPONSOR:	Sure Constructions (ABN 51 132 266 061)
CULTURAL HERITAGE ADVISORS:	Matthew Barker and Maya Barker
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DATE OF COMPLETION:	23 rd of April 2013

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Aboriginal Communities:

Lloyd Hood, GunaiKurnai

The Sponsor:

David Sowerby, Sure Constructions

Disclaimer

The information contained in this CHMP references information contained in government heritage databases and similar sources and is, to the best knowledge of Benchmark Heritage Management Pty Ltd, true and correct at the time of report production. While this CHMP contains a summary of information it does not provide, nor does it intend to provide, an in-depth summary and assessment of all available research materials in relation to the Activity Area. Benchmark Heritage Management Pty Ltd does not accept liability for errors or omissions referenced in primary or secondary sources.

Any opinions expressed in this CHMP are those of Benchmark Heritage Management Pty Ltd and do not represent those of any third parties. Benchmark Heritage Management Pty Ltd have undertaken reasonable efforts to consult with Registered Aboriginal Parties and representatives of Indigenous community groups who are, to the best of our knowledge and advice, the legal and proper representatives of the local Indigenous community relevant to the Activity Area. However, Benchmark Heritage Management Pty Ltd will not be held responsible for opinions or actions which may be expressed by dissenting persons or organisations. This CHMP has been prepared to comply with the *Aboriginal Heritage Act 2006* and the *Aboriginal Heritage Regulations 2007*.

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Abbreviations

ACHP: Aboriginal Cultural Heritage Place

BHM: Benchmark Heritage Management

GKLWAC: GunaiKurnai Land and Waters Aboriginal Corporation

CHMP: Cultural Heritage Management Plan

BT: Backhoe transect

TP: Test Pit

VAHR: Victorian Aboriginal Heritage Register

Executive Summary

Activity, Location and Level of Assessment Undertaken

The Activity Area is located at 110-120 Waterloo Road, Moe, Victoria, and covers an approximate area of 210,000m². The proposed activity for the property is a residential subdivision comprising 109 individual lots with an average size of 1042 sq.m. (see Map 3).

A Notification of the Intent (NOI) to prepare this CHMP, as required by Section 54 of the Act was submitted to the Secretary, Aboriginal Affairs Victoria (AAV) on the 4th of April 2013. A copy of the NOI is attached as Appendix 1. AAV replied to the NOI on the 4th of April 2013 and allocated this project with the CHMP Number 12583.

The GunaiKurnai Land and Waters Aboriginal Corporation have been appointed as a RAP for the region in which the Activity Area is located. GKLWAC responded and stated that they would be evaluating the CHMP (Appendix 1).

Results of Assessment: Desktop Assessment

The Activity Area has been settled by Europeans since the 1840s. From this time various landscape changes have been made, such as clearing of scrub and timber and ploughing. These initial impacts would have resulted in the possible destruction of culturally scarred trees and a variety of surface archaeological sites such as stone arrangements and the spatial and temporal integrity of stone artefact scatters. Aboriginal stone artefacts may have survived however little information will now remain regarding how these artefacts were originally deposited. The potential for an archaeological site of high scientific significance (as significance is linked to condition) is therefore low.

The local distribution of Aboriginal archaeological sites clearly indicates that Indigenous people established campsites over a wide area of the alluvial plains and adjacent to existing watercourses. The archaeological sites which have been recorded in previous studies are indicative of past campsites, established by Indigenous people exploiting resources in the riverine environments, as well as resources which would have been available on the grassy plains.

Because of the close proximity of the Activity Area to the riverine environments of the Moe Swamp it is possible that Indigenous people would have established campsites in the local area, including the Activity Area, during the past. This is supported by the large number of archaeological sites which have been found in the locality surrounding the Activity Area.

There is, therefore, some potential for remains of past Indigenous campsites to occur within the Activity Area. Archaeological site types are most likely to comprise of surface scatters of stone artefacts and scarred trees. Any surface or near surface archaeological sites within the

Activity Area, are likely to be highly disturbed by land clearance, grazing, slope wash and siltation.

Very little is known about the Bunjil Kraura and land use practises within the region of the Activity Area. A number of archaeological assessments have been undertaken within the region and some of these studies have resulted in site prediction models for the occurrence of Indigenous archaeological sites on the alluvial plain and within creek and river valleys. It is suggested that stone artefact scatters are most likely to occur on the alluvial plains within 200m of a water body (Hall 1988).

The probability of locating Indigenous sites within the Activity Area is low. This likelihood is based on the current land use history, on previous studies undertaken within the area and the proportion of sites located within proximity to the area. It is possible that the existence of cultural heritage may have been adversely affected. This is because:

1. Based on the regional history the existing conditions on the property; past land use activities that have occurred within the study area include clearance of native vegetation, grazing, ploughing, and construction of a dwelling and associated farming infrastructure. These activities would have adversely impacted on any Indigenous archaeological sites.
2. The soils within the former swamp land that comprises the bulk of the study area are likely to clayey and poorly drained; and are unlikely to contain deposits of Aboriginal cultural material;
3. The area of former lowland forest in Lot 1 on TP674252 is considered to be of slightly higher potential sensitivity than the lots to the north (Map 5). This is because Aboriginal sites are more likely to be located on elevated, well drained and sheltered locations on the margin of swamplands/wetlands.
4. The soils within Lot 3 on TP836437 are likely to comprise clay soils which have formed as a result of flood activity and are therefore unlikely to contain any cultural heritage material.
5. There are no registered Aboriginal archaeological sites located in the Study Area;
6. There has been no previous archaeological assessment of the Study Area;
7. Previous archaeological assessments in the region have indicated that Aboriginal archaeological sites within the region are likely to be located on elevated well drained land within close proximity to swamps and watercourses.
8. There is a low likelihood of culturally scarred trees remaining within the Study Area due to previous land clearance.

The alluvial deposits on the floodplain within the Study Area contain deep deposits of silt, gravel and clay. Consequently, any archaeological sites on this landform are likely to be obscured or are deeply buried. It is likely that the remains of camp sites on higher ground may have been exposed as material is washed onto the floodplain, therefore deflating these campsites.

However we must also take into account the impact of recent land use on any deposits of Aboriginal cultural material. Most if not all of any Aboriginal archaeological sites within the property are likely to have been impacted on by past land use activities, such as the clearance of native vegetation. As much of the Study Area has been farmed since the early 1850s, it is likely that any surface or near-surface remains of past Indigenous campsites will be highly disturbed.

Results of Assessment: Standard Assessment

A systematic surface survey of the Activity Area was undertaken by cultural heritage advisors Matthew Barker and Mr Lloyd Hood from the GunaiKurnai on April 8th 2013.

No Indigenous archaeological sites were identified within the Activity Area during the field investigation (this includes artefact scatters, scarred trees, caves, cave entrances and rock shelters).

The absence of any evidence for Indigenous cultural sites may be due to the Activity Area having incurred disturbance in the past, including the clearance of native vegetation.

The standard assessment (surface survey) has determined that it is likely that the proposed activities will impact on any Aboriginal cultural heritage sites within the proposed Activity Area.

The majority of the Activity Area has been cleared of native vegetation. This would have contributed to soil erosion and the movement of any Aboriginal cultural material that may have existed on the ground surface; thus the removal of topsoils and the destruction of any surface or near surface Aboriginal cultural materials. Vegetation clearance is not considered to be significant ground disturbance.

Mr Lloyd Hood from the GunaiKurnai felt strongly about the area and recommended a robust sampling strategy be developed to ensure that any cultural heritage is identified through a proper cultural and archaeological investigation so that any potential impacts from the activity can be identified and minimised.

However, it is considered that there is potential that Aboriginal archaeological sites may be located within the development footprint of the proposed residential subdivision. This is because:

- Well drained areas within walking distance to food and water sources are sensitive landforms for Indigenous archaeological sites;
- Ground surface visibility was poor and was not adequate to assess the soils deposits.

Due to a lack of ground surface visibility in the Activity Area and the potential for buried archaeological sites within the Activity Area, the standard assessment has determined that there is a requirement to undertake a further complex assessment for this activity, prior to the preparation of a CHMP document.

Results of Assessment: Complex Assessment

A complex assessment comprising hand excavation was carried out as part of this CHMP. The aim of the subsurface testing/excavation was to establish if the proposed activity is likely to cause harm to Aboriginal cultural heritage. The complex assessment was undertaken by Matthew Barker and Dr Maya Barker (BHM) and GKLWAC representatives Lloyd Hood and Cory Simpson from April 8th to April 9th 2013.

A 1x1m test pi and 22 backhoe transects were excavated, to establish the soil stratigraphy of the Activity Area and to assess the likelihood of Indigenous cultural material being located within the Activity Area.

No Aboriginal cultural material was noted in the deposits.

The stratigraphy of the backhoe transects and test pits excavated within this landform was uniform with no major differences noted in any of the excavations.

Soils on the Activity Area are characteristic of a soil type described by Cochrane et al as acidic duplex soils (Geological Survey of Australia: 1995: 51):

- The A horizon is comprised grey to pale grey silt and sand;
- The B horizon is comprised of a red/orange/grey mottled clay

These soils contain a high degree of clay therefore when wet the soils swell which closes the pores thus preventing water from draining through causing water logging (Cochrane et al 1995: 51). Conversely In dry conditions, the A horizon sets hard.

The results indicate that there are no Aboriginal cultural remains within the upper soil profile; and hard clay was consistently found below this level. The complex assessment has revealed that the Activity Area is of low potential sensitivity for Aboriginal cultural deposits.

In terms of ground disturbance; the initial clearance of trees would have also disturbed the integrity of these shallow soils as would the subsequent agricultural activities. However it must be noted that evidence of ploughing or tree removal was not visible in the soil profiles of the excavated test pits and backhoe transects and therefore no definite statements concerning the extent of ground disturbance can be made. It is considered that vegetation clearance and agricultural use of the Activity Area will disturb the integrity of an archaeological deposit within the upper 200-300mm.

Recommendations

Based on the results of the archaeological assessment, the following management recommendations are made for the Activity Area. Please note that once this CHMP is approved these recommendations become compliance requirements.

No Aboriginal cultural heritage was recorded during either the standard or complex assessments. Consequently, no cultural heritage recommendations are necessary.

The contingency plans contained in Section 8.0 of this report form part of the Cultural Heritage Management Plan and must be incorporated into the development or Environmental Management Plan for the project. A copy of this management plan should be held on site at all times.

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Part 1 - Assessment

1.0 Introduction

This CHMP has been prepared for a proposed residential development located at 110-120 Waterloo Road, Moe, herein referred to as the Activity Area. The proposed activity to be undertaken in relation to the Activity Area is a proposed residential subdivision. The purpose of the CHMP is to identify and assess the nature, extent and significance of Aboriginal sites within the Activity Area. The CHMP provides mitigation, protection and contingency procedures for the management of cultural heritage values before, during and after development of the land.

Reasons for Preparing the Management Plan

This Cultural Heritage Management Plan (CHMP) is a mandatory CHMP, because:

- *The proposed Activity Area occurs within an area of Cultural Heritage Sensitivity because it is situated within 200m of a registered Aboriginal Place (Aboriginal Heritage Regulations 2007, Part 2, Div 3, 22 (1 and 2)).*
- *The proposed activity is a high impact activity because it involves the subdivision of land into three or more lots (Aboriginal Heritage Regulations 2007, Division 5, 46, Part 1 (a) and (b)). It is a high impact activity involving excavation and filling of the land surface for the purpose of constructing house-lots, roads, driveways, deep excavation for associated service infrastructure, as well as more superficial landscaping works (see Section 2.0).*

The purpose of the CHMP is to identify and assess the nature, extent and significance of Aboriginal sites, objects and cultural heritage values within the subject land and to provide mitigation, protection and contingency procedures to manage those values before, during and after development of the land.

In accordance with Section 61 of the Aboriginal Heritage Act (2006), the following mandatory matters are considered by this CHMP:

- Whether the activity will be conducted in a way that avoids harm to Aboriginal cultural heritage;
- If it does not appear to be possible to conduct the activity in a way that avoids harm to Aboriginal cultural heritage, whether the activity will be conducted in a way that minimises harm to Aboriginal cultural heritage;
- Any specific measures required for the management of Aboriginal cultural heritage likely to be affected by the activity, both during and after the activity;

- Any contingency plans required in relation to disputes, delays and other obstacles that may affect the conduct of the activity.

Location of the Activity Area and Current Landowner

The Activity Area is located at 110-120 Waterloo Road, Moe, Victoria, and covers an approximate area of 210000m².

Specifically, the Activity Area is located in the Parish of Moe, County of Buln Buln, Lot 1 on TP674252 and Lot 3 on 836437, in the City of Latrobe. The Activity Area is located in Zone 55. The Activity Area is situated within the City of Moe, which lies approximately 150km east of the Melbourne CBD (see Map 1 and Map 2).

The land comprising the Activity Area is owned by Sure Constructions.

Name of the Sponsor

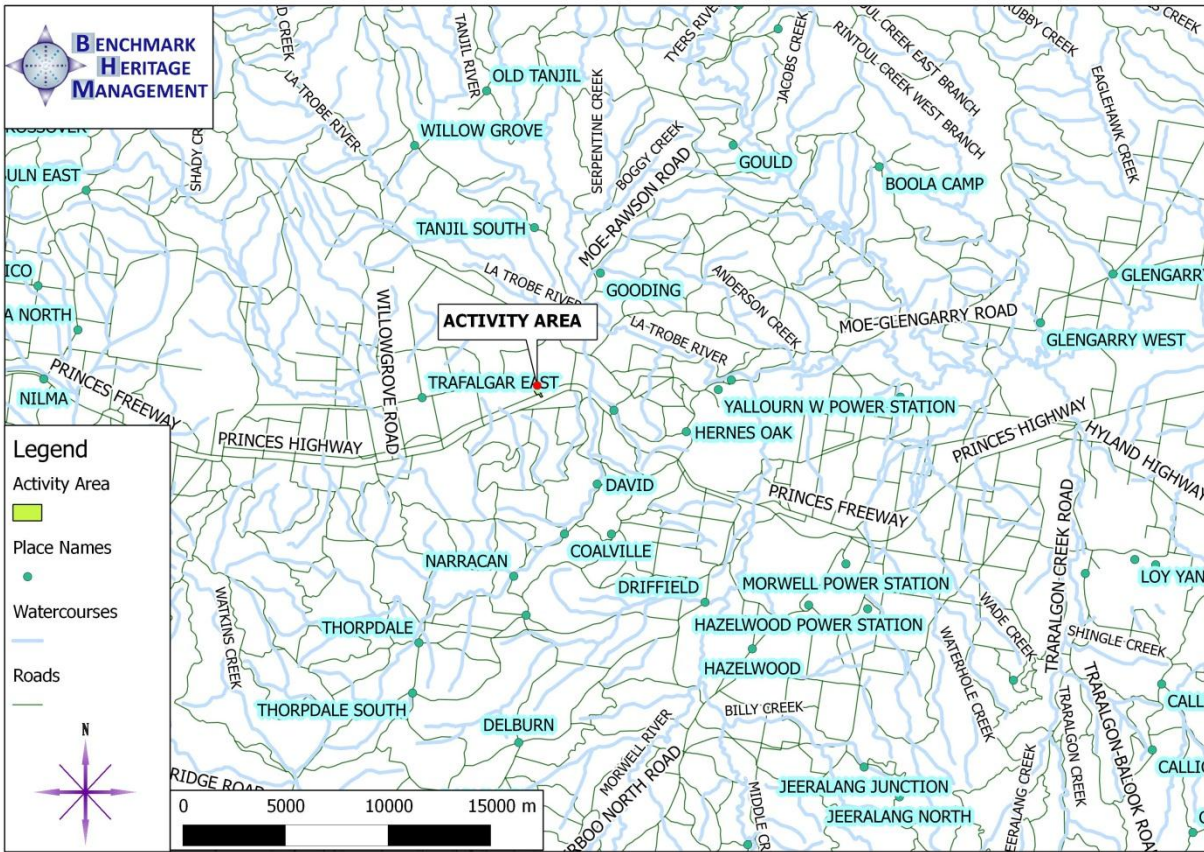
The sponsor for this CHMP is the Sure Constructions, ABN 51 132 266 061.

Details of Cultural Heritage Advisors

The Cultural Heritage Advisors who have undertaken this CHMP are Matthew Barker and Dr Maya Barker. Matthew holds a BA Hons [Archaeology] from La Trobe University and has had seven years' experience working in the field of Aboriginal archaeology. Dr Maya Barker (BA Hons [Arch]/BSc/PhD [Arch]) holds degrees from both Monash and La Trobe Universities and also has over seven years' experience working in the field of Aboriginal archaeology.

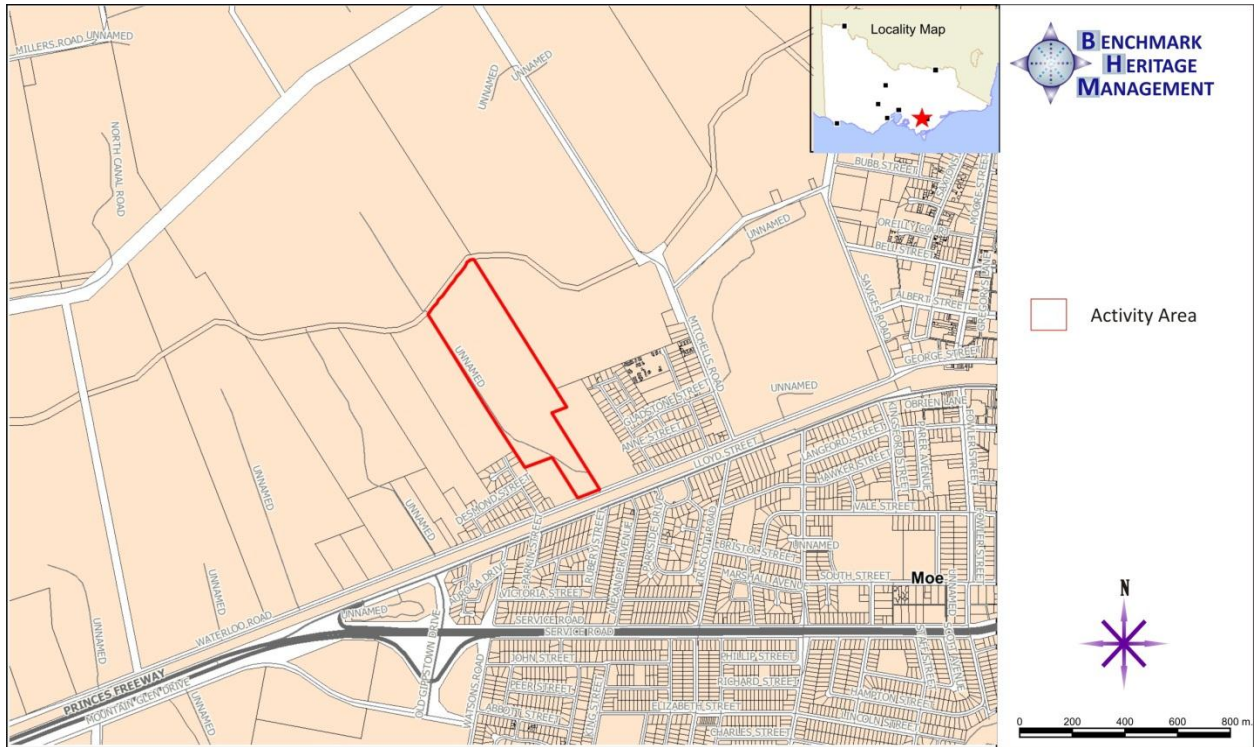
Registered Aboriginal Party (RAP) with Responsibility for the Activity Area

At the time of preparation of this CHMP no RAP had been appointed for the Activity Area. Therefore the Secretary (AAV) will be evaluating the plan. Consultation with relevant Aboriginal groups has been undertaken.



Map 1: Activity Area Location: Regional View

The Activity Area is located in Zone 55. Parish of Moe, County of Buln Buln, Lot 1 on TP674252 and Lot 3 on 836437, in the City of Latrobe.



Map 2: Activity Area Location within Moe

2.0 Activity Description

The proposed activity for the property is a residential subdivision comprising 109 individual lots with an average size of 1042 sq.m (see Map 3). The land is zoned Residential 1 (R1Z).

The proposed development will involve some degree of soil disturbance to both surface and buried land surfaces. This activity is the beginning of a development process that will involve some degree of soil disturbance to both surface and buried land surfaces, and it is not possible for development to take place within the Activity Area in a way that will avoid harm to Indigenous cultural heritage should any such material be found to exist on the property. It should be noted, however, that details of any further development beyond the construction of the houses is not within the remit of Sure Constructions P/L and will be decided by individual property owners after purchase.

However, the sequence of activities which will occur during the course of any subsequent development is likely to be as follows:

1. Installation of drainage, utilising heavy machinery through the excavation of open cut trenches only. The top surface of the existing stripped ground 1.0m to either side of the trench may be disturbed during this work.
2. Installation of services (electricity, telecommunications, gas, water) utilising heavy machinery. As the trench excavations are likely to be relatively shallow and narrow, disturbance either side of the trench is of minimal impact.
3. Where possible, shared trenching or common works areas will be used.
4. Once all works involving excavation are complete, the allotments are then filled (where necessary) and/or shaped in accordance with the design levels, ready for when the development is constructed by the purchaser.
5. Industry construction will then take place in accordance with the design of the individual purchaser.
6. Landscaping works will also occur according to the needs of each individual purchaser.

All of the above activities will involve the removal of topsoil, and would therefore have some potential to harm Aboriginal cultural heritage if it was found to exist within the Activity Area. A summary of typical trench widths and depths of excavation of each construction activity is provided below:

Activity	Width of Trench (m)	Depth Range (m)
Drainage	0.9 – 3.0	1.0 – 4.0
Sewer reticulation	0.9 – 2.0	1.0 – 5.0
Water reticulation	0.3 – 1.0	0.8 – 1.0
Electricity	0.3 – 1.0	0.6 – 0.9
Telecommunications	0.3 – 1.0	0.3 – 0.6
Gas	0.3 – 1.0	0.6 – 0.9

Map 3: Development Plan

3.0 Extent of the Activity Area Covered by the Management Plan

The Activity Area is located at 110-120 Waterloo Road, Moe, Victoria and covers an approximate area of 210000m² (20.1ha) known as Parish of Moe, County of Buln Buln, Lot 1 on TP674252 and Lot 3 on 836437, in the City of Latrobe. The Activity Area is located in Zone 55. The Activity Area is situated within the city of Moe, which lies approximately 150km east of the Melbourne CBD (see Map 1). The extent of the Activity Area covered by this CHMP is shown in Map 4.

The Activity Area comprises an undeveloped irregular block of land bordered by Waterloo Road to the south, light industrial units and residential homes to the east and west and open pasture to the north (Map 4). A manmade drainage channel flows on the northern boundary.

Topographically the Activity Area comprises a wide section of the Moe River floodplain with a gentle slope to Waterloo Road.

The Activity Area comprises mostly cleared pasture and is characterised by dense grass coverage (see Plates 1-10 - Section 5.2). Ground disturbance within the Activity Area has occurred as a result of pastoral practices involving clearance of native vegetation, and grazing. It is likely these activities have caused disturbance to the topsoils, especially as the entire property would have been covered in dense woodland.



Map 4: Aerial View of Activity Area

4.0 Documentation of Consultation

A Notification of the Intent (NOI) to prepare this CHMP, as required by Section 54 of the Act was submitted to the Secretary, Aboriginal Affairs Victoria (AAV) on the 4th of April 2013. A copy of the NOI is attached as Appendix 1. AAV replied to the NOI on the 4th of April 2013 and allocated this project with the CHMP Number 12583.

The GunaiKurnai Land and Waters Aboriginal Corporation have been appointed as a RAP for the region in which the Activity Area is located. GKLWAC responded and stated that they would be evaluating the CHMP (Appendix 1).

Consultation in Relation to the Assessment

Initial Aboriginal community consultation was conducted with a representative of the GunaiKurnai in the form of a meeting within the Activity Area. The Indigenous group was invited to participate in the standard and complex assessments.

Participation in the Conduct of the Assessment

The standard assessment was conducted on the 8th of April 2013 and was undertaken by Mr Matthew Barker of Heritage Insight P/L and Mr Lloyd Hood from the GunaiKurnai. The complex assessment was conducted from the 8-9th of April 2013 and was undertaken by Mr Matthew Barker and Maya Barker of BHM P/L, Lloyd and Jarrod Hood of the GunaiKurnai.

Consultation in Relation to the Recommendations

The results of the complex assessment were discussed on site with Mr Lloyd Hood from the GunaiKurnai.

Summary of Outcomes of Consultation

Mr Lloyd Hood from the GunaiKurnai requested that a thorough excavation should be undertaken. The results of the complex assessment were discussed with Mr Lloyd Hood from the GunaiKurnai. Mr Hood stated that the complex assessment had thoroughly tested the activity area and it was clear that the entire property was of low sensitivity for Aboriginal cultural material.

5.0 Aboriginal Cultural Heritage Assessment

5.1 Desktop Assessment

This section contains the results of the desktop assessment. The aim of the desktop assessment is to produce an archaeological site prediction model, which would assist in the design of the fieldwork, the interpretation of the fieldwork results, the assessment of cultural significance and the design of the management recommendations. The desktop assessment involved a review of:

- Standard ethnographic sources to identify the likely traditional owners and a review of any written and oral local history regarding Aboriginal people in the geographic area;
- Environmental resources available to Aboriginal people within the region of the Activity Area;
- The site registry at AAV and previous archaeological studies, to identify any previously registered Aboriginal archaeological sites either within or surrounding the Activity Area and the results of previous -archaeological assessments; and
- The land-use history of the Activity Area, particularly evidence for the extent and nature of past land disturbance.
- The landforms or geomorphology of the Activity Area and identification and determination of the geographic region of which the Activity Area forms a part that is relevant to the Aboriginal cultural heritage that may be present in the Activity Area.

This information was used to produce an archaeological site prediction model (Section 5.1.1). The site prediction model assists in determining the type of archaeological sites which may potentially occur within the Activity Area, the possible contents of these sites, the possible past use of the landscape by Aboriginal people and the likely extent of ground disturbance to archaeological sites. The information provided by the site prediction model is used constructively in designing the survey strategy, by, for example, allowing the field team to target areas which have a high probability of containing archaeological sites. No obstacles were encountered during the preparation of this desktop assessment.

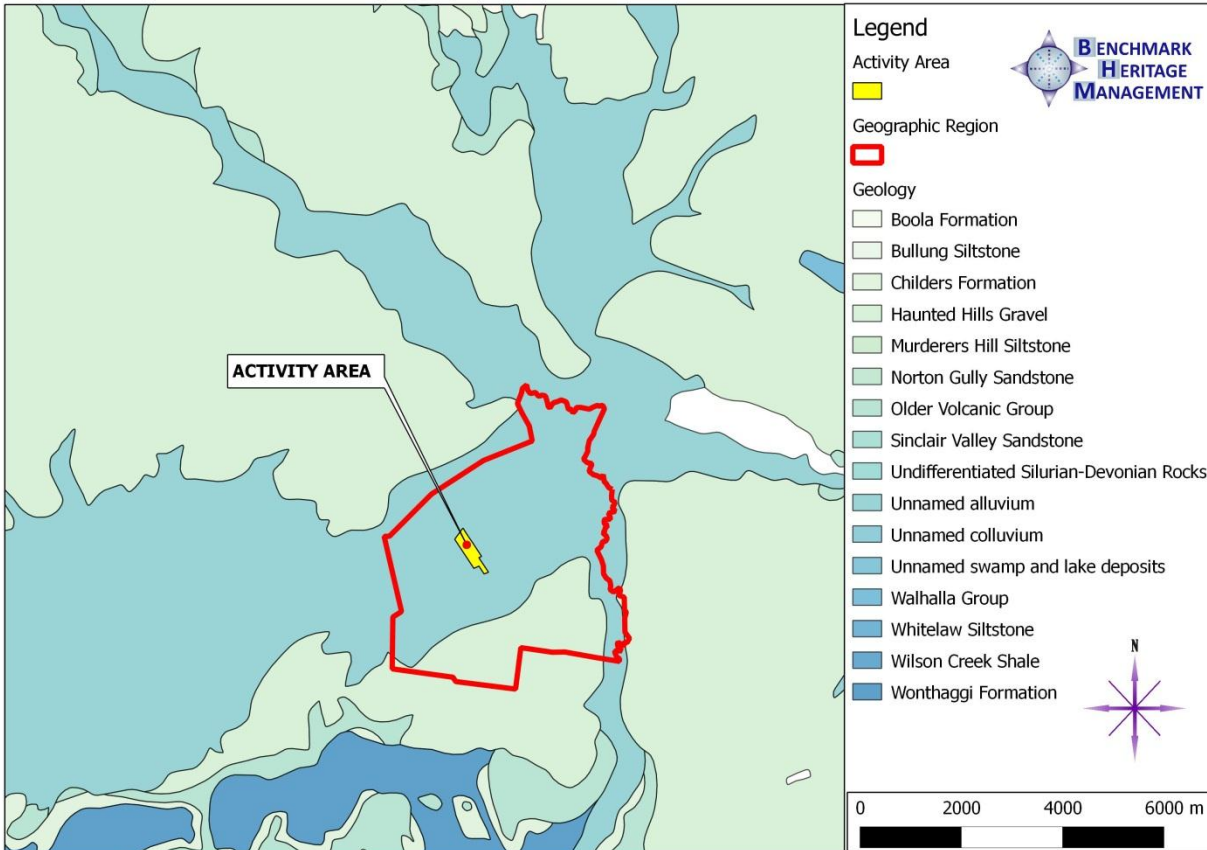
Search of the Victorian Aboriginal Heritage Register

The Victorian Aboriginal Heritage Register (VAHR) on-line database maintained by Aboriginal Affairs Victoria was searched to identify any previously registered Indigenous archaeological sites within the Activity Area and surrounding geographic region, as well as the results of previous archaeological assessments. The Register was accessed on the 5th of April 2013. Two ACHPs were found to be located within 200m of the Activity Area: 8121-0215 and 0217. VAHR 8121-0215 (Map 6) is located within approximately 25m of the southern boundary of the study area on Waterloo Road; within the rail reserve. The site comprises two silcrete cores recorded during monitoring of upgrades to the regional rail link. The 50m buffer of cultural sensitivity falls on the southernmost section of the current study area: Lot 1 on 674252. A further two

sites were located within the rail reserve: 8121-0217 and 0272 both of which comprises artefact scatters.

The Geographic Region

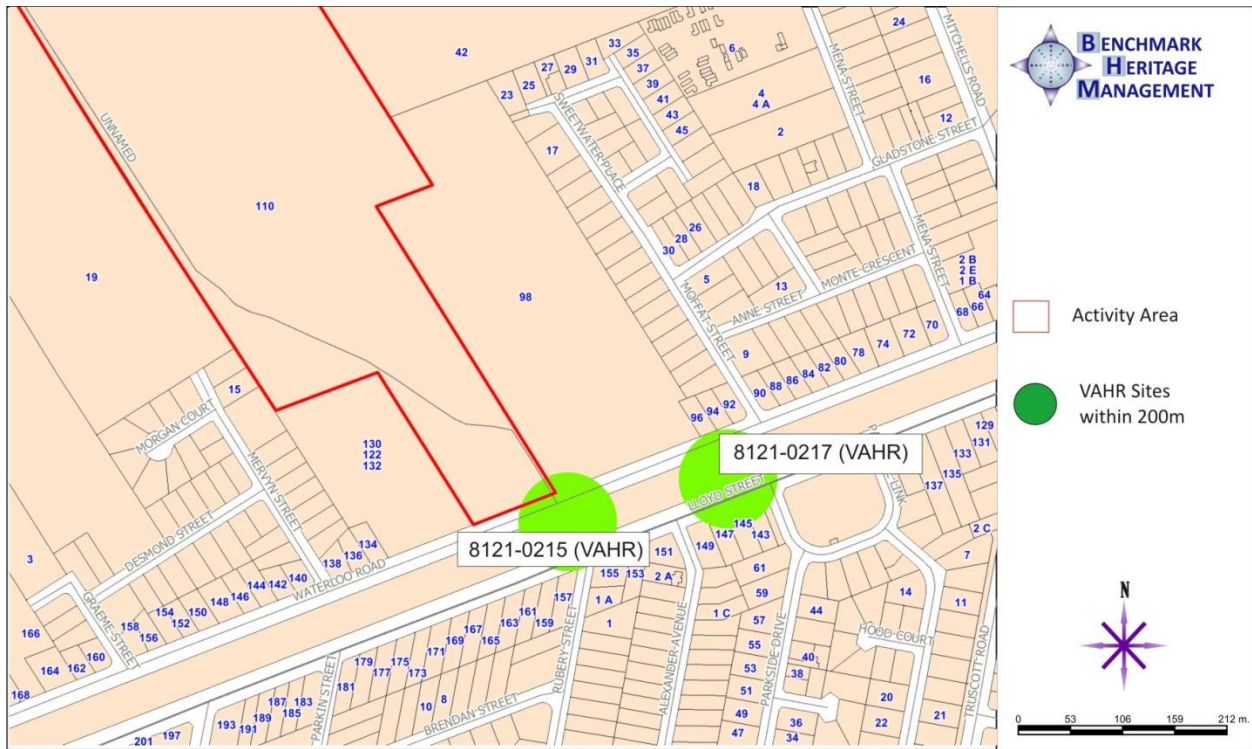
The geographic region in which the Activity Area is located is the City of Moe (Map 5).



Map 5: Geographic Region

Registered Aboriginal Places in the Geographic Region

The Activity Area has not been subject to previous archaeological assessment and no Aboriginal Cultural Heritage Places (ACHP) are located on the property, however many Indigenous sites have been recorded in the surrounding geographic region. There are 5 registered Aboriginal Cultural Heritage Places within the geographic region; comprising 4 artefact scatters and an Aboriginal Historic Place (see Table 1). Within 10km there are 138 ACHP's, the majority comprising artefact scatters located along watercourses.



Map 6: Aboriginal Places within 200m of the Proposed Activity Area

Table 1: Site types in the region of the Activity Area

Site Type	Frequency (No)
Artefact Scatter	126
Scarred Tree	2
Artefact Collection	1
Earth Feature	5
Quarry	1
Literature Reference Only	2

There are no Aboriginal Cultural Heritage Places within 200m of the Activity Area. The post-Contact Historic Place that has been recorded near the Activity Area relates to GunaiKurnai Elder Lloyd Hood. VAHR Historical Place Report 2.3-14 is a place type record of Noel Hood in Moe (approx. 2km north of the Activity Area). The report notes that: Noel Hood, Joycie’s father, had been a slaughterman at Lake Tyers, and when he left Lake Tyers in 1964, he got a job as slaughterman at Rice Brothers in Moe. Noel used to leave home at 5.30 am and walk ten miles to work and ten miles home every day. Noel’s brother Lloyd got the job when Noel left (Joycie Hood Interview No.1, 1993).

Only general locations for these post-Contact places are known, however, such recent associations with Moe point to a continued presence and contribution by Aboriginal people within the broader East Gippsland communities. These places are important because of their associations with, and cultural significance to Aboriginal people.

Previous Works in the Geographic Region Relevant to the Activity Area

Regional Investigations

There have been few regional archaeological investigations in the surrounding region and none of these has incorporated the Activity Area. In general, these studies have shown that there is a high probability that Aboriginal Cultural Heritage Places will occur in landforms such as creek banks and dry elevated rises bordering watercourses and floodplains that the most common Aboriginal Cultural Heritage Place types are likely to be artefact scatters and, where suitable trees remain, culturally modified trees.

There has been only one regional study that has included Moe. This study is of relevance to the current investigation as it runs parallel to the pipeline alignment, as it was confined to the railway easement of the Gippsland rail line. However the following information has been collated from site cards as no report is listed on the Victorian Aboriginal Heritage Register. In 2003, Rhodes conducted a sample survey of the Gippsland Railway line as part of the Regional Fast Rail Project. Two low density stone artefact scatters were found close to Moe River as part of monitoring construction works (8121-0215 and 0217). A later survey conducted by Pauline Mullet recorded a further low density surface artefact scatters within the rail reserve (8121-0272).

A number of archaeological investigations have been carried out near Moe, of which those relevant to the current investigation are discussed below.

In 1981 Wesson and Beck conducted an archaeological survey of the Driffield Project area, between Morwell and Yallourn and south to Yinnar. The field survey resulted in the recording of 132 Aboriginal sites were recorded, comprising 22 surface scatters of stone artefacts, 4 scarred trees and 2 stone sources. They considered that site location was affected by:

1. Proximity to water;
2. Access to and availability of resources;
3. Access and availability to stone resources;
4. Good vantage points;
5. Elevated well drained areas;
6. Type of ground surface.

The sites included a large quarry VAHR 8121-0087. The majority of the stone artefacts were made on silcrete; a rock type not found in the Driffield study area and no source for this rock

type was discovered during the investigation or since. In terms of landform and context the following was pattern was noted:

- Crest - 36%
- Slopes -35%),
- Creek banks and undulating land - 10%
- Level plains and river terraces -5%

The authors considered that the number of sites located was directly affected by ground surface visibility conditions. The largest number of sites was located within the hills landform, and this was also the land system that received greater survey coverage due to higher levels of ground surface visibility.

The closest previous Aboriginal heritage investigation was undertaken by Brown and Sciusco (1995) of a property on Old Sale Road, Moe, north of the present Activity Area. This study area consisted of a cleared gentle north west facing hill slope with no natural watercourses. During this investigation a single stone artefact was located (AAV 8121-0153) and recorded, and removed from site by the Aboriginal community representative. The artefact was considered waste/un-utilised and was assessed as being of low scientific significance. The authors concluded that the study area was unlikely to be a location frequently utilised by pre-contact Aboriginal people as a campsite due to its poor drainage. The stone artefact was considered to represent evidence of a short term ephemeral campsite location resulting from Aboriginal people foraging through the area in the past. It was recommended that no further investigation was required prior to development of the study area.

Murphy (2007) undertook a cultural heritage investigation of land proposed as a future residential development and extension to an existing golf course in Newborough approximately 4km east of the current Activity Area. Based on the Aboriginal archaeological, ethnographic and environmental background, and results of the site survey, the study area was considered to have limited Aboriginal archaeological potential. The tributary of Sandy Creek within the study area was not considered to have provided fresh water on a reliable basis and vegetation in the upper section of the drainage line was dry woodland. The banks of Sandy Creek were preserved within an open space/reserve and will not be directly impacted by development of the study area. The banks of Sandy creek were considered the most probable landform for the presence of cultural material. Very low density surface scatters of stone artefacts were the only predicted site type for the study area. Due to past disturbance, no other site type is considered likely or possible for the study area. Previously disturbed low density artefact scatters are common throughout the region and Victoria in general and in most cases have limited scientific value.

The results of the investigation concluded that previously disturbed low-density scatter of stone artefacts are likely to be present within the study area but are likely to be obscured by thick pasture grasses. As the potential archaeological deposits within the study area are highly unlikely to contain any significant spatial or temporal integrity, Murphy considered that was no further requirement for additional scientific assessment of the study area.

Barker (2012) undertook a CHMP at Coalville Road, Moe, Victoria for a proposed residential subdivision (CHMP 12219). Two 50cm x50cm test pits and 188 shovel test pits were excavated, to establish the soil stratigraphy of the Activity Area and to assess the likelihood of Indigenous cultural material being located within the Activity Area. No Aboriginal cultural material was noted in the deposits. The results indicated that there are no Aboriginal cultural remains within the upper soil profile; and dense, sterile, moist clay was consistently found below this level. The complex assessment has revealed that the Activity Area is of low potential sensitivity for Aboriginal cultural deposit. In terms of ground disturbance; the initial clearance of trees would have also disturbed the integrity of these shallow soils as would the subsequent agricultural activities. However it must be noted that evidence of ploughing or tree removal was not visible in the soil profiles of the excavated test pits and backhoe transects and therefore no definite statements concerning the extent of ground disturbance can be made. It is considered that vegetation clearance and agricultural use of the Activity Area will disturb the integrity of an archaeological deposit within the upper 200-300mm.

The Environmental Determinants of the Activity Area

The desktop assessment included a review of the physical context and natural resources present within the Activity Area. These environmental variables can determine how people used the landscape in the past. This information is used to gain an understanding of past human behaviours and provides an indication of where archaeological sites and heritage places may be located within the landscape. These environmental factors are summarised below.

Geology and Geomorphology

The Activity Area is located within the Gippsland Basin - the northwestern portion of the Gippsland Basin lies within the Central Highlands area. The main sedimentary sequences within the area are the Strzelecki Group (Cretaceous) and the Moe Swamp Basin (Tertiary). Tertiary sediments deposited in the Latrobe Valley Depression, which are partly continuous with the Moe Swamp Basin sediments, lie to the south of the Central Highlands.

The Moe Swamp Basin and Latrobe Valley Depression form the northwestern lobe of the Gippsland Basin. Eocene to Pleistocene continental clastic sediments, volcanics and thick seams of brown coal fill these sedimentary basins and cover the intervening Haunted Hill Block which forms a concealed basement high and separates the two basins. Large deposits of brown coal accumulated during Tertiary times in slowly subsiding shallow water basins. The climate and geological conditions in these basins were suitable for the continuous formation of peat, in sufficient quantities for subsequent consolidation and upgrading into thick seams of brown coal (Gloe, Barton, Holdgate, Bolger, King and George, 1988).

The Moe Swamp Basin sequence includes seams of brown coal interbedded with, and overlying several thick flows of basalt (Thorpdale Volcanics), and overlain by clay, sand, and gravel resulting in a series of fluvial and marine terraces which have resulted from fluctuating sea

levels (Jenkin 1968: 75, following Murphy 2007). These terraces have been incised by several major drainage systems including the Moe, La Trobe and Thompson Rivers (LCC 1982).

The Activity Area is within the unnamed alluvium geological landform (Map 5) which comprises of Holocene deposits of alluvium (Qa1) comprising gravel, sand and silt (DPI Geovic Interactive Map, Accessed 19/4/2013). These are non-marine deposits laid down by ancient watercourses. The DPI Catchment Information Mapper describes the entire activity area as being floodplain with poor drainage and waterlogging along watercourses and drainage lines. Soils of a higher sand component are found along the drainage lines, and overly more compact brown silt.

To the south is a formation known as the Haunted Hills landform which is known to have supplied pre-contact Aboriginal people with a variety of raw stone materials. There are no significant outcrops of stone occurring within the Activity Area. To the north of the Activity Area, a number of Palaeozoic and Mesozoic rocks outcrop, and to the south west, basalts of Oligocene age also occur (LCC 1980: 275). The main form of naturally occurring stone within the Activity Area is small water-worn quartz pebbles.

Climate

Temperature averages at Moe indicate a cold to hot maximum average of 6.8°C in July to 22.9°C in February. Minimum average temperatures throughout the year range from 6.8°C in July to 13.9°C in February. The annual average rainfall for the area is 687mm. These climate conditions would have placed no restrictions on Indigenous or European occupation of the area (BOM accessed 6/4/13).

Water Sources

Sources of fresh water would have existed in close proximity to the present Activity Area. Narracan Creek is located approximately 2.5km east of the Activity Area and the Latrobe River is located 4.5km north. The Moe Swamp was 2km to the northwest would have been a significant water source and would have provided a perennial supply of water. The Moe Contour Drain traverses the northern boundary of the study area and is a recent man made drainage channel and therefore is not considered culturally sensitive.

All the watercourses in the geographic region are part of the Latrobe River Basin. The basin extends south to north from the Strzelecki Ranges to the Great Dividing Range. It consists of an elongated central area of flat cleared farmland with unconsolidated soils, (potential for bank erosion), plus a larger northern and smaller southern area of forested, steep mountain and/or hills. The La Trobe River originates as a number of tributaries in several high rainfall areas (mean annual 1,000-1,400 mm and 1,400+ mm) resulting in a very reliable flow regime and a large waterway, downstream. Rainfall elsewhere is in excess of 700 mm per year except in the eastern area where it varies from 500-700 mm.

Land use in the central La Trobe Valley is grazing and broad acre cropping with intensive cropping of potatoes in rolling hills at Thorpdale. The largest river is the La Trobe which flows for over 80 km, discharging into Lake Wellington. A clear separation can be made between streams flowing through forest and those in farmland. The former (mostly in the north-western area) are in excellent condition with native riparian vegetation, coarse substrate with little or no sedimentation, fast-flowing riffles, good pools, clear water and good summer flow. They contain excellent habitat for biota and provide a good environment for fish. Streams flowing through farmland, including the middle and lower reaches of the La Trobe River are in poor condition.

Description of Existing and Pre-Contact Vegetation

The Study Area falls within the Gippsland Plains bioregion (Victorian resources online, dpi website, 2013). The Pre-1750 vegetation comprised a mixture of EVC 53 Swamp Scrub and EVC 16 Lowland Forest (DPI Biodiversity Interactive Map, Accessed 7/04/2013). The former of which comprises 90% of the study area, whilst the latter comprises a narrow strip approximately 100m wide along Waterloo Road in the far south of the study area.

EVC 53 Swamp Scrub: Land containing swamp scrub is dominated by Swamp Paperbark *Melaleuca ericifolia* or sometimes Woolly Tea-tree *Leptospermum lanigerum* and Swamp Gum *Eucalyptus ovata*. Understorey vegetation can comprise by Swamp Paperbark *Melaleuca ericifolia*, Woolly Tea-tree *Leptospermum lanigerum*, Common Reed *Phragmites australis*, Hop Goodenia *Goodenia ovata*, Sweet Bursaria *Bursaria spinosa*, Victorian Christmas-bush *Prostanthera lasianthos*, Wattles *Acacia* spp. Spiny-headed Mat-rush *Lomandra longifolia* and Common Tussock-grass *Poa labillardierei*.

EVC 16 Lowland Forest: comprises widespread eucalypt forest on relatively fertile, moderately well-drained soils in areas of relatively high rainfall; characterised by the diversity of life forms and species in the understorey including a range of shrubs, grasses and herbs. This widespread dry forest type grows on soils of moderate fertility on the foothills of the Great Dividing Range through to the foothills of the Strzelecki ranges and Wilsons Promontory National Park to far East Gippsland. The understorey varies from shrubby to heathy to sedgy and may even be grassy as fertility increases. It occurs mostly in the intermediate rainfall areas of the foothills where it occupies the dry aspects and dry crests where incident radiation is greatest but may also occur in the lower rainfall/lower fertility areas of the Gippsland plains. In the foothill areas, Damp Forest develops immediately down slope where sufficient topographic protection is available. Lowland Forest merges into Gippsland Plains Grassy Woodland or South Gippsland Plains Grassland as fertility increases and with decreasing fertility on the most infertile sands, Heathy Woodland and Sand Heathland occur. The vegetation is dominated by a tall eucalypt tree layer to 30 m tall over a medium to tall dense shrub layer of broadleaved species typical of wet forest mixed with elements from dry forest types. The ground layer includes herbs and grasses as well as a variety of moisture-dependent ferns including occasional tree ferns.

Silver wattle may have been employed by local Indigenous peoples in the production of stone axe handles, its gum used as a food source or 'mixed with ash to make a waterproof paste, used for fixing holes in bark water vessels' (Zola and Gott, 1996: 38). Tussock grasses may have been used to make baskets and mats, and the tubers of water-ribbons had the potential to provide a valuable food source for local inhabitants (Zola and Gott, 1996: 58, 12). River red gums potentially provided Indigenous inhabitants with bark for a variety of uses including the building of shelters and canoes, and its gum was also employed for medicinal purposes (Zola and Gott, 1992: 14 and 55). The red gum was popular amongst European settlers as well, who used it primarily for construction (Zola and Gott, 1996: 14).

Water plants including cumbungi (*Typha* spp.) and water ribbons (*Triglochin*) would also have been gathered from these creeks. The roots and tubers of lilies would have been collected and roasted and would have provided a staple food. The fruits of plants such as the native raspberry and the common apple-berry provided a common and sweet food source (Zola & Gott 1996: 49-50).

Information on Fauna of the Activity Area

The Activity Area would have contained a large number and great variety of fauna, many of which would have congregated within the dense vegetation along the Moe River and the Moe Swamp and within the drainage lines. Prior to post-settlement activities of clearing and drainage works, the streams within the Activity Area are unlikely to have had a clearly defined course other than in times of peak flows. The drainage lines were most likely part of an extensive wetland that expanded and contracted with runoff/water level conditions. The abundance of fauna along creeks and around wetlands in the region would have been seasonal, with the greatest concentrations occurring during the summer periods.

Fauna native to the region would have provided Indigenous inhabitants with a potential source for food and clothing, among other things. Walsh (1987, Murphy 2007: 25) considered that the Moe River and the extensive former swamp that existed north of Yarragon Areas would be the focus of Aboriginal exploitation within the region. Within this ecological zone, there would have been variation in staple species diversity and abundance, and this would have in turn influenced site location. Seasonal congregations would have provided the highest food potential, such as eels, nesting birds and their eggs within wetland areas with larger mammals such as kangaroos would have frequented the drier lands.

A number of animals would have been present within the Activity Area and are likely to have been hunted by traditional owners. These include the Eastern Grey Kangaroo (*Macropus giganteus*), Common Brushtail Possum (*Trichosurus vulpecula*), Common Ringtail Possum (*Pseudocheirus peregrinus*), Short Beaked Echidna (*Tachyglossus aculeatus*) and the Wombat (*Vomatus Ursinus*). Birds, bird eggs and reptiles may have also been utilised.

Stone Resources

No stone resources and outcrops suitable for the manufacture of stone tools are found within the Activity Area. The geology within the region of the Activity Area is relevant when considering the availability of stone material suitable for manufacture of tools and may influence aspects of Aboriginal occupation.

Approximately 1km south of the Activity Area is a region of the Haunted Hills Formation which would have provided potential raw materials (e.g. silcrete) for pre-contact Aboriginal stone tool manufacture. The hills to the north and east would also have provided potential sources of basalt, quartz, granite and quartzite (Murphy 2007).

The Activity Area however, does not contain any naturally occurring outcrops of stone material and would therefore be an unlikely location where raw stone materials were once extracted, quarried or collected for the manufacture of stone implements by pre-contact Aboriginal people. This indicates that any Indigenous archaeological stone artefacts located within the Activity Area will be comprised entirely of imported stone.

The Activity Area is comprised of alluvial silts, sands, clays and gravels deposited during past flood events which may include alluvial pebbles.

Historical and Ethno-historical Accounts of the Geographic Region

A search of available literature has indicated that no published references are available which specifically allude to Aboriginal use of the Activity Area. Rather than providing site-specific information which may be limiting and brief, a summary is instead provided of the overview of Aboriginal history in the wider region encompassing the Activity Area. This information is helpful in the formulation of the site prediction model by analysis of the occupational and subsistence patterns of Aboriginal people in the region. In combination with the recorded archaeological evidence for the region, the ethnographic information allows for an interpretation of archaeological sites in the wider area, and is potentially of assistance in locating the likely site types which may be present.

The following information is provided as a summary and should be viewed as such; it does not set out to detail all of the historical information available on the Gunai people of Gippsland. Further, the following information does not include any oral history from the Gunai that may be relevant to the Activity Area.

The current Activity Area and surrounding region are located within the Gunai Kurnai language group (Clark 1990, 364; Barwick 1984). The Gunai Kurnai occupied the stretch of land in Gippsland reaching between Wilson's Promontory and New South Wales (Volume 2: Figure 7). It has been suggested by Wesson (2000, 17) that custodianship and ownership in Gippsland was primarily focused on a 'local descent group'. Each group undertook care and maintenance responsibility for a region of land. As such these groups may have exercised a high degree of

residential mobility within and beyond their 'tribal territories'. It is suggested by Howitt (cited in Wesson 2000, 41-42) that a total of five clans comprised the Gunai Kurnai. These clans were known respectively as: Brataualong, Brayakaulung, Tatungalung, Krauatungalung and Brabralung. The boundaries of the groups were often correlated to major geographical features such as rivers, mountain ranges, or valleys.

The current Activity Area is located within the traditional territory of the Brayakaulung people. The territory of these people comprised the land reaching from the land north of the Latrobe River, east to the Mitchell River and north to the headwaters of the Wonangatta River (Wesson 2000, 41-42). The Bunjil Kraura/Woollum Woolum were the group most closely associated with the Brayakaulung people. This group are associated with the land located around Longford and Rosedale in association with the Latrobe River (Wesson 2000, 28). It is likely that, owing to the rich food resources available, the Bunjil Kraura/Woollum Woolum focused their efforts on the lower Latrobe Valley which encompassed the river and rich alluvial flats and which may have encompassed the western edge of Lake Wellington. As their area also expanded into Mount Warragul and alpine country the group would also have had seasonal access to Bogong Moths.

Eels and Fat Mullet comprised a primary food source for the summer; consequently much of the season was spent fishing. Camps were established at the entrance to the Lakes, where fish and eels were plentiful during the summer season. In addition to the fish, kangaroo apples (Koonyang) were located in the gullies near to the lakes and complemented the daily diet. As an alternative protein source wallaby was also hunted in the nearby bush (Bulmer in Smyth 1878 vol. 1, 141). During the autumn and winter seasons the groups spent time in the hinterland hunting kangaroo, koalas and wombats and complementing their diet with a variety of vegetable roots (Bulmer in Smyth 1878 vol. 1, 141-143). George Augustus Robinson, Chief Protector of Aborigines, was informed that all the tribes from Gippsland seasonally went to the mountains around Omeo to collect Bogong moths (Clark 1998, 88).

The Gunai were divided into totemic groups which were defined by gender. The males were assigned to the Yerang and the females to the Djeetgang; both of which are names of small birds (Hotchin 1989). The division came with segregated responsibilities wherein the men were responsible for hunting larger game, spearing fish and the cooking and division of meat. The women were responsible for gathering much of the smaller foods such as roots and tubers, shellfish and were also required to undertake line and net fishing on the canoes and lakes (Rhodes 1996: 17).

Post-Contact History

The area known as the Gippsland Lowlands was settled by Europeans in the 1840s following the establishment of a shipping port at Port Albert. The central plain between Tambo and Latrobe River had been occupied by European settlers by 1842 and within a few more years the area was occupied by 2,000 cattle and 62,000 sheep (Synan 1994, 19).

The pre-contact population estimates for the Gunai people are between 4000-5000 people (Nicolson 1998). In 1844 the Bunjil Kraura/Woollum Woolum were recorded as consisting of 300 people and by 1864 only 51 (Wesson 2000, 28).

The intensity and severity of conflict between Gunai Kurnai and Europeans in the broader regions is best illustrated by the Warrigal Creek Massacre which occurred in 1843. During this incident approximately 150 Aboriginals were massacred at the Warrigal Creek waterhole in retaliation for the killing of Ronald Macalister at Port Albert, which in itself appears to have been a retaliatory attack for the killing of some Gunai Kurnai at the same location (Gardner 1983, 8; 1990, 40). Available evidence indicates that these were by no means isolated occurrences and that conflict and atrocities were widespread albeit often undertaken in a surreptitious manner (Gardner 1990, 43; Mathew and Endacott 2012, 21).

The Government made entirely inadequate attempts to balance the colonial imperative of pastoral settlement with the needs of the Indigenous population. The survivors of the contact period completely lost all access to their wide and varied landscape. Rather than living off of the land as their ancestors had they had little choice but to reside on Government sponsored stations or pastoral stations where they desperately tried to collect supplied for day to day survival.

Land Use History Relevant to the Activity Area

The area was settled in the 1850s and the township of Moe was originally located 3km to the north of its present site. It was moved to its current site when the railway arrived in the late 1870s. In the 1850s it became a base for rural selectors moving south into the hill country and for miners headed for the Walhalla goldfields to the north. A small gold discovery was made in the immediate area in 1852.

The area was originally known as 'The Moe' or the 'Mowie' swamp. Indeed the town's name derives from an Aboriginal word which supposedly relates to the marshy nature of the territory. The swampland to the west of the town initially meant that the beef cattle raised in the district had to be shipped to Melbourne via Port Albert.

The local Narracan shire was proclaimed in 1878 and the Moe town site surveyed the following year due to the arrival of the railway from Morwell in 1877 and from Melbourne in 1879. The enhanced access to Melbourne and overseas markets stimulated the development of agriculture and dairying, as did the construction of the highway from Melbourne after World War I.

The modern history of the area was shaped by the determination, after the First World War, of the State Electricity Commission (SEC) to utilise the large brown coal deposits in the area. A mine had operated at Yallourn North between 1887 and 1899 and was reopened in 1916. The SEC began building a power station in 1922 to economise on transportation costs. When it opened in 1924 it became the primary source of energy in the state. Poet John Shaw Neilson was one of the navies who laboured in the area at this time. The model town of Yallourn was

simultaneously developed in order to house the required workers. From 1925 the coal was also briquetted for domestic and industrial use.

The arrival of bucket dredges and electric locomotives in the late twenties and early thirties saw the acceleration of production at the mine site. Several thousand more homes were built between 1947 and 1952 to attract employees. Gas was also produced from the coal between 1956 and 1969 when it was superseded by the development of offshore resources. As a result of these developments the area experienced a rapid growth. Moe was declared a borough in 1955 and a city in 1963. The power station was periodically extended until the early sixties when a power complex was built at Morwell. Another was constructed at Hazelwood in 1971. In order to obtain the coal deposits beneath Yallourn the SEC announced, in 1969, that it was phasing out the town, with demolition commencing in the 1970s and being completed in 1982. The population of Yallourn was relocated to Moe, Traralgon and Morwell.

The Activity Area has been settled by Europeans since the 1840s. From this time various landscape changes have been made, such as clearing of scrub and timber and ploughing. These initial impacts would have resulted in the possible destruction of culturally scarred trees and a variety of surface archaeological sites such as stone arrangements and the spatial and temporal integrity of stone artefact scatters. Aboriginal stone artefacts may have survived, however little information will now remain regarding how these artefacts were originally deposited. The potential for an archaeological site of high scientific significance (as significance is linked to condition) is therefore low.

In summary, the recent activities within the Activity Area that would have actively degraded archaeological resources are:

- Initial grazing
- Initial clearing
- Pastoral activities
- Stock rubbing and trampling
- Excavation of a drainage line and services to the existing farm infrastructure

Conclusions from the Desktop Assessment

The local distribution of Aboriginal archaeological sites clearly indicates that Indigenous people established campsites over a wide area of the alluvial plains and adjacent to existing watercourses. The archaeological sites which have been recorded in previous studies are indicative of past campsites, established by Indigenous people exploiting resources in the riverine environments, as well as resources which would have been available on the grassy plains.

Because of the close proximity of the Activity Area to the riverine environments of the Moe Swamp it is possible that Indigenous people would have established campsites in the local area, including the Activity Area, during the past. This is supported by the large number of archaeological sites which have been found in the locality surrounding the Activity Area.

There is, therefore, some potential for remains of past Indigenous campsites to occur within the Activity Area. Archaeological site types are most likely to comprise of surface scatters of stone artefacts and scarred trees. Any surface or near surface archaeological sites within the Activity Area, are likely to be highly disturbed by land clearance, grazing, slope wash and siltation.

Very little is known about the Bunjil Kraura and land use practises within the region of the Activity Area. A number of archaeological assessments have been undertaken within the region and some of these studies have resulted in site prediction models for the occurrence of Indigenous archaeological sites on the alluvial plain and within creek and river valleys. It is suggested that stone artefact scatters are most likely to occur on the alluvial plains within 200m of a water body (Hall 1988).

In summarising our current knowledge of the geographic region in which the Activity Area is located, the following predictive statements should be taken into account:

- There are no registered Aboriginal Cultural Heritage Places located in the Activity Area although two ACHPs are located within 200m;
- There has been no previous archaeological assessment of the Activity Area;
- Previous archaeological assessments in the region have indicated that Aboriginal archaeological sites within the region are likely to be located on high ground adjacent to riverine environments. Sites are more likely to be situated on the crests and upper slopes, adjacent to creeklines and swamps, than the lower slopes;
- There would have been a range of plant, animal and mineral resources available for Indigenous people living in, or in the region of, the Activity Area;
- Artefact scatters are the most likely predominant site types.
- The Activity Area was most likely subject to burning-off following land-clearing. Thus any surface sites and shallow sub-surface sites existing at the time are likely to have been highly disturbed and distributed.
- Aboriginal cultural heritage sites will be no more than 4000 years old;
- There still exists a potential for intact sub-surface archaeological deposits in areas that have experienced minimal disturbance;

5.1.1 Site Prediction Model

Based on the Aboriginal archaeological desktop investigation, ethnographic and environmental background; the Activity Area is considered to have moderate Aboriginal archaeological potential. This is because:

As there have been so few studies undertaken within the surrounding area, it is difficult to draw on surrounding patterns when forming the site prediction model. However, the sites which have been recorded within the region do suggest a pattern in which artefact scatters will be located on rises overlooking waterways.

The probability of locating Indigenous sites within the Activity Area is low. This likelihood is based on the current land use history, on previous studies undertaken within the area and the proportion of sites located within proximity to the area. It is possible that the existence of cultural heritage may have been adversely affected. This is because:

1. Based on the regional history the existing conditions on the property; past land use activities that have occurred within the study area include clearance of native vegetation, grazing, ploughing, and construction of a dwelling and associated farming infrastructure. These activities would have adversely impacted on any Indigenous archaeological sites.
2. The soils within the former swamp land that comprises the bulk of the study area are likely to clayey and poorly drained; and are unlikely to contain deposits of Aboriginal cultural material;
3. The area of former lowland forest in Lot 1 on TP674252 is considered to be of slightly higher potential sensitivity than the lots to the north (Map 5). This is because Aboriginal sites are more likely to be located on elevated, well drained and sheltered locations on the margin of swamplands/wetlands.
4. The soils within Lot 3 on TP836437 are likely to comprise clay soils which have formed as a result of flood activity and are therefore unlikely to contain any cultural heritage material.
5. There are no registered Aboriginal archaeological sites located in the Study Area;
6. There has been no previous archaeological assessment of the Study Area;
7. Previous archaeological assessments in the region have indicated that Aboriginal archaeological sites within the region are likely to be located on elevated well drained land within close proximity to swamps and watercourses.
8. There is a low likelihood of culturally scarred trees remaining within the Study Area due to previous land clearance.

The alluvial deposits on the floodplain within the Study Area contain deep deposits of silt, gravel and clay. Consequently, any archaeological sites on this landform are likely to be obscured or are deeply buried. It is likely that the remains of camp sites on higher ground may have been exposed as material is washed onto the floodplain, therefore deflating these campsites.

However we must also take into account the impact of recent land use on any deposits of Aboriginal cultural material. Most if not all of any Aboriginal archaeological sites within the property are likely to have been impacted on by past land use activities, such as the clearance of native vegetation. As much of the Study Area has been farmed since the early 1850s, it is

likely that any surface or near-surface remains of past Indigenous campsites will be highly disturbed.

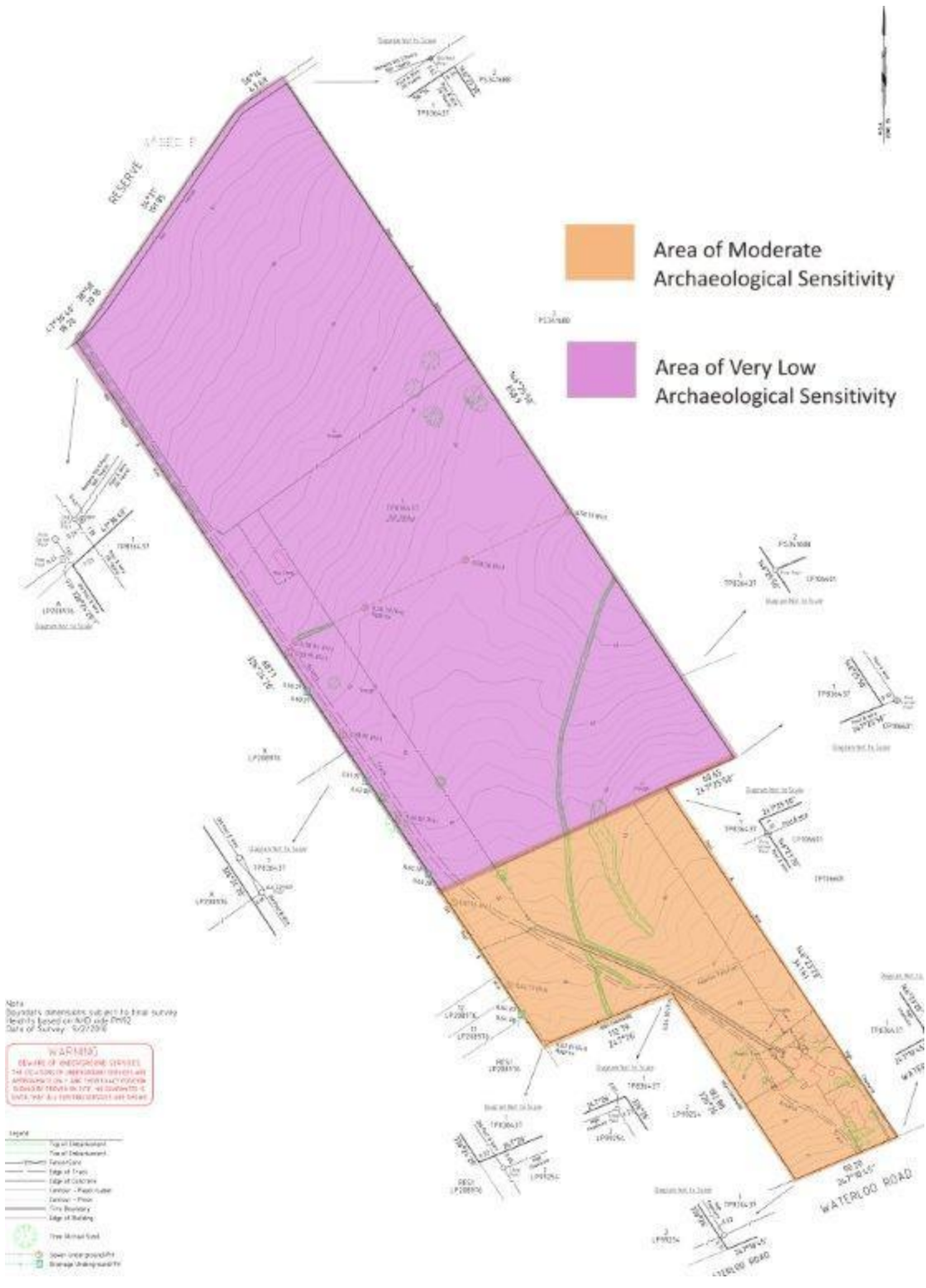
5.2 Standard Assessment

The aims of the standard assessment (archaeological survey) were to:

- Attempt to identify Aboriginal cultural heritage;
- Undertake consultation with representative(s) of the RAP applicants;
- Identify any areas of potential archaeological sensitivity deposit (that may require sub-surface testing) and;
- Document the extent of significant ground disturbance in the Activity Area.

Standard Assessment Methodology

Linear transects were walked with personnel spaced approximately 20m apart across the Activity Area from the southeast corner to the northwest corner from south to north (see Map 6). Focus was concentrated on areas of high ground surface visibility. All mature indigenous trees were inspected to determine if they were culturally scarred. Areas of potential archaeological sensitivity/deposits (PAS and PAD) and significant ground disturbance were recorded. Ground surface visibility and surface exposure was recorded in order to determine the effective ground survey coverage. There were no significant constraints to carrying out the survey.



Map 7: Standard Assessment

Results of Ground Survey

A systematic surface survey of the Activity Area was undertaken by cultural heritage advisor Matthew Barker and Mr Lloyd Hood from the GunaiKurnai on April 8th 2013.

Lot 1 on TP674252

The parcel of land contains a weatherboard house; shedding and farm outbuildings (Plates 1-3). This parcel contains no remnant native vegetation and is characterised by a dense coverage of pasture grass and fences which demark paddock boundaries currently utilised for grazing cattle and horses.

The farm house and shedding was constructed on the highest point of the Activity Area; on the crest of a rise in the south of the property and would have offered an excellent vantage point to the view the surrounding area (Plates 1-4). The land slopes gently down from the house to the north (Plate 1).

No Aboriginal Places were identified in the parcel of land known as Lot 1 on TP674252. This section comprising a low rise overlooking the flat floodplain to the north was assessed of moderate archaeological sensitivity (see Map 7 – shaded in orange).

Lot 3 on 836437

The parcel of land known as Lot 3 on 836437 contains no structures other than a hay shed (Plates 5-10). This parcel contains several isolated remnant eucalypts and is characterised by a dense coverage of pasture grass and is currently utilised for grazing cattle. A drainage channel traverses the property from west to northeast. The topography of this section is relatively simple and is generally characterised by a large, gently undulating area of flat land. Sections were boggy and poorly drained with water lying on the surface.

No Aboriginal Places were identified in the parcel of land known as Lot 3 on 836437 and this section comprising flat floodplain was assessed of low archaeological sensitivity (see Map 7 – shaded in purple).

All eucalyptus trees within the area were examined for the presence of scars produced by cultural activities, such as the removal of bark for shelters, shields or containers. Little remnant native vegetation remains in the Activity Area; comprising several eucalypts on the far north of the property (Plates 5-6).

No Indigenous archaeological sites were identified within the Activity Area during the field investigation (this includes artefact scatters, scarred trees, caves, cave entrances and rock shelters).

The absence of any evidence for Indigenous cultural sites may be due to the Activity Area having incurred disturbance in the past, including the clearance of native vegetation.

The standard assessment (surface survey) has determined that it is likely that the proposed activities will impact on any Aboriginal cultural heritage sites within the proposed Activity Area.

The majority of the Activity Area has been cleared of native vegetation. This would have contributed to soil erosion and the movement of any Aboriginal cultural material that may have existed on the ground surface; thus the removal of topsoils and the destruction of any surface or near surface Aboriginal cultural materials. Vegetation clearance is not considered to be significant ground disturbance.

Land Disturbance

Land disturbance has been caused within the Activity Area through several means. Pastoral practices have been a major cause of land disturbance. These disturbances have been caused by the clearance of native vegetation, including the removal of mature native trees, which is likely to have exacerbated soil erosion, ploughing and animal grazing.

Table 2: Survey Photographs

Plate 1:
View of
Activity
Area from
southern
end showing
densely
grassed
paddock
and farm
building
s(M. Barker
8/4/13),
facing
northwest.



Plate 2:
View of
existing
farm
buildings
(M. Barker
8/4/13),
facing east.



Plate 3:
View of
alluvial flats
and (M.
Barker
8/4/13),
facing
north.



Plate 4:
View of
drainage
line in north
centre and
flat former
swampy
land ; M.
Barker
8/4/13,
facing
north.



Plate 5:
View of flat
swampy
land in
north of
activity area
; M. Barker
8/4/13,
facing
south.



Plate 6:
View of flat
swampy
land in
north of
activity area
(M. Barker
8/4/13),
facing
south.



Plate 7:
View from
north of
Activity
Area south
to Waterloo
Road (M.
Barker
8/4/13),
facing
south.



Plate 8:
View of
dense
vegetation
and
drainage
line in the
northeast of
the Activity
Area (M.
Barker
8/4/13),
facing
northeast.



Plate 9:
View of low
gentle rise
at the
southern
end of the
activity area
(M. Barker
8/4/13),
south.



Plate 10:
View of
swampy
northern
section of
the activity
area (M.
Barker
8/4/13),
facing
north.



Ground Surface Visibility and Effective Survey Coverage

Effective coverage is quantified to account for ground surface visibility and exposure limitations to survey coverage, and gives a good estimate of the actual proportion of the Activity Area investigated.

Ground surface visibility is a major factor in obscuring archaeological materials, and can be defined as how much of the surface is visible and what other factors (such as vegetation, gravels or leaf litter) may limit the detection of archaeological materials (Burke and Smith 2004). The higher the level of ground surface visibility, the more it is that Aboriginal cultural material can be identified; therefore a good level of ground surface visibility enables a better representation of places than areas where the ground surface is obscured (Ellender and Weaver 1994).

Ellender and Weaver (1994) attempted to quantify ground surface visibility for a 1m² area:

- 0-5%: Unable to see soil;
- 5-10%: Occasional glimpse of soil;
- 10-20%: Occasional patch of bare ground;
- 20-50%: Frequent patches of bare ground;
- 50-70%: About half the ground bare;
- 75-100%: More than half the bare ground; ploughed fields.

Ground surface visibility in the entire Activity Area (Plates 1-10) was very low (0-5%), and therefore there was no possibility of identifying archaeological deposits on the surface. It is estimated that the effective survey coverage was less than 1%, due to poor ground surface visibility, and it is not considered adequate for effective field assessment.

Conclusions of the Ground Survey

Mr Lloyd Hood from the GunaiKurnai felt strongly about the area and recommended a robust sampling strategy be developed to ensure that any cultural heritage is identified through a proper cultural and archaeological investigation so that any potential impacts from the activity can be identified and minimised.

However, it is considered that there is potential that Aboriginal archaeological sites may be located within the development footprint of the proposed residential subdivision. This is because:

- Well drained areas within walking distance to food and water sources are sensitive landforms for Indigenous archaeological sites;
- Ground surface visibility was poor and was not adequate to assess the soils deposits.

Due to a lack of ground surface visibility in the Activity Area and the potential for buried archaeological sites within the Activity Area, the standard assessment has determined that there is a requirement to undertake a further complex assessment for this activity, prior to the preparation of a CHMP document.

5.3 Complex Assessment

Justification for Subsurface Testing

Due to the high archaeological sensitivity of the Activity Area, it was not possible to assess the archaeological potential comprehensively by surface survey. Owing to its proximity to the Bass Strait coastline and the nearby presence of several Aboriginal Places it was clear that the Activity Area had the potential to contain buried Aboriginal sites. Therefore, it was considered necessary that the Activity Area be investigated by means of a complex assessment.

The Subsurface Testing Aims

The aims of the Complex Assessment were to:

- Record the subsurface stratigraphic composition of the landform and investigate a representative sample of subsurface sediments;
- Identify any undisturbed (in-situ) subsurface deposits;
- Use backhoe transect excavation to provide improved sample size and investigate the extent of subsurface disturbance;
- Determine whether the soils to be impacted are culturally sensitive;
- Enable an accurate scientific significance assessment to be made.

A complex assessment comprising hand excavation was carried out as part of this CHMP. The aim of the subsurface testing/excavation was to establish if the proposed activity is likely to cause harm to Aboriginal cultural heritage. The complex assessment was undertaken by Matthew Barker and Dr Maya Barker (BHM) and GKLWAC representatives Lloyd Hood and Cory Simpson on April 8-9th 2013.

Subsurface Testing Methodology

Excavation of Test Pit

As required by the Aboriginal Heritage Regulations 2007, a test pit was first excavated to determine the soil stratigraphy (see Map 8, Table 3).

The test pit was excavated in order to examine the soil stratigraphy within the property and determine whether there were sub-surface deposits of cultural materials.

The test pit was excavated by context using a flat edged shovel with a 30cm blade, trowels and 30cm hand shovels. Excavation was undertaken on a stratigraphic basis by context and ceased when a new soil layer was encountered. Hand excavated deposits were initially excavated in arbitrary 10cm spits. As clear stratigraphic units became apparent, excavation continued according to the stratigraphic unit (context). Excavation continued to sterile deposit.

The depth of each context is shown in Table 3. Levels were taken on the surface and at the base of each context excavated with a dumpy level. A surface plan and plans of the base of each context were made during the excavation. Soil sections were drawn of the western section of the test pit once excavation was completed. A photographic record of the surface, base of each context and the soil section was made. A range pole(s) with increments of 20cm was included in all photographs of excavation. Soil descriptions and other natural and cultural features were recorded on standard excavation forms. PH levels were taken of each context and a Munsell Chart was consulted to provide soil colour descriptions.

All of the soil was passed through 5mm mesh from the test pit was sieved. In the event that any cultural material was recovered, the procedure was to place the artefacts in bags with labels identifying the context of the artefacts, and that, with agreement with the Indigenous community representatives, any artefacts recovered from the excavation were to be retained for later analysis at the office of BHM Pty Ltd.

The centre of the test pit was spatially recorded using a Topcon GRS-1 DGPS with sub one metre accuracy as per AAV (2008) target standard for recording Aboriginal heritage places.

The excavated test pit location is shown in Maps 8-9. A stratigraphic section of the test pit is shown in Table 3.

Excavation of Backhoe Transects

The excavation of 22 two metre backhoe transects (BTs) was undertaken during subsurface testing (Table 4, Maps 8-11, Plates 12-20). BTs were undertaken to examine the general stratigraphy; changes in stratigraphy and presence/absence of Aboriginal cultural heritage within the Activity Area. The BTs were based on topography, areas of potential sensitivity for Aboriginal cultural heritage (Map 7) and the location of works scheduled for the Activity Area.

In addition, the proposed methodology was discussed during a meeting with the GKLWAC representatives prior to the commencement of fieldwork and during the Complex Assessment.

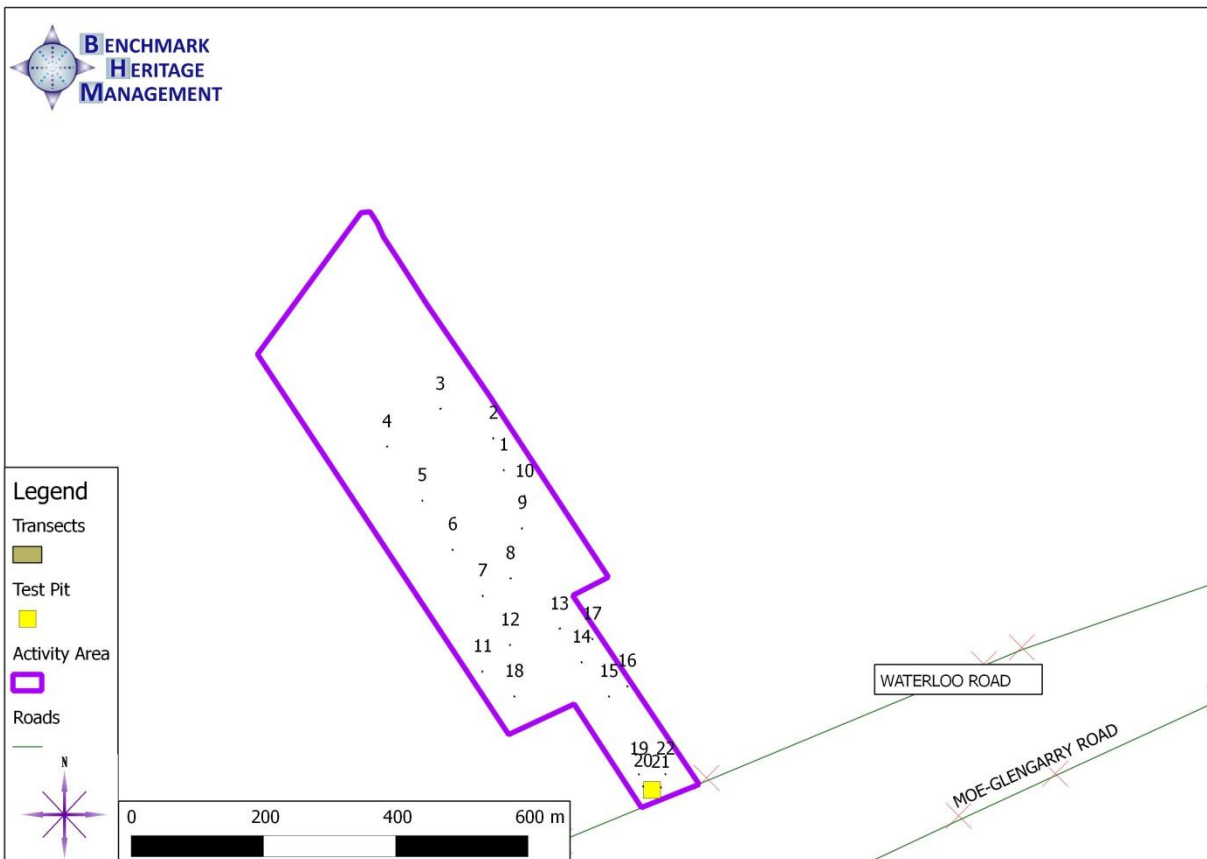
The backhoe transects were excavated using a 600mm flat edged mud bucket. Initially, the grass and surface soil was stripped off each hole to a depth of approximately 5cm. Soil within the backhoe transect was then excavated in increments of 10cm until the basal layer was reached.

The soil from each backhoe transect was sieved by the field team using hand sieves with a 5mm mesh. Soil data and the location of any cultural materials were recorded on field forms. A section of the vertical soil profile of each backhoe transect was recorded. A range pole with increments of 20cm was included in all photographs of excavation. The outlined procedure for dealing with cultural materials, if found, was to place any cultural material in bags with labels identifying their context. A photographic record of each backhoe transect was also made. By agreement with the Indigenous community representatives, any artefacts recovered were to be

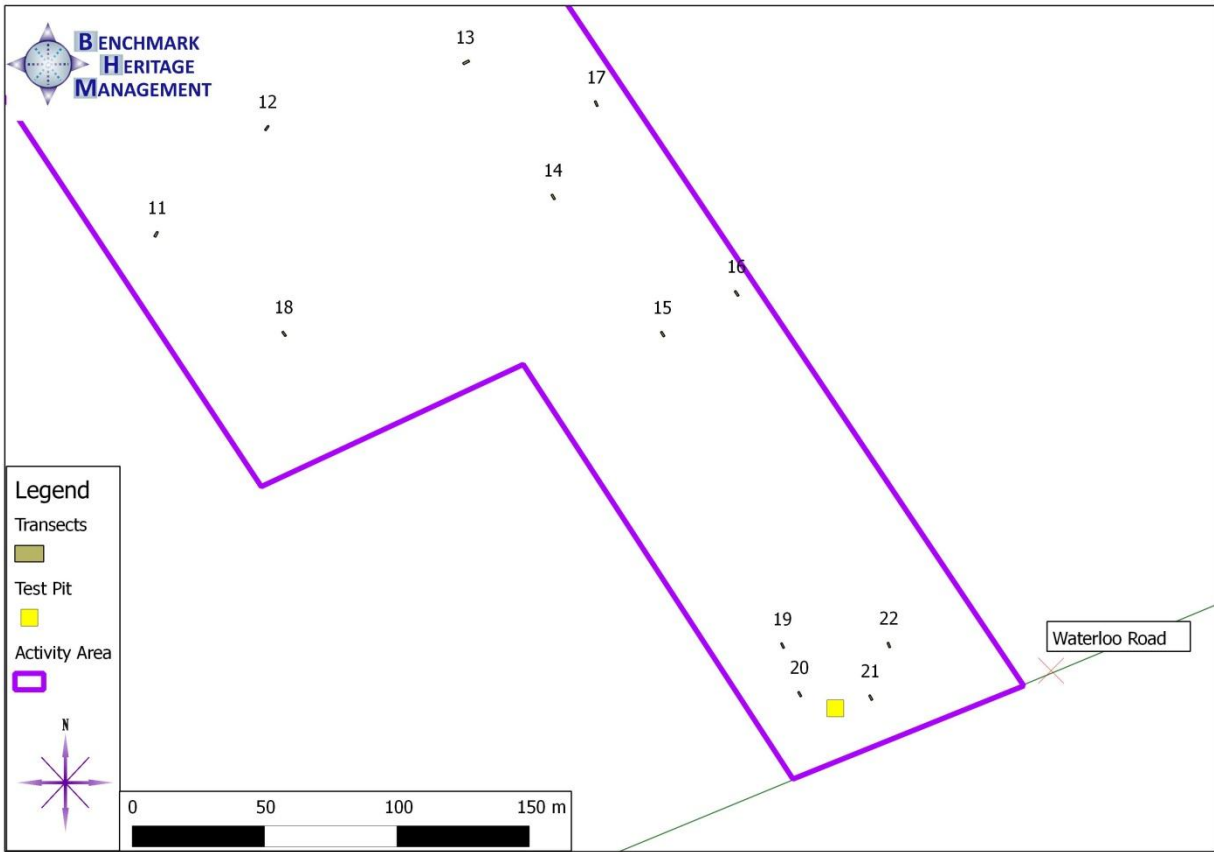
retained for later analysis at the office of BHM Pty Ltd. The ends of each backhoe transect were spatially recorded using a Topcon GRS-1 DGPS with sub one metre accuracy as per AAV (2008) target standard for recording Aboriginal heritage places.

As the excavation of the backhoe transects was carried out in contexts and the soil from each context were sieved separately, it was possible to assess both the vertical and horizontal distribution of cultural materials within the soil profile.

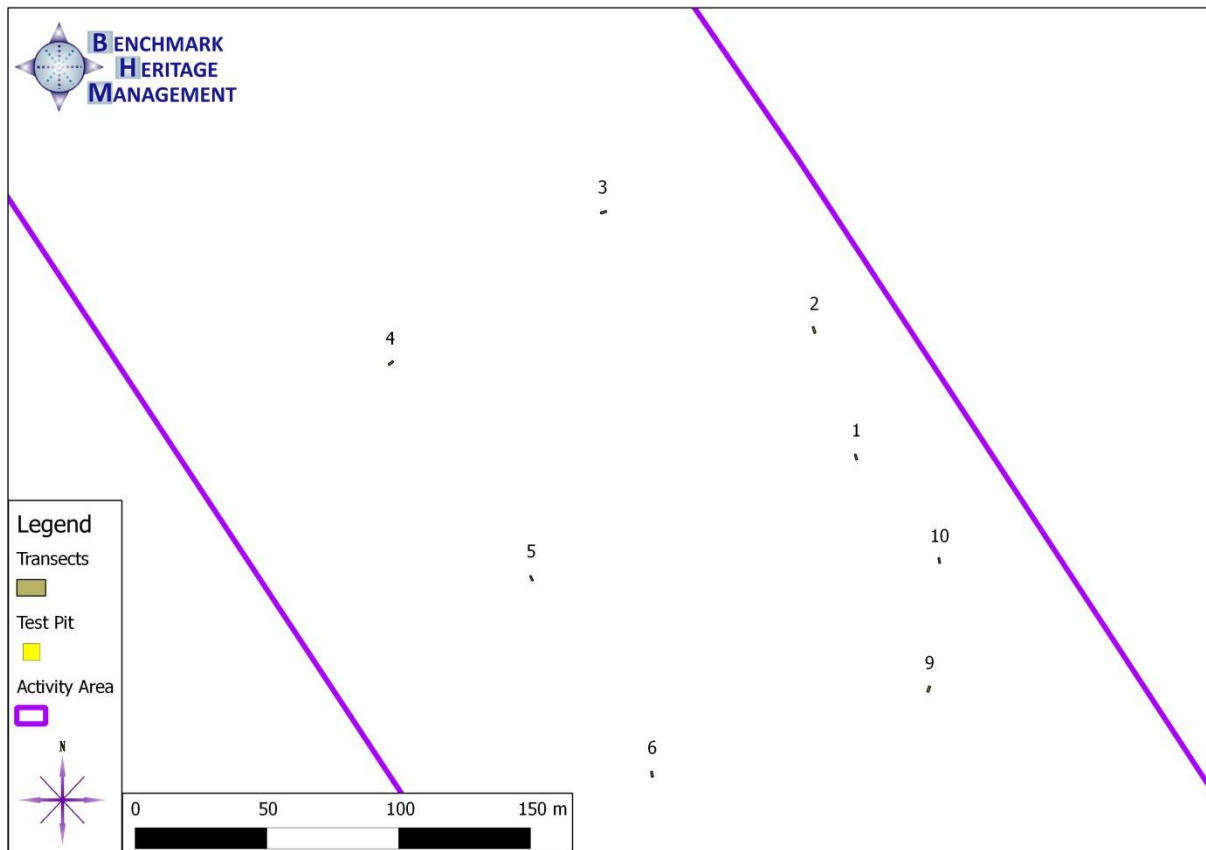
The excavated backhoe transect locations are shown in Maps 8-11. The stratigraphy of the backhoe transects is shown in Table 4. GDA 94 co-ordinates are shown in Appendix 3.



Map 8: Sub-surface Map - Overview



Map 9: Sub-surface Testing Locations; BTs 11-22 and Test Pit 1



Map 10: Sub-surface Testing Locations; BTs 1-10

Results of the Subsurface Testing

Excavation of Test Pit 1

As required by the Aboriginal Heritage Regulations 2007, a test pit was first excavated to determine the soil stratigraphy (see Plate 11, Map 8 and Table 3). The test pit was located in the far south of the activity area 10m north of Waterloo Road. This location was chosen as this is the highest point of the activity area seemed relatively dry and was an ideal location for a camp site to access the resources of the region. In addition the test pit located within 50m of VAHR 8121-0215 which was identified within the railway alignment.

This test pit was excavated to a depth of 250mm, at which very hard alluvial clay was encountered and further excavation by machine became physically impossible with hand tools. Backhoe Transects 21-22 were later excavated adjacent to the test pit to investigate the soils further.

No Aboriginal cultural material was identified.

Table 3: Summary excavation data from Test Pit 1.

Test Pit	1
Field Team	Matthew Barker and Dr Maya Barker (BHM) and GKLWAC representatives Lloyd Hood and Cory Simpson
GDA 94 Coordinates	433855.647e, 5773834.014n
Site Datum	79.2m ASL
Size	1x1m
Stratigraphy	
Context 1	0-20mm: Greyish brown medium grained clay loam (10 YR 5/2) with a pH of 6.
Context 2	20-250mm: 100/300-650mm. Light grey (10 YR 7/1) silty loam with reddish brown clay inclusions toward base (7.5YR 6/6 Reddish Yellow) with a soil pH of 6.5.
Depth of Excavation	250mm
Evidence of Disturbance	None
Section Drawing of North Profile	<p>The diagram is a hand-drawn stratigraphic profile on blue graph paper. It depicts a rectangular test pit. At the top, a dashed line is labeled 'STRINGLINE'. Below this, the soil profile is shown with two distinct layers. The upper layer is marked with a circled '1' and the lower layer with a circled '2'. A scale bar at the bottom left indicates a length of 30 centimeters, with markings at 0, 10, 20, and 30.</p>

<p>Plate 11: Photo by M. Barker (8/04/2013) after excavation showing stratigraphic profile of Test Pit 1</p>	
<p>Vertical artefact distribution</p>	<p>None</p>

Backhoe Transects

In order to try and determine the extent of soil disturbance in the Activity Area and to provide a more extensive sample of the surface and sub-surface soils, a series of 22; two metre long backhoe transects were excavated where possible depending on the vegetation. The backhoe transects were excavated to:

1. Further assess the likelihood of Indigenous cultural material being located on the rises within the Activity Area.
2. To determine the extent of ground disturbance caused by land clearance.

The provenance and stratigraphic data from the backhoe transects is contained in Table 4. The locations of the backhoe transects can be found in Maps 8-11. Table 4 summarises the details of the backhoe transects. GDA 94 co-ordinates are shown in Appendix 3.

Backhoe Transects 1-22

The backhoe transects were excavated by Matthew Barker and Dr Maya Barker (BHM) and GKLWAC representatives Lloyd Hood and Cory Simpson..


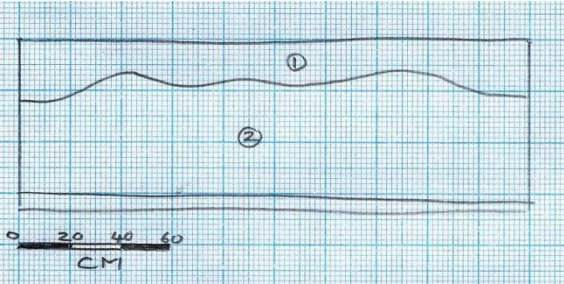
The stratigraphy of the backhoe transects was fairly consistent and generally similar to that of Test Pit 1; and were characterised by only a shallow surface layer which is considered to have been subject to disturbance as a result of vegetation removal overlying dense and extremely hard silty clays.



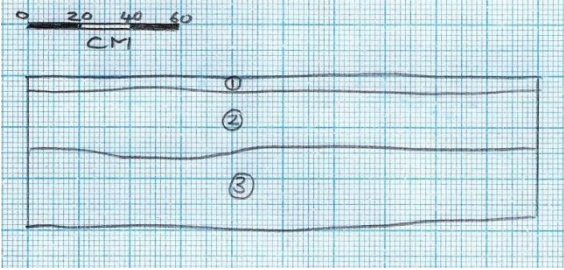
The only major differences between the backhoe transects was the depth of the underlying reddish brown clay which varied from 200-450mm in depth.

The stratigraphic profiles of the individual backhoe transects are contained in Table 4. Photographs showing examples of the backhoe transects excavated are shown in Table 4 (Plates 12-20).



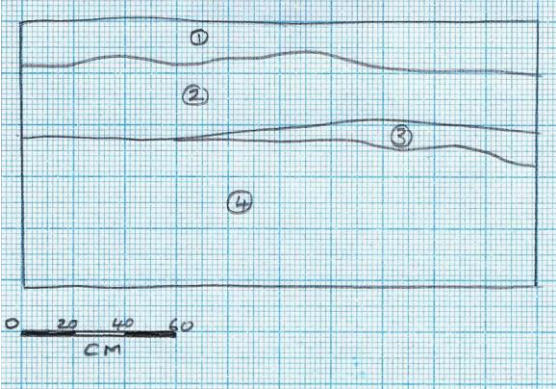
Little evidence of ground disturbance was identified during the excavation of the backhoe transects however it can be assumed that vegetation clearance of dense woodland would have caused severe ground disturbance to the upper soil profile across the entire Activity Area.



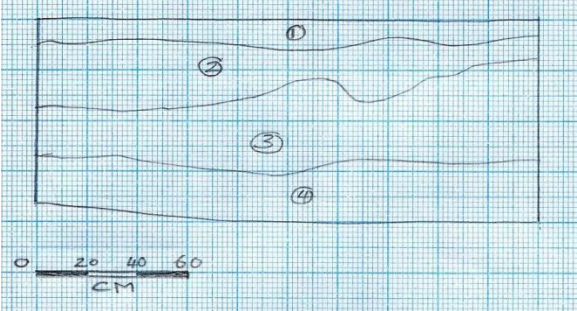
Table 4: Backhoe transects 1-22 Summary Detail

Backhoe Transect Details	Soil Stratigraphy (by Contexts)	Photo	Selected Section Drawings
<p>Date excavated: April 8-9th 2013</p> <p>Number of pits: 22</p> <p>Cultural Material: None</p>	<p>BTs 1-10</p> <p>Context 1</p> <p>0-100/300mm: Greyish brown medium grained clay loam (10 YR 5/2) topsoil moist, fine grained with plant matter, pH 6</p> <p>Context 2</p> <p>2.100/300-650mm. Very hard light grey (10 YR 7/1) silty loam with reddish brown clay inclusions toward base (7.5YR 6/6 Reddish Yellow) with a soil pH of 6.5.</p> <p>Context 3</p> <p>650-690+mm. Reddish brown very hard and compact clay (7.5YR 6/6 Reddish yellow) with a soil pH of 6.5.</p>	 <p>Plate 12: BT 1, facing north after excavation (Photo by M. Barker, 8/4/13)</p>	 <p>Section Drawing of BT1 East Wall</p>

Backhoe Transect Details	Soil Stratigraphy (by Contexts)	Photo	Selected Section Drawings
		 <p>Plate 13: BT3, facing east after excavation (Photo by M. Barker, 8/4/13)</p>  <p>Plate 14: BT5, facing north after excavation (Photo by M. Barker, 28/06/2012)</p>	 <p>Section Drawing of BT5 North Wall</p>

Backhoe Transect Details	Soil Stratigraphy (by Contexts)	Photo	Selected Section Drawings
		 <p>Plate 15: BT8, facing south after excavation (Photo by M. Barker, 8/4/13)</p>  <p>Plate 16: BT12, facing north after excavation (Photo by M. Barker, 9/4/13)</p>	

Backhoe Transect Details	Soil Stratigraphy (by Contexts)	Photo	Selected Section Drawings
	<p>BTs 11- Context 1</p> <p>0-100/200mm: Dark brown clay loam topsoil (7.5YR 3/3) moist, fine grained with plant matter, pH 6</p> <p>Context 2</p> <p>100/200-180/450mm. Grey (10 YR 7/1) silty very hard clay with reddish brown clay inclusions toward base (7.5YR 6/6 Reddish Yellow) with a soil pH of 6.5.</p> <p>Context 3</p> <p>180/450-440/620mm. Very hard Light grey (10 YR 7/1) silty clay with reddish brown clay inclusions toward base (7.5YR 6/6 Reddish Yellow) with a soil pH of 6.5.</p>	 <p>Plate 17: BT15, facing south after excavation (Photo by M. Barker, 9/4/13)</p>  <p>Plate 18: BT16, facing east after excavation (Photo by M. Barker, 27/06/2012)</p>	 <p>Section Drawing of BT16 East Wall</p>

Backhoe Transect Details	Soil Stratigraphy (by Contexts)	Photo	Selected Section Drawings
	<p>Context 4</p> <p>440/620-660/1000+mm. Light brown heavy very hard clay (7.5YR 5/2 Brown) with reddish brown clay inclusions toward base (7.5YR 6/6 Reddish Yellow)</p>	 <p>Plate 19: BT18, facing east after excavation (Photo by M. Barker, 9/4/13)</p>  <p>Plate 20: BT21, facing north after excavation (Photo by M. Barker, 9/4/13)</p>	 <p>Section Drawing of BT21 North Wall</p>

Conclusions of the Subsurface Testing

A 1x1m test pit and 22 backhoe transects were excavated, to establish the soil stratigraphy of the Activity Area and to assess the likelihood of Indigenous cultural material being located within the Activity Area.

No Aboriginal cultural material was noted in the deposits.

The stratigraphy of the backhoe transects and test pits excavated within this landform was uniform with no major differences noted in any of the excavations.

Soils on the Activity Area are characteristic of a soil type described by Cochrane et al as acidic duplex soils (Geological Survey of Australia: 1995: 51):

- The A horizon is comprised grey to pale grey silt and sand;
- The B horizon is comprised of a red/orange/grey mottled clay

These soils contain a high degree of clay therefore when wet the soils swell which closes the pores thus preventing water from draining through causing water logging (Cochrane et al 1995: 51). Conversely In dry conditions, the A horizon sets hard.

The results indicate that there are no Aboriginal cultural remains within the upper soil profile; and hard clay was consistently found below this level. The complex assessment has revealed that the Activity Area is of low potential sensitivity for Aboriginal cultural deposits.

In terms of ground disturbance; the initial clearance of trees would have also disturbed the integrity of these shallow soils as would the subsequent agricultural activities. However it must be noted that evidence of ploughing or tree removal was not visible in the soil profiles of the excavated test pits and backhoe transects and therefore no definite statements concerning the extent of ground disturbance can be made. It is considered that vegetation clearance and agricultural use of the Activity Area will disturb the integrity of an archaeological deposit within the upper 200-300mm.

Comparison with the Site Prediction Model

The archaeological research undertaken in preparation of the CHMP was comprehensive and has resulted in an overall understanding of the nature of Aboriginal cultural heritage within the Activity Area.

The site prediction model stated that it is likely that Aboriginal Cultural Heritage Places will occur within the Activity Area. The complex assessment targeted landforms suitable for establishing campsites; flat crested rises above flood level, however no cultural material was

noted within the Activity Area indicating that there may have been more suitable places to camp within the region.

6.0 Consideration of Section 61 Matters

Are there particular Contingency Plans that might be necessary?

There are several contingency plans that may be necessary during the project. In particular, it is necessary to have a contingency in place for the unexpected discovery of cultural material and for the unexpected discovery of a burial. These and other contingency plans are discussed in detail in Section 7.

Part 2 – Cultural Heritage Management Recommendations

7.0 Specific Cultural Heritage Management Requirements

Based on the results of the archaeological assessment, the following management recommendations are made for the Activity Area. Please note that once this CHMP is approved these recommendations become compliance requirements.

No Aboriginal cultural heritage was recorded during either the standard or complex assessments. Consequently, no cultural heritage recommendations are necessary.

The contingency plans contained in Section 8.0 of this report form part of the Cultural Heritage Management Plan and must be incorporated into the development or Environmental Management Plan for the project. A copy of this management plan should be held on site at all times.

General Recommendation

In order to provide a system for notification of the discovery of Aboriginal cultural heritage during construction works, it will first be necessary to provide an induction to any future project managers and construction workers about the discovery of Aboriginal cultural heritage onsite. There will also need to be a system of reporting any possible Aboriginal cultural heritage items which are discovered which must be built into any development or environmental management plan (EMP) for the site. Some recommendations for notifying the discovery of Aboriginal cultural heritage are contained below.

- A site induction or inductions must be held with project managers and any construction workers onsite. The purpose of the inductions will be to describe items of Aboriginal cultural heritage to personnel engaged in construction to create an awareness of their cultural value and to inform personnel about the procedure for reporting suspected Aboriginal cultural heritage.

This induction could be presented by a cultural heritage advisor in association with a relevant Aboriginal person or a RAP representative, if a RAP has been appointed by the time works commence.

8.0 Contingency Plans

The approved form a CHMP states that, in accordance with Clause 13(1) Schedule 2 of the *Aboriginal Heritage Regulations 2007*, a management plan must also include specific contingency plans for:

- (a) the resolution of any disputes between the sponsor and relevant registered Aboriginal parties in relation to the implementation of the plan or the conduct of the activity;
- (b) reviewing compliance with the cultural heritage management plan and mechanisms for remedying non-compliance;
- (c) the management of Aboriginal cultural heritage found during the activity;
- (d) the notification, in accordance with the Act, of the discovery of Aboriginal cultural heritage during the carrying out of the activity.

Contingency plans are required, even in situations where it has been assessed that there is a low probability of Aboriginal archaeological sites being located within an Activity Area.

8.1 Section 61 Matters

Section 61 of the Aboriginal Heritage Act 2006 is concerned with the avoidance and/or minimisation of harm to Indigenous cultural heritage, and any specific measures required for the management of Indigenous cultural heritage during and following the activity. Section 61 matters pertaining to the sites discovered during this CHMP are discussed in Section 6. Section 61 matters pertaining to undiscovered cultural heritage that may become exposed during the activity are discussed in Section 8.3.

8.2 Dispute Resolution

In the event of a dispute between the Sponsor and the GKLWAC. over the implementation of this CHMP, the following should occur:

- Details of the dispute should be documented by both the GKLWAC. and the Sponsor;
- Representatives of the Sponsor and the GKLWAC. should organise a meeting as soon as possible to attempt to resolve the dispute;
- The understanding of the issue by both parties should be clearly stated by the relevant representatives during the course of the meeting;
- If desired by both parties, external mediation by a third party may occur during the meeting;

- The objective of the meeting should be to discuss and arrive at an understanding of the matter being disputed and reach a negotiated settlement of the dispute. This may include a formal protocol between the Sponsor and the GKLWAC.; and
- The resolution to the dispute should be recorded in writing and signed off on by both parties.

8.3 Discovery of Indigenous cultural heritage during works

8.3.1 Unexpected discovery of Human Remains

Although it is highly unlikely that Indigenous human burials will occur within the Activity Area, the consultants are obliged to provide advice in the event that a human burial is discovered.

If any suspected human remains are found during any activity, works must cease. The Victoria Police and the State Coroner’s Office must be notified immediately. If there are reasonable grounds to believe that the remains are Aboriginal, the Department of Sustainability and Environment’s Emergency Coordination Centre must be contacted immediately on 1300 888 544.

Any such discovery at the Activity Area must follow these steps.

1. Discovery:

- If suspected human remains are discovered, all activity in the vicinity must stop to ensure minimal damage is caused to the remains; and,
- The remains must be left in place, and protected from harm or damage.

2. Notification:

- Once suspected human skeletal remains have been found, the Coroner’s Office and the Victoria Police must be notified immediately;
- If there is reasonable grounds to believe that the remains could be Aboriginal, the DSE Emergency Co-ordination Centre must be immediately notified on 1300 888 544; and
- All details of the location and nature of the human remains must be provided to the relevant authorities.
- If it is confirmed by these authorities that the discovered remains are Aboriginal skeletal remains, the person responsible for the activity must report the existence of the human remains to the Secretary, DVC in accordance with s.17 of the Act.

3. Impact Mitigation or Salvage:

- The Secretary, after taking reasonable steps to consult with any Aboriginal person or body with an interest in the Aboriginal human remains, will determine the appropriate course of action as required by s.18(2)(b) of the Act.
- An appropriate impact mitigation or salvage strategy as determined by the Secretary must be implemented (This will depend on the circumstances in which the remains were found, the number of burials found and the type of burials and the outcome of consultation with any Aboriginal person or body);

Note: In consultation with any relevant RAP, a sponsor may consider incorporating a contingency plan to reserve an appropriate area for reburial of any recovered human remains that may be discovered during the activity. This may assist the Secretary in determining an appropriate course of action.

4. Curation and further analysis:

- The treatment of salvaged Aboriginal human remains must be in accordance with the direction of the Secretary.

5. Reburial:

- Any reburial site(s) must be fully documented by an experienced and qualified cultural heritage advisor, clearly marked and all details provided to AAV;

Appropriate management measures must be implemented to ensure that the remains are not disturbed in the future.

8.3.2 Unexpected discovery of isolated or dispersed Indigenous cultural heritage

The following procedure must occur in the event of the discovery of isolated or dispersed cultural heritage:

- In the event that a RAP has been appointed, the RAP must be contacted in the first instance. The cultural heritage advisor must facilitate the involvement of the RAP. This would include an on-site investigation and assessment of the significance of the cultural heritage. In the event that a RAP has not yet been appointed, the following must occur:
- The location of the suspected Aboriginal cultural heritage must be fenced off with temporary webbing.
- All works must cease within 20m of the general area where the suspected Aboriginal cultural heritage is located and a cultural heritage advisor notified of the discovery as soon as possible.

- Work may continue in other parts of the Activity Area, away from the 20 metre buffer around the webbing.
 - The suspected Aboriginal cultural heritage must be examined by a qualified cultural heritage advisor, a relevant Aboriginal community representative and a representative of the sponsor. The cultural heritage advisor must complete site records and advise on management strategies for the feature;
 - Within a period of 3 working days a decision/recommendation must be made by the cultural heritage advisor, in consultation with the sponsor and relevant Aboriginal community representative, on a process to be followed to manage or salvage the Aboriginal cultural heritage in a manner which complies with the *Aboriginal Heritage Regulations 2007* and which is culturally appropriate.
- Works may recommence within the area of exclusion:
 - When the appropriate protective measures have been taken;
 - When the relevant Aboriginal cultural heritage records have been updated and/or completed;

If the site cannot be retained within the development, then the site must be salvaged using an appropriate methodology as defined in the *AAV Guide to Preparing Cultural Heritage Management Plans 2007*.

8.3.3 Unexpected discovery of stratified occupation deposits

The following procedure must occur in the event of the discovery of stratified occupation deposits:

- In the event that a RAP has been appointed, the RAP must be contacted in the first instance. The cultural heritage advisor must facilitate the involvement of the RAP. This would include an on-site investigation and assessment of the significance of the cultural heritage. In the event that a RAP has not yet been appointed, the following must occur:
 - The location of the suspected Aboriginal cultural heritage must be fenced off with temporary webbing.
 - All works must cease within 20m of the general area where the suspected Aboriginal cultural heritage is located and a cultural heritage advisor notified of the discovery as soon as possible.

- Work may continue in other parts of the Activity Area, away from the 20 metre buffer around the webbing.
 - The suspected Aboriginal cultural heritage must be examined by a qualified cultural heritage advisor, a relevant Aboriginal community representative and a representative of the sponsor. The cultural heritage advisor must complete site records and advise on management strategies for the feature;
 - Within a period of 3 working days a decision/recommendation must be made by the cultural heritage advisor, in consultation with the sponsor and relevant Aboriginal community representative, on a process to be followed to manage or salvage the Aboriginal cultural heritage in a manner which complies with the *Aboriginal Heritage Regulations 2007* and which is culturally appropriate.
- Works may recommence within the area of exclusion:
 - When the appropriate protective measures have been taken;
 - When the relevant Aboriginal cultural heritage records have been updated and/or completed;

If the site cannot be retained within the development, then the site must be salvaged using an appropriate methodology as defined in the *AAV Guide to Preparing Cultural Heritage Management Plans 2007*.

8.4 Reporting discovery of Indigenous cultural heritage during works

In order to provide a system for notification of the discovery of Aboriginal cultural heritage during construction works, it will first be necessary to provide an induction to any future project managers and construction workers about the discovery of Aboriginal cultural heritage on site. There will also need to be a system of reporting any possible Aboriginal cultural heritage items which are discovered which must be built into any development or environmental management plan (EMP) for the site. Some recommendations for notifying the discovery of Aboriginal cultural heritage are contained below.

- A site induction or inductions must be held with project managers and any construction workers on site. The purpose of the inductions will be to describe items of Aboriginal cultural heritage to personnel engaged in construction, to create an awareness of their cultural value and to inform personnel about the procedure for reporting suspected Aboriginal cultural heritage.

This induction could be presented by a cultural heritage advisor in association with a relevant Aboriginal person or a RAP representative, if a RAP has been appointed by the time works commence.

- The project manager must appoint a qualified cultural heritage advisor for the duration of the project, who will be available to advise and act on the discovery of suspected Aboriginal cultural heritage. The cultural heritage advisor will need to:
 - Be available to visit the site and inspect any items of suspected Aboriginal cultural heritage that may be found during any development.
 - Document any items of Aboriginal cultural heritage that are found during any development and report the sites to AAV by means of completing an AAV site card and registering the site.
 - Complete the site documentation in association with a representative of the Registered Aboriginal Party (RAP), must one exist for the Activity Area at the time of works.
 - Advise on appropriate treatment or salvage of any Aboriginal cultural heritage.
 - Provide adequate reporting on the treatment of any Aboriginal cultural heritage to standards required by AAV.

8.5 Custody and Management of Aboriginal Cultural Heritage Recovered

In any case where previously unrecorded Aboriginal cultural material is located during the assessment, it will be the responsibility of the Cultural Heritage Advisor to:

- Catalogue the Aboriginal cultural heritage;
- The cultural heritage must be re-buried at a location agreed by the GKLAWAC;
- The location of the re-buried cultural heritage will be recorded by the cultural heritage advisor and recorded with the VAHR;
- The cultural heritage will be placed in plastic zip-lock bag together with a label identifying provenance and catalogue numbers;
- At the conclusion of works, the cultural heritage will be relocated to a secure location in a durable container, together with details of provenance and a copy of the artefact catalogue and management plan.

8.6 Reviewing Compliance with the Plan

The sponsor must ensure that compliance with this plan is reviewed. A review process must be incorporated in the Environmental Management Plan or similar document for the project. It is

recommended that each of the management actions recommended in Section 7 above be listed in the Environmental Management Plan. There must be a mechanism included in the plan (such as a checklist or database) to indicate when the recommended actions for Aboriginal cultural heritage have been carried out. The project manager must be responsible for maintaining this list. Any associated documentation which accompanies the actions must be recorded on the checklist or database.

Compliance can be checked at any time using the checklist provided below. However, this should be done at least once before beginning of ground disturbance works, once during construction and once following construction. The record of compliance must be maintained by the project manager at all times and must be available for inspection by either an Inspector under the Act or other representative of the Secretary.

It is illegal to harm cultural heritage outside of the recommendations contained within this management plan. Inspectors from Aboriginal Affairs Victoria may conduct CHMP compliance audits.

A checklist is provided below that specifies what measures will be undertaken to review compliance with the CHMP. The site manager must verify that the measures specified below have been undertaken.

CHECKLIST FOR REVIEWING COMPLIANCE WITH THIS CHMP		
	Yes	No
Prior to works occurring		
1: Have the contingency plans contained within this report been incorporated into the development or JEHA (Job Environment & Heritage Assessment) for the project?		
Identification of Aboriginal Cultural Heritage		
1: Has all activity within 20m ceased if 1-5 artefacts have been located or within the general area if a dense artefact scatter, <i>in situ</i> deposits, shell midden, hearth feature, stone or earth feature has been located?		
2: Has the Secretary been notified?		
3: Has a Cultural Heritage Advisor been notified?		
4: Have the artefacts been left in place?		
5: Has the find/s been protected (e.g. with fencing) if required?		
6: In relation to suspected human remains, have the Coroner's Office and Victoria Police been notified?		
7: Has an appropriate mitigation/salvage strategy been developed?		
8: Has the mitigation/salvage works been implemented?		
9: Have the salvaged finds/remains been treated in accordance with the direction of the RAP?		

Reburial Procedure: Human Remains		
1: Has a suitably qualified archaeologist been engaged to fully document the reburial site?		
2: Has the reburial site been clearly marked?		
3: Have all details been provided to AAV?		
4: Has a strategy been developed to ensure no further disturbance (such as Section 173 in the Planning and Provision Act)?		
Changes to Activity		
1: Has statutory approval been obtained for any changes to the activity?		

Review of this CHMP can be undertaken at any time by project delegates representing the Sponsor, or an agreed independent reviewer, to ensure that all parties are complying with the terms of this CHMP.

To ensure compliance with the terms of this CHMP The site manager must verify that the measures specified in the above checklist have been undertaken. Where non-compliance has been found to have occurred, the RAP (if one exists) and the cultural heritage advisor should be contacted immediately to attempt to remedy the non-compliance. This may be achievable over the phone for minor non-compliances, but more than likely a meeting will be required – the sponsor should provide the RAP (if one exists) with reasonable remuneration for any time required for this. If the non-compliance cannot be remedied, AAV should be contacted, with a view to them conducting a cultural heritage audit.

If any of the following breaches occur the site manager must action the relevant remedy. The aim of this process must be resolve non-compliance issues by immediately actioning processes to remedy non-compliance through consultation with the Indigenous representatives, and the cultural heritage advisor.

If mechanisms for remedying non-compliance are not actioned and resolution cannot be reached then ultimately, the Minister may order a cultural heritage audit to be carried out. Details of cultural heritage audits can be obtained from Part 6, Division 1 of the Aboriginal Heritage Act 2006.

Potential Breaches and Remedies

Potential Breach	Remedy
Prior to works occurring	
1: Contingency plans contained in this report have not been incorporated into the development or JEHA (Job Environment & Heritage Assessment) for the project.	The site manager must ensure that the Contingency plans are incorporated within 48 hours. All employees must be made aware of the contingency requirements.

During Development	
1: Activity has not ceased within 20m if Aboriginal cultural heritage has been located.	Activity must cease immediately within 20m of the find and the Secretary notified within 48 hours. A cultural heritage advisor must immediately be notified to assess the find.
2: The Secretary has not been notified of any Aboriginal cultural heritage	Notify the Secretary within 48 hours
3: Harm to Aboriginal cultural heritage has occurred?	<p>Work within 20m of the Aboriginal cultural heritage must cease immediately. The sponsor must notify the Secretary with 48 hours. The sponsor must immediately notify a cultural heritage advisor to assess the level of harm and Aboriginal representatives in the following order of priority: the RAP (if one has been appointed); registered Native Title Holder; Native Title party; relevant Aboriginal persons with traditional or familiar links; relevant Aboriginal body or organisation with historical or contemporary links. The sponsor and the RAP or Aboriginal representatives must undertake the following process:</p> <ul style="list-style-type: none"> • Details of the harm must be documented by the sponsor, the cultural advisor and Indigenous representatives; • A meeting must be held within 48 hours to attempt to mitigate further harm; • The understanding of the issue by both parties must be clearly stated by the relevant representatives during the course of the meeting; • The parties must reach a resolution; • The objective of the meeting must be to discuss and arrive at an understanding of the matter being disputed and reach a negotiated settlement of the dispute. This may include a formal protocol between the Sponsor and Aboriginal representatives ; and

	<ul style="list-style-type: none"> The resolution to the dispute must be recorded in writing and signed off on by both parties.
4. Activity has not ceased if potential skeletal remains have been located.	Work within 20m of the Aboriginal cultural heritage must cease immediately. The sponsor must immediately action the procedure outlined in Contingency 8.3.1.

8.7 Communication

The Project Manager and any personnel involved with supervision of future construction must read the CHMP, and be aware of the contingency procedures concerning Indigenous heritage within the Activity Area. The Project Manager (or other relevant supervisory staff) must be responsible for implementing any conditions contained in the CHMP.

The Project Manager must set in place internal processes of communication, which ensure that they are notified prior to any contractors conducting works (including archaeological contractors) at any of the archaeological sites on the property.

Contact Details for Developer

Sure Constructions
9 Burke Street, Warragul
Victoria 3820
Phone: (03) 5623 4053
Fax: (03) 5622 3372

Contact Details for RAP

Barry Kenny, CEO
Gunaikurnai Land & Waters Aboriginal Corporation
(R.A.P.) Registered Aboriginal Party
197 Macleod Street, Bairnsdale VIC 3875
PO Box 1699, Bairnsdale VIC 3875
T 03 5152 5100
F 03 5152 1666
M 0487 301 323
E barryk@glawac.com.au

References

Aboriginal Heritage Act 2006

Aboriginal Heritage Regulations 2007

Aboriginal Affairs Victoria 2007a

Guide to Preparing Aboriginal Cultural Heritage Management Plans.

Barker, M. 2012

Proposed Residential Development– Coalville Road, Moe: Desktop Standard and Complex Assessments. AAV Management Plan Number: 12219

Cochrane, G.W., G.W. Quick & D. Spencer-Jones 1995

Introducing Victorian Geology. Geological Society of Australia (Victorian Division).

Coutts, P.J.F. 1981

Readings in Victorian Prehistory. Volume 2. The Victorian Aboriginals 1800-1860. Victoria Archaeology Survey. Ministry for Conservation.

Brown, S. & L. Sciusco 1995

A Survey for Aboriginal Archaeological Sites Old Sale Road, Moe. Draft Report to Office of Building, Department of Planning and Development.

Fison, L. and Howitt, A.W. 1880

The Kurnai: Their Customs in Peace and War, George Robertson, Melbourne.

Gardner, P. 1993

Gippsland Massacres: The destruction of Kurnai Tribes 1800-1860. Ngarak Press, Ensay. 2 nd Edition.

Hall, R. 1988

'An Archaeological Survey of the Gippsland Lakes'. Draft Report to Heritage Services Branch, Aboriginal Affairs Victoria.

Hotchin, K.L. 1989

Environmental Evolution and Culture Change in the Gippsland lakes Region, Victoria, Australia. Unpublished PHD Thesis.

Howitt, A.W. 1904

The Native Tribes of Southeastern Australia. MacMillan & co. London.

Jenkin, J.J. 1968

'The Geomorphology and Upper Cainozoic Geology of South-East Gippsland, Victoria'.
Geological Survey of Victoria, Memoir 27.

Keen, I. 2004

Aboriginal Economy and Society: Australia at the Threshold of Colonisation,
Oxford University Press, Melbourne.

LCC 1980

Land Conservation 1980 South Gippsland District 1. Council of Victoria Melbourne.

LCC 1982

Gippsland Lakes Hinterland Area. Conservation Government Printers, Melbourne.

Morgan, P. 1997

The Settling of Gippsland – A Regional History. Gippsland Municipalities Association.

Murphy, A. 2007

Proposed Development, Monash Views, Newborough: Cultural Heritage Assessment.

Nicolson, O. 1998

An Archaeological Survey of a Proposed School Site, Bairnsdale, Victoria.
Report to Building Services Agency.

Orr, A, Vines, G. and M. Pham 2008

Drouin-Warragul bike path CHMP. Report to Warragul Shire. Biosis Research P/L

Rhodes, D. 1996

The History of Ramahyuck Aboriginal Mission and a Report on the Survey of Ramahyuck
Mission Cemetery. Occasional Report No. 47, AAV, Melbourne

Rhodes, D. 2003

VicTrack Optic Fibre Cable Project Aboriginal SEMP. Report to VicTrack.

Symthe, R.B. 1878

The Aborigines of Victoria; With notes Relating to the Habits of Natives of Other Parts of
Australia. Victorian Government Printer.

Walsh, F.J. 1987

'The influence of the spatial and temporal distribution of plant food resources on
traditional Martujarra subsistence strategies'. Australian Archaeology 25, pp. 88-101.

Wells, J. 1986.

Gippsland – people, a place and their past. Landmark Press

Wesson, S. 2000

An Historical Atlas of the Aborigines of East Victoria and Far South East New South Wales. Monash Publications in Geography and Environmental Science, #53.

Wesson, J.P. & W.E. Beck 1981

Report on an Archaeological Survey of the Site of the Proposed Driffield Project. Report to SEC.

Young, A. and D. Young 1980.

Slope Development. MacMillan, London.

Zola, N. & B. Gott 1996

Koorie Plants, Koorie People. Koorie Heritage Trust, Melbourne

Websites




Department of Primary Industries Geological Maps, 2012, Victoria, viewed 19/4/13,
<<http://nremap-sc.nre.vic.gov.au/MapShare.v2/imf.jsp?site=em>>

Department of Sustainability and Environment Interactive Biodiversity Maps, 2012,
Victoria, viewed 19/4/13,
http://nremapsc.nre.vic.gov.au/MapShare.v2/imf.jsp?site=bim_external

Australian Bureau of Meteorology Website, viewed 19/4/13
<http://bom.gov.au>

Appendices

Appendix 1: Notice of Intent to Prepare a Cultural Heritage Management Plan

	Department of Planning and Community Development		
Notice of Intent to prepare a Cultural Heritage Management Plan for the purposes of the <i>Aboriginal Heritage Act 2006</i>			
<p>This form can be used by the Sponsor of a Cultural Heritage Management Plan to complete the notification provisions pursuant to s.54 of the <i>Aboriginal Heritage Act 2006</i> (the "Act").</p> <p>For clarification on any of the following please contact Victorian Aboriginal Heritage Register (VAHR) enquiries on 1800-726-003.</p>			
SECTION 1 - Sponsor information			
Sponsor:	Sure Constructions		
ABN/ACN:	51 132 266 601		
Contact Name:	David Sowerby		
Postal Address:	9 Burke Street, Warragul		
Business Number:	5623 4053	Mobile:	0400997032
Email Address:	dsowerby@sureconstructions.com.au		
Sponsor's agent (if relevant)			
Company:	_____		
Contact Name:	_____		
Postal Address:	_____		
Business Number:	_____	Mobile:	_____
Email Address:	_____		
SECTION 2 - Description of proposed activity and location			
Project Name:	Residential Subdivision at 110-120 Waterloo Road, Moe		
Municipal district:	Baw Baw Shire Council		
Clearly identify the proposed activity for which the cultural heritage management plan is to be prepared (ie. Mining, road construction, housing subdivision)			
Subdivision:	_____		
SECTION 3 - Cultural Heritage Advisor			
Matthew Barker	Benchmark Heritage Management	matthew@benchmarkheritage.com.au	
<i>Name</i>	<i>Company</i>	<i>Email address</i>	
SECTION 4 - Expected start and finish date for the cultural heritage management plan			
Start Date:	05-Apr-1905	Finish Date:	05-Jul-1905
Submitted on: 04 Apr 2013			

**SECTION 5 - Why are you preparing this cultural heritage management plan?**

- A cultural heritage management Plan is required by the Aboriginal Heritage Regulations 2007
What is the high Impact Activity as it is listed in the regulations?
Pipeline
Is any part of the activity an area of cultural heritage sensitivity, as listed in the regulations? Yes
- Other Reasons (Voluntary)
- An Environmental Effects Statement is required
- A Cultural Heritage Management Plan is required by the Minister for Aboriginal Affairs.

SECTION 6 - List the relevant registered Aboriginal parties (if any)

This section is to be completed where there are registered Aboriginal parties in relation to the management plan.

Gunaikurnai Land and Waters Aboriginal Corporation

SECTION 7 - Notification checklist

Ensure that any relevant registered Aboriginal party/s is also notified. A copy of this notice with a map attached may be used for this purpose.
(A registered Aboriginal party is allowed up to 14 days to provide a written response to a notification specifying whether or not it intends to evaluate the management plan.)

In addition to notifying the Deputy Director and any relevant registered Aboriginal party/s, a Sponsor must also notify any owner and/or occupier of any land within the area to which the management plan relates. A copy of this notice with a map attached may be used for this purpose.

Submitted on: 03 Mar 2013

Gunaikurnai



Land & Waters Aboriginal Corporation RNTBC (ICN4768)

Registered Aboriginal Party
ABN 25065817303
197 Macleod Street (PO Box 1699), Bairnsdale VIC 3875

17/4/2013

Sure Constructions
David Sowerby
9 Burke Street,
Warragul

The Gunaikurnai Registered Aboriginal Party has received your notice of intent to prepare a cultural heritage management plan for the purposes of the aboriginal act 2006 for the project Residential Subdivision at 110-120 Waterloo Road, Moe. As this management plan falls within our registered boundary we will be evaluating this CHMP.

For any further information please contact Barry Kenny 0487301323 or email barryk@glawac.com.au

Barry Kenny

A handwritten signature in black ink, appearing to read "Barry Kenny".

Gunaikurnai RAP
Cultural Coordinator
0487301323

Appendix 2: Glossary

A

Angular fragment: A piece of stone that is blocky or angular, not flake-like.

Archaeology: The study of the remains of past human activity.

Area of Archaeological Sensitivity: A part of the landscape that contains demonstrated occurrences of cultural material. The precise level of sensitivity will depend on the density and significance of the material.

Artefact scatter: A surface scatter of cultural material. Aboriginal artefact scatters are defined as being the occurrence of five or more items of cultural material within an area of about 100m² (Aboriginal Affairs Victoria 1993). Artefact scatters are often the only physical remains of places where people have lived camped, prepared and eaten meals and worked.

B

BP: Before Present. The present is defined as 1950.

Backed blade (geometric microlith): Backing is the process by which one or more margins contain consistent retouch opposite to the sharp working edge. A backed blade is a blade flake that has been abruptly retouched along one or more margins opposite the sharp working edge. Backed pieces include backed blades and geometric microliths. Backed blades are a feature of the Australian Small Tool Tradition dating from between 5,000 and 1,000 years ago in southern Australia (Mulvaney 1975).

Blade: A stone flake that is at least twice as long as it is wide.

Burial: Usually a sub-surface pit containing human remains and sometimes associated artefacts.

C

Core: A stone piece from which a flake has been removed by percussion (striking it) or by pressure. It is identified by the presence of flake scars showing the negative attributes of flakes, from where flakes have been removed.

E

Ethnography: The scientific description of living cultures.

Exposure: Refers to the degree to which the sub-surface of the land can be observed. This may be influenced by natural processes such as wind erosion or the character of the native vegetation, and by land use practices, such as ploughing or grading. It is generally expressed in terms of the percentage of the sub-surface visible for an observer on foot.

F

Flake: A stone piece removed from a core by percussion (striking it) or by pressure. It is identified by the presence of a striking platform and bulb of percussion, not usually found on a naturally shattered stone.

Formal tool: An artefact that has been shaped by flaking, including retouch, or grinding to a predetermined form for use as a tool. Formal tools include scrapers, backed pieces and axes.

G

GDA94 or Geocentric Datum of Australia 1994: A system of latitudes and longitudes, or east and north coordinates, centred at the centre of the earth's mass. GDA94 is compatible with modern positioning techniques such as the Global Positioning System (GPS). It supersedes older coordinate systems (AGD66, AGD84). GDA94 is based on a global framework, the IERS Terrestrial Reference Frame (ITRF), but is fixed to a number of reference points in Australia. GDA94 is the Victorian Government Standard and spatial coordinates for excavations, transects and places in CHMP documents.

H

Hearth: an organic sub-surface feature; it indicates a place where Aboriginal people cooked food. The remains of a hearth are usually identifiable by the presence of charcoal and sometimes clay balls (like brick fragments) and hearth stones. Remains of burnt bone or shell are sometimes preserved within a hearth.

Holocene, recent or postglacial period: The time from the end of the Pleistocene Ice Age (c. 10,300 BP) to the present day.

I

In situ: A description of any cultural material that lies undisturbed in its original point of deposition.

L

Land System: Description for an area of land based on an assessment of a series of environmental characteristics including geology, geomorphology, climate, soils and vegetation

M

Midden: Shell middens vary widely in size composition and complexity. Deposits vary in complexity, they range from being homogenous to finely stratified deposits. Material which may be found in middens includes different shell species, stone artefacts, hearths and animal bones.

Q

Quarry (stone/ochre source): A place where stone or ochre is exposed and has been extracted by Aboriginal people. The rock types most commonly quarried for artefact manufacture in Victoria include silcrete, quartz, quartzite, chert and fine-grained volcanics such as greenstone.

Quartz: A mineral composed of silica with an irregular fracture pattern. Quartz used in artefact manufacture is generally semi-translucent, although it varies from milky white to glassy. Glassy quartz can be used for conchoidal flaking, but poorer quality material is more commonly used for block fracturing techniques. Quartz can be derived from waterworn pebble, crystalline or vein.

P

Pleistocene: The dates for the beginning and end of the Pleistocene generally correspond with the last Ice Age. That is from 3.5 to 1.3 million years ago. The period ends with the gradual retreat of the ice sheets, which reached their present conditions around 10,300 BP.

Pre-contact: Before contact with non-Aboriginal people.

Post-contact: After contact with non-Aboriginal people.

R

Raw material: Organic or inorganic matter that has not been processed by people.

Registered Aboriginal Cultural Heritage Places: These are Aboriginal sites registered on the Victorian Aboriginal Heritage Register (VAHR).

Regolith: The mantle of unconsolidated soil/sediments/weathered rock materials forming the surface of the land that rests upon the bedrock.

S

Scarred trees: Aboriginal derived scars are distinct from naturally occurring scars by their oval or symmetrical shape and occasional presence of steel, or more rarely, stone axe marks on the scar's surface. Other types of scarring include toeholds cut in the trunks or branches of trees for climbing purposes and removal of bark to indicate the presence of burials in the area. Generally, scars occur on River red gums (*Eucalyptus camaldulensis*) or grey box (*E. microcarpa*) trees. River red gums are usually found along the margins of rivers, creeks and swamps with grey box on near and far floodplains. Size and shape of the scar depended on the use for which the bark was intended. For example, bark was used for a variety of dishes and containers, shields, canoes and construction of huts.

Significance: The importance of a heritage place or place for aesthetic, historic, scientific or social values for past, present or future generations.

Silcrete: Soil, clay or sand sediments that have silicified under basalt through groundwater percolation. It ranges in texture from very fine grained to coarse grained. At one extreme it is cryptocrystalline with very few clasts. It generally has characteristic yellow streaks of titanium oxide that occur within a grey and less commonly reddish background. Used for flaked stone artefacts.

Spit: Refers to an arbitrarily defined strata of soil removed during excavation.

Stratification: The way in which soil forms in layers.

Stratified deposit: Material that has been laid down, over time, in distinguishable layers.

Stratigraphy: The study of soil stratification (layers) and deposition.

Stone Artefact: A piece of stone that has been formed by Aboriginal people to be used as a tool or is a by-product of Aboriginal stone tool manufacturing activities. Stone artefacts can be flaked such as points and scrapers or ground such as axes and grinding stones.

T

Tool: A stone flake that has undergone secondary flaking or retouch.

Transect: A fixed path along which one excavates or records archaeological remains.

V

Victorian Aboriginal Heritage Register: A list of all registered Aboriginal cultural heritage places (Aboriginal Places) in Victoria.

Visibility: Refers to the degree to which the surface of the ground can be observed. This may be influenced by natural processes such as wind erosion or the character of the native vegetation, and by land use practices, such as ploughing or grading. It is generally expressed in terms of the percentage of the ground surface visible for an observer on foot.

REFERENCES

Aboriginal Affairs Victoria 1997 *Guidelines for Conducting and Reporting upon Archaeological Surveys in Victoria*. AAV, Melbourne.

Mulvaney, DJ 1975 *The Prehistory of Australia*. Harmondsworth, Penguin.

Holdaway, S & N Stern

2004 *A Record in Stone: the Study of Australia's Flaked Stone Artefacts*.

Museum Victoria and Aboriginal Studies Press, Australian Institute

of Aboriginal and Torres Strait Islander Studies, Canberra

Appendix 3: GDA 94 Co-ordinates

Excavation Pit A = Start A1 = End	Easting GDA 94	Northing GDA 94
T1A	433632.641	5774312.28
T1A1	433630.8648	5774317.567
T2A	433616.426	5774361.528
T2A1	433614.8812	5774365.985
T3A	433540.1445	5774411.003
T3A1	433534.5058	5774409.27
T4A	433457.2739	5774353.998
T4A1	433454.0845	5774351.762
T5A	433507.6662	5774271.628
T5A1	433510.5738	5774267.407
T6A	433553.6547	5774197.647
T6A1	433555.103	5774193.049
T7A	433598.942	5774127.75
T7A1	433601.9181	5774123.797
T8A	433640.603	5774153.483
T8A1	433644.6756	5774153.661
T9A	433656.7247	5774225.487
T9A1	433659.2259	5774229.932
T10A	433663.1628	5774276.468
T10A1	433660.7557	5774283.828
T11A	433599.4316	5774013.758
T11A1	433596.0499	5774008.836
T12A	433639.5596	5774050.698
T12A1	433641.4083	5774053.796
T13A	433715.0884	5774077.102
T13A1	433719.2385	5774079.077
T14A	433748.3065	5774027.627
T14A1	433750.3726	5774023.988
T15A	433789.6291	5773975.91
T15A1	433792.267	5773970.994
T16A	433819.9685	5773987.689
T16A1	433817.6131	5773991.217
T17A	433764.6281	5774062.851
T17A1	433766.2319	5774060.268
T18A	433649.8016	5773972.725
T18A1	433646.5569	5773975.877
T19A	433836.1407	5773856.219

T19A1	433834.9521	5773858.551
T20A	433841.4016	5773840.136
T20A1	433842.3407	5773838.408
T21A	433870.4901	5773835.791
T21A1	433868.7505	5773839.135
T22A	433875.9308	5773856.811
T22A1	433875.1704	5773858.745

15 Appendix 9 – SWMS Concept

Neil Craigie – 12th October 2010

Neil M Craigie Pty Ltd

ACN 074 582 282 ABN 29 074 582 282

Waterway Management Consultants

12 October 2010

Mr C Lyon
SMEC Urban (Traralgon Office)
(By Email)

Dear Craig,

Re: WATERLOO AT MOE

I refer to the meeting at your offices on 6 August 2010 during which you requested me to prepare concept arrangements to address stormwater management and floodplain management issues for development of lands in Moe (refer Figure 1), specifically on the properties at 42 Mitchells Road (Area 1 on Figure 2) and 110-120 Waterloo Road (Area 2 on Figure 2).

Subsequent to that meeting you have also advised that the balance area identified as Area 3 on Figure 2 is required to be included in the assessment.

The estimated sizes of the three nominated areas are as follows:

- Area 1 17.7 ha
- Area 2 26.8 ha
- Area 3 32.8 ha

Proposed development is primarily residential with surface imperviousness estimated to average 50% across the total areas. Area 3 includes some industrial land.

1. Catchments and Constraints

1.1 Moe Contour Drain

The subject properties are bounded to the north by the Moe Contour Drain (MCD) which was constructed to divert minor flood flows from the southern hillslopes away from the productive agricultural flats along the Moe River floodplain. As such it also receives urban stormwater from those parts of Moe which are generally west of Wirraway Street. Figure 2 shows the upstream urban catchments contributing to the three main waterways which affect Areas 1-3.

All stormwater from the subject lands will also drain to the MCD. The MCD is a designated waterway under the Water Act and any works affecting it are subject to the issue of a Works on Waterways permit from the West Gippsland Catchment Management Authority (WGCMA). Photos 1 and 2 show views from Mitchells Road.

Director Neil McKinnon Craigie BE(Civil), MEngSci, MIEAust, CPEng

Email: nmcraigie@bigpond.com

15 Mulawa Street Croydon, Vic. 3136, Australia

Telephone & Fax: (03) 9725 1053



Photos 1 and 2 Looking westerly at Moe Contour Drain from Mitchells Road

1.2 Mitchells Road Drain

A main urban outfall known as the Mitchells Road Drain is aligned on the west side of Mitchells Road within the (widened) road reserve abutting 42 Mitchells Road.

This drain is piped (1500 mm diameter) to about 100 m south of Saviges Road intersection (Photo 3) from whence it is an open waterway with mature vegetation for about 240 m to its crossing under Mitchells Road via a 1500 mm diameter pipe (Photo 4) and thence enters the Moe Contour Drain. The drain alignment is well vegetated along the east boundary of the property at 42 Mitchells Road. This drain is not a designated waterway under the Water Act. It is the responsibility of Latrobe City Council.

No drainage from the subject lands currently enters this drain but primary road access is proposed across it from the Savages Road intersection into 42 Mitchells Road.



Photos 3 and 4 Mitchells Road Drain pipeline (1500 mm diameter) at outlet to open waterway 100 m south of Saviges Road and at inlet to pipeline under Mitchells Road

1.3 Overland Flowpath Considerations

Piped drainage networks reflect constraints associated with major transport infrastructure such as the Freeway and Railway, more than natural catchment boundaries. Figure 3 is an extract from Volume 2 of the Latrobe City Council Stormwater Management Plan (March 2002) showing pipeline system layouts in the Moe Contour Drain (west) catchment.

Site inspections indicate that the piped drainage system is likely to be overtaxed in events of at most 5-10 years Average Recurrence Interval. Larger events will activate available overland flowpaths and surface flows will be transported quickly down the steep slopes via roads and reserves, generally following the natural topography rather than pipe alignments.

The first real barrier to the passage of overland flows from the upper catchments is the Freeway. Site inspection and available mapping indicates the Freeway will provide effective protection to downstream residential lands west of the high point generally around the Truscott Road/Prince Street alignment. Overland flows are expected to be redirected westwards along the Freeway at least to Old Gippstown Drive. This means that Areas 1-3 are likely to be reasonably well protected against uncontrolled surface flows emanating from the upper catchments.

The next physical barrier to overland flow is the Railway line. However the Railway includes many sets of piped culverts which are distributed along its length and which would therefore act to trap, disperse and direct overland flows generated from the catchment area between the Freeway and the Railway on alignments which do not always reflect the location of main drains.

The culverts which would influence drainage planning in Areas 1-3 are as follows:

- 750 mm nominal diameter culvert near Alexander Avenue alignment which would operate for overland flows emanating in the Alexandra Avenue/Parkside Drive area (potentially affecting Rocklea Mills downstream-see photos 5 and 6);
- twin 2*600 mm nominal diameter culverts between Parkin and Rubery Streets which would operate for overland flows emanating in the Victoria Street/Alexandra Avenue/Parkside Drive area (potentially affecting the W4 Industries site);
- 2*750 mm nominal diameter culverts around the Watsons Road alignment (potentially affecting housing downstream in Desmond Street/Mervyn Street);
- 2*750 mm nominal diameter culverts around the Old Gippstown Drive alignment (potentially affecting development of the western end of Area 3).



Photos 5 and 6 Culverts under Railway and Waterloo Road at Rocklea Mills

1.4 Waterloo Drain

The primary waterway affecting Areas 1 and 2 is un-named but is a designated waterway. For the purposes of this report it is referred to as the Waterloo Drain. Figure 4 shows the drain alignment, surrounding developments and main sewer on the aerial photo base.

The catchment of Waterloo Drain was shown in previous reports as about 93 hectares in area and extending south to about Elizabeth Street. However the pipe drainage layout mapped in Volume 2 of the Latrobe City Council Stormwater Management Plan (March 2002) shows that this open earth drainage line serves a far lesser piped drainage catchment extending just upstream of Brendan Street. Pipe diversions south of the Railway direct drainage water from most of the catchment easterly to the Mitchells Road Drain. Total piped drainage catchment at the inlet to Area 2 (the open drain at the rear of W4 Industries-see Photos 7 and 8) is about 9 ha. A deep pipeline exiting from the northwest end of the Sweetwater Place development has recently been connected to Waterloo Drain.



Photos 7 and 8 One set of Waterloo Drain culverts under Railway and downstream of Waterloo Road at W4 Industries

1.5 *Watsons Road Drain*

The western waterway is an un-named designated waterway, but is referred to herein as the Watsons Road Drain. It is piped through the existing Desmond Street/Mervyn street residential development and then passes through the easterly titles of Area 3 as a straight open earth drain to the MCD.

Figure 4 shows the drain on the aerial photo base.

It serves a large urban catchment of about 102 ha extending south to the natural catchment boundary at the end of King Street Extension.

Photo 9 shows the twin culverts under the Railway which are opposite No. 150 Waterloo Road.

As shown by Photo 10 no free overland flowpath remains to the north of Waterloo Road through the existing development. However the Railway embankment and culverts and the Freeway diversion upstream appear to mitigate potential flooding problems.



Photos 9 and 10 Watsons Road Drain culverts under Railway and looking downstream to the blocked flowpath from Waterloo Road in the Mervyn Street/Desmond Street subdivision.

1.6 Old Gippstown Drive outfall

Although no other waterways are shown on basemaps, Area 3 also receives overland flow discharges from the twin culverts under the Railway on the Old Gippstown Drive alignment. A small open earth drain conveys some of the flows downstream of Waterloo Road on a northwesterly alignment. Area 3 planning will need to provide for free passage of these flows via appropriate road floodways or reserves.



Photos 11 and 12 Culverts under Railway and Waterloo Road at Old Gippstown Drive alignment. Part of Area 3 is downstream of Waterloo Road.

2. Discussions with WGCMA

WGCA have advised that best practice environmental treatment for stormwater is required for development connecting to all designated waterways. This therefore includes Areas 1-3 inclusive. WGCMA have no on-ground maintenance responsibility for assets created to achieve compliance with best practice so any and all such treatment assets will need to be maintained by the Latrobe City Council.

WGCMA advise that designated waterways are to be protected and enhanced wherever possible, as open waterways. Piping of designated waterways would only be considered in instances where overall environmental benefits can be shown to be sufficiently positive for the development as a consequence of such action.

Discussions have been held with Mr Adam Dunn of the WGCMA to determine likely requirements for the subject waterways. It was confirmed that the Moe Contour Drain must be retained and protected as part of any development proposal. Ecological investigations completed to date support the proposition that aquatic and terrestrial values of the Drain and its vegetation should be protected, via appropriate setbacks, weed control and effective stormwater quality treatment.

In regard to Waterloo Drain, it was agreed that piping would be considered given the relatively small catchment area, provided that (a) an effective wetland system was created in or adjacent to the Contour Drain floodplain area to ensure best practice stormwater treatment standards were achieved and (b) that such wetland design was arranged to enhance and protect the values of the Contour Drain as well.

The Watsons Road Drain was not discussed with Mr Dunn at the time because Area 3 was not then known to be part of the investigation area. It might be expected that with its large upstream urban catchment, piping of the Drain will not be acceptable to the WGCMA. However with the protection afforded by the Freeway and Railway it may prove to be feasible to do this whilst complying with floodway safety standards, provided that environmental “pluses” still outweigh the detriments of piping.

The Mitchells Road Drain will not receive any stormwater drainage from Area 1 but it will need to be crossed to provide road access to the development from Mitchells Road at Saviges Road. This crossing will not require a Works on Waterways permit from the WGCMA as it is not a designated waterway. However approval will be required from LCC.

Given the known sensitivity of downstream rural lands to flooding issues along the Moe River flats it follows that the development plans for Areas 1-3 must incorporate sufficient retarding storage to prevent increase in peak discharge as a consequence of urban development.

3. Water Quantity and Quality Considerations

3.1 Peak Discharges

At this point in time a firm development plan exists only for Area 1 so drainage design has focussed on the Waterloo Drain to determine water quality and quantity management requirements.

The Rational Method has been used in accordance with Australian Rainfall and Runoff, to determine peak flow regimes in the Waterloo Drain between Waterloo Road and the Moe Contour Drain. In the absence of a full catchment hydrologic modelling study and design plans for existing infrastructure, the following assumptions have been made to determine peak flows:

- that the Freeway will sever and divert all upstream catchment overland flows;
- that the pipe diversions to Mitchells Road Drain shown on Figure 3 have 5 year ARI capacity and will remain effective at all times;
- that the three sets of culverts under the Railway between Parkin Street and Alexander Avenue will operate to maximum capacity (3.5 m³/s in total);
- that the Railway will not be overtopped in the 100 year ARI flood event.

Tables 1 and 2 present summary results. These show that without any compensatory storage being provided, development of the subject lands and surrounding lands will significantly increase peak discharges at the Moe Contour Drain. The results for existing conditions assume that the Sweetwater Place and Querencia RV developments are fully complete whereas these are only partially developed at present.

TABLE 1 Rational Method Estimates-Waterloo Drain (Existing Conditions)							
Location	Catchment Status	Tc (mins)	ARI (yrs)	Catchment (ha)	Average Imperviousness (%)	Peak Flow (m3/s)	Comments
Lloyd Street at the Railway	Existing and future	10	1	4	50	0.2	
		10	5	4	50	0.4	
		15	100	~25 ha (overland flow)	50	5.30	Capacity of 4*600 mm dia and 1*750 mm dia culverts with 0.5 m head across Railway is 3.5 m3/s.
Inlet to Area 1	Existing	20	1	35.8 • U/s Railway=4.0 • Area 2=14.8 • Sweetwater=12.0 • Other=5.0	33 • U/s Railway=50.0 • Area 2=20% • Sweetwater=50% • Other=20%	0.8	Includes Sweetwater Place catchment as fully developed. Rocklea Mills existing development in Area 2
		20	5	35.8	33	1.8	
		25	100	31.8 • Area 2=14.8 • Sweetwater=12.0 • Other=5.0	31 • Area 2=20% • Sweetwater=50% • Other=20%	3.7+3.5= 7.2	3.5 m3/s added for Railway inflow
Outlet to Moe Contour Drain	Existing	27	1	57.3 • U/s Railway=4.0 • Area 2=14.8 • Area 1=17.7 • Sweetwater=12.0 • Querencia=3.8 • Other=5.0	27 • U/s Railway=50.0 • Area 2=20 • Area 1=0 • Sweetwater=50 • Querencia=80 • Other=20	0.9	Total developable area of Area 1=14.6 ha assumed to contribute Includes Sweetwater Place catchment as fully developed. Rocklea Mills existing development in Area 2 Querencia RV assumed to be fully developed.
		27	5	57.3	27	2.1	
		30	100	53.3 • Area 2=14.8 • Area 1=17.7 • Sweetwater=12.0 • Querencia=3.8 • Other=5.0	24 • Area 2=20 • Area 1=0 • Sweetwater=50 • Querencia=80 • Other=20	4.8+3.5=8.3	3.5 m3/s added for Railway inflow

TABLE 2 Rational Method Estimates-Waterloo Drain (Full development)

Location	Catchment Status	Tc (mins)	ARI (yrs)	Catchment (ha)	Average Imperviousness (%)	Peak Flow (m3/s)	Comments
Lloyd Street at the Railway	Existing and future	10	1	4	50	0.2	
		10	5	4	50	0.4	
		15	100	~25 ha (overland flow)	50	5.30	Capacity of 4*600 mm dia and 1*750 mm dia culverts with 0.5 m head across Railway is 3.5 m3/s.
Inlet to Area 1	Future Developed without retarding storage	15	1	35.8 • U/s Railway=4.0 • Area 2=14.8 • Sweetwater=12.0 • Other=5.0	50 • U/s Railway=50.0 • Area 2=50% • Sweetwater=50% • Other=50%	1.2	Drain piped for >=5 yr ARI capacity with road floodways Assumes all external areas are fully developed
		15	5	35.8	50	2.7	
		20	100	31.8 • Area 2=14.8 • Sweetwater=12.0 • Other=5.0	50 • Area 2=50% • Sweetwater=50% • Other=50%	5.7+3.5= 9.2	3.5 m3/s added for Railway inflow
Outlet to Moe Contour Drain	Future Developed without retarding storage	17	1	57.3 • U/s Railway=4.0 • Area 2=14.8 • Area 1=17.7 • Sweetwater=12.0 • Querencia=3.8 • Other=5.0	52 • U/s Railway=50.0 • Area 2=50 • Area 1=50 • Sweetwater=50 • Querencia=80 • Other=50	1.8	Total developable area of Area 1=14.6 ha assumed to contribute Assumes all external areas are fully developed. Drain piped for >=5 yr ARI capacity with road floodways
		17	5	57.3	52	4.1	
		22	100	53.3 • Area 2=14.8 • Area 1=17.7 • Sweetwater=12.0 • Querencia=3.8 • Other=5.0	52 • Area 2=50 • Area 1=50 • Sweetwater=50 • Querencia=80 • Other=50	9.4+3.5=12.9	3.5 m3/s added for Railway inflow

3.2 Moe Contour Drain Flood Levels

Water Technology (November 2005) completed a flood level analysis of the Moe Contour Drain for Earthtech along the Area 1 frontage. The analysis showed that the maximum inlet capacity of the Drain at the west end of Area 1 was only 0.9 m³/s. Higher flows resulted in overtopping of the low points along the confining bank level.

The design 100 year ARI flood levels were set grading from 55.60 m at Mitchells Road (adopted to match the estimated lowpoint level of the road at the Drain crossing) to 56.20 m at the western end of Area 1.

Additional survey levels taken for this present study have revealed that the overtopping level of Mitchells Road is 55.70 m with lowpoint bank levels being 55.61 m or higher throughout the Area 1 frontage.

With inlet flows from the Area 1 catchments exceeding 8 m³/s for existing development conditions, it is considered that the adopted 100 year ARI flood level should be no lower than 56.00 m across most of the Area 1 frontage grading to 56.50 m at the west end of Area 1.

No survey of the drain invert and banks is available across the Area 2 or 3 frontages. However basemap levels indicate that nominal 100 year ARI flood levels could grade from 56.50 m at the Area 1/2 boundary to 57.00m at the west end of Area 3.

3.3 Retarding Storage Requirements

Given the known sensitivity of rural lands to flooding issues along the Moe River flats, development plans for Areas 1 and 2 must incorporate sufficient retarding storage to prevent increase in peak discharge at the Moe Contour Drain for all events up to and including the 100 year ARI event.

The results for the recent detailed RORB hydrologic model analysis for the Cross's Road developments in Traralgon have been used to inform requirements for the subject developments.

That modelling exercise produced a storage requirement of 315 m³/ha of development area (at 50% imperviousness), an outcome which is consistent with other extensive investigations for similar developments across the greater Melbourne area.

This implies retarding storage requirements across the subject lands as in Table 3.

It should be noted that these volumes are additional to existing flood storage volumes that may exist on the site.

Property/ies	Total Area (ha)	Storage rate (m³/ha)	Storage Need (m³)
Area 1	17.7	315	5,575
Area 2	26.8		8,440
Area 3	32.8		10,330
Total	77.3		24,345

3.4 Wetland Treatment Areas

The MUSIC model (Version 3) has been used to generate estimates of wetland area to achieve compliance with best practice stormwater quality treatment standards. The continuous 6 minute duration rainfall sequence for KooWeeRup between 1970 and 1979 was used with average imperviousness increased to achieve the correct balance with the 6% higher mean annual rainfall at Moe.

The results indicated that for extended detention depth of 0.5 m, wetland area should be not less than 2% of the developed urban catchment. Hence treatment requirements across the subject lands are listed in Table 4.

Property/ies	Total Area (ha)	Wetland area rate (m²/ha)	Wetland area need (m²)
Area 1	17.7	200	3,540
Area 2	26.8		5,360
Area 3	32.8		6,560
Total	77.3		15,460

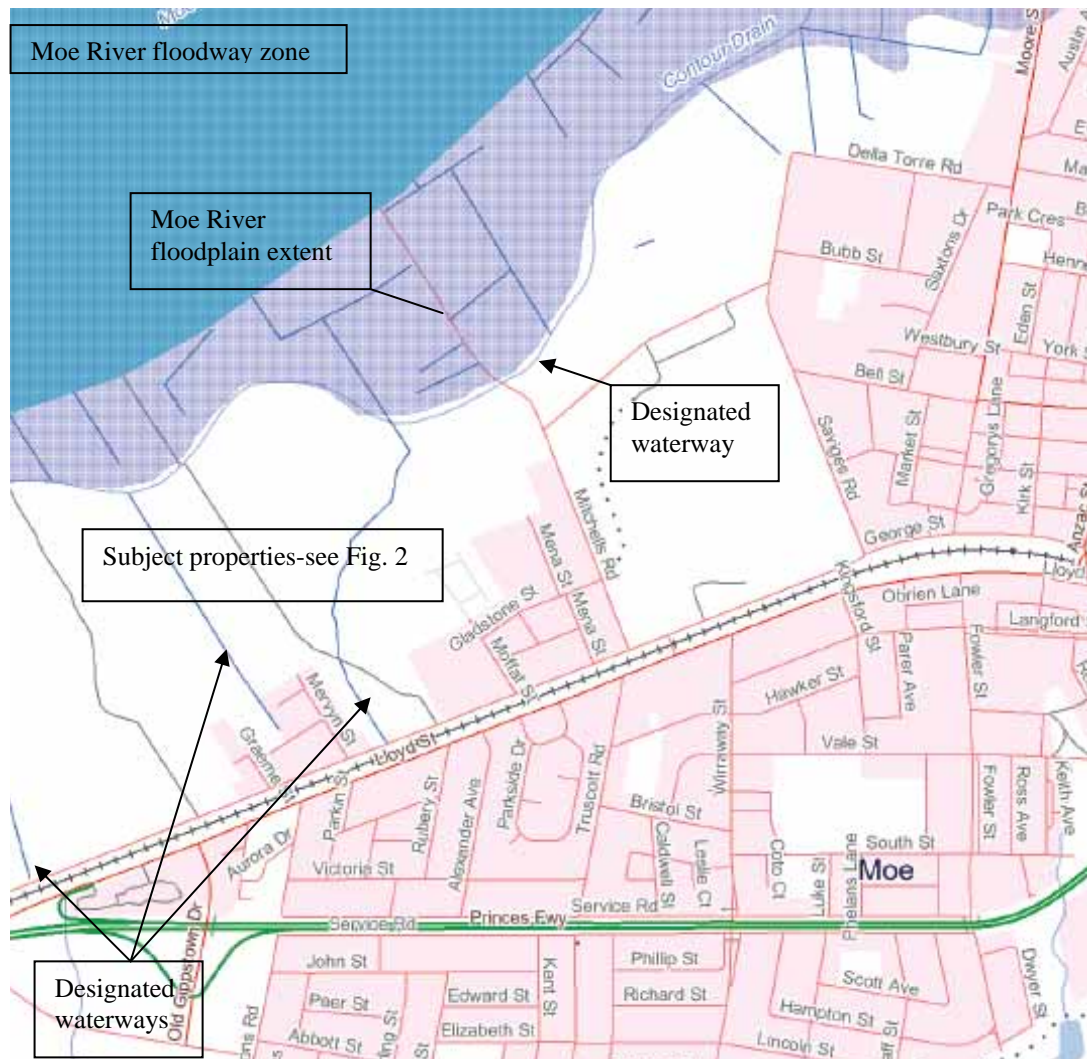


Figure 1 Plan showing subject properties, extent of major flooding in Moe River floodplain and designated waterways

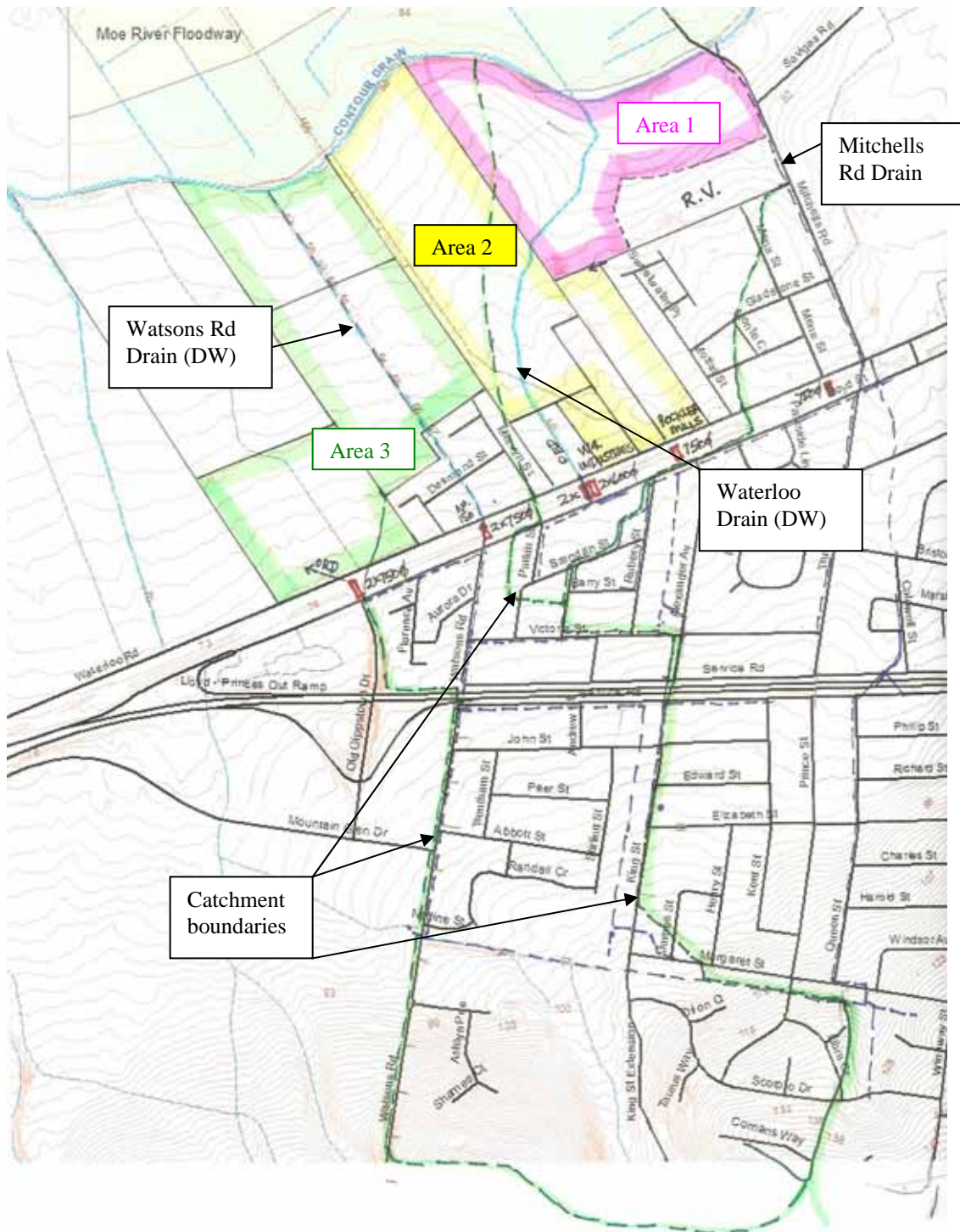


Figure 2 Plan showing subject properties (Areas 1-3), designated waterways and urban drainage catchment boundaries (extracted from Latrobe City Council Stormwater Management Plan (2002) and 1 m basemap contour (source WGCMA).

DW-Designated Waterway



Figure 3 Extract from LCC SWMP (Fisher Stewart 2001) showing pipeline layouts in the Moe Contour Drain (west) catchment.

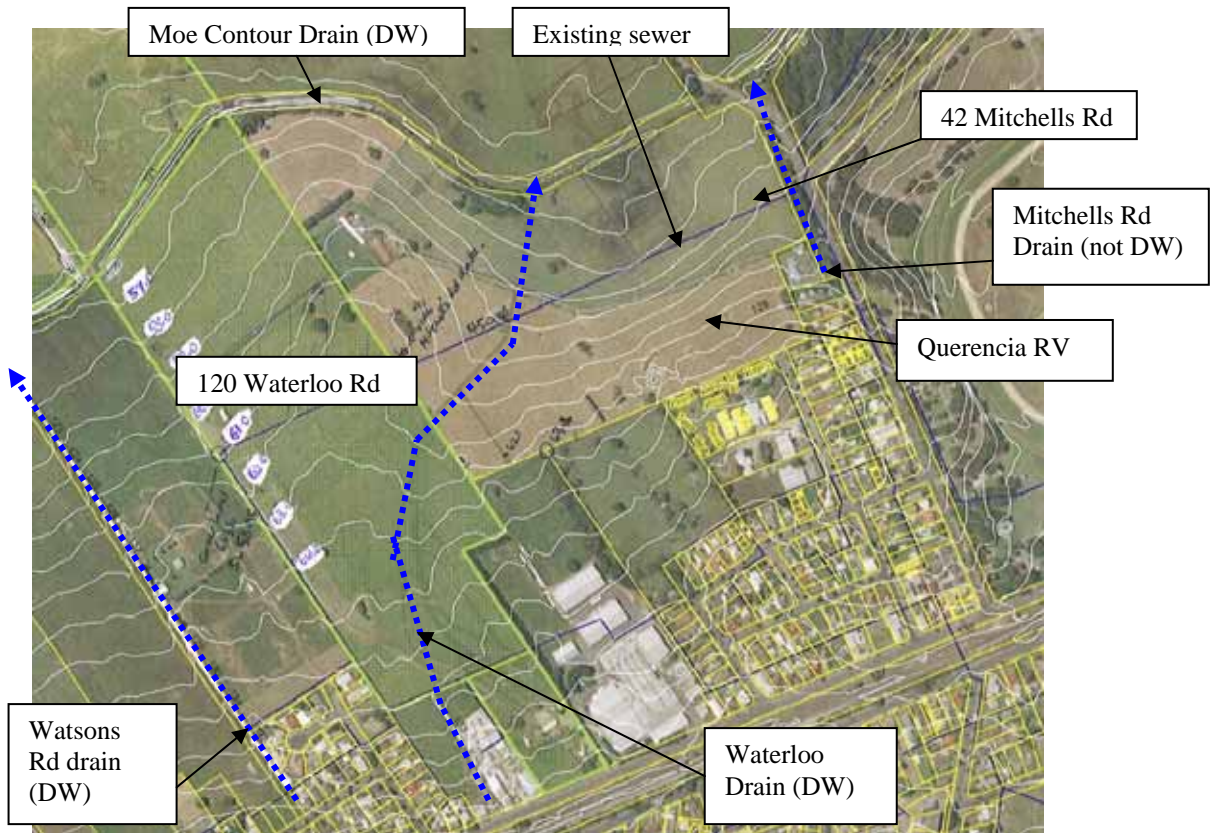


Figure 4 Aerial photo showing 1 m contours, main sewer, and main waterways affecting subject properties. Note: DW-Designated Waterway

4. An Integrated Surface Water Management Strategy

4.1 Wetland Retarding Storages in Area 1

The best way to effectively provide the required retarding storage volumes is via excavation within or abutting the floodplain of the Moe Contour Drain, and efficiency points to retarding storage capacity being provided in the airspace above stormwater quality treatment wetlands as part of an overall integrated management strategy.

Previous experience confirms that land area needs to provide the required flood retarding storage will exceed those required to comply with stormwater quality treatment requirements and this is the case here. Maximum flood depth in the airspace above the new wetlands is 1.5 m with average depth over and above existing conditions about 1.2 m at most. Hence minimum flood area for Area 1 is 4,645 m² which is about 30% greater than the wetland water surface area needed.

Available ecological information and my site inspections all indicate to me that the Moe Contour Drain low flow channel and dependent aquatic and terrestrial vegetation should be retained. Excavation within the floodplain should not disturb the low flow channel other than as required to make good hydraulic connections. However there are obvious ecological advantages in integrating the additional wetland areas as closely as possible with the aquatic environment of the Contour Drain.

The arrangement shown on Figure 5 for Area 1 wetlands is suggested as a prototype approach for all developments fronting the Contour Drain.

Normal Top Water Level (NTWL) in the Area 1 wetlands is set at 54.50 m to match the existing low flow invert/water level as surveyed in the Contour Drain with inlet and outlet zones merging with the drain bank in locations where no significant vegetation is observed. Other than the inlet zones which are approximately 20 m wide, no other physical disturbance is proposed within the Contour Drain reserve. The existing twin 300 mm diameter culverts under Mitchells Road are adequate to achieve the necessary hydraulic control on the Contour Drain. No other hydraulic structures are needed.

The summary features of the Area 1 wetlands listed in Table 5 show that a wetland area of 9,600 m² is proposed with total increased flood storage volume of 10,890 m³. Compared with the requirements for Area 1 listed in Tables 3 and 4 it can be seen that the proposal will provide significantly greater area and volume. This can be used to offset requirements for the balance Area 2 lands as set out in Table 6.

4.2 Balance of Areas 2 and 3 Frontage to Moe Contour Drain

Although no survey of similar quality to Area 1 is available in Areas 2 or 3, Figure 6 has been prepared to indicate a probable layout of integrated wetland retarding

storages for both the balance part of Area 2 and Area 3. Including likely setbacks and vegetation protection areas it is considered that:

- a 1.2 ha reserve will be required for the balance Area 2 frontage with wetland water surface area of about 0.4 ha;
- a 2.1 ha reserve will be required in Area 3, incorporating a 1 ha wetland.

It is possible that these areas may be reduced once survey information is available.

Area 3 can be developed separately as a stand-alone exercise from Areas 1 and 2.

It is suggested that for present purposes a floodway reserve of not less than 20 m width should be assumed to be required in Area 3 along the current Watsons Road Drain alignment north of Desmond Street. If the integrated wetland retarding storage shown on Figure 6 is provided, I am confident that the WGCMA would see the benefits for the Moe Contour Drain corridor and treatment of stormwater from the major upstream catchments as being sufficient benefits to offset the piping of the drain in Area 3. However my expectation is that overland flow magnitudes will exceed the safe capacity of a roadway acting as a floodway.

4.3 MUSIC Modelling of Proposed Management System

The MUSIC model was set up for Areas 1 -3 and the proposed integrated wetland retarding storages to check overall stormwater quality performance. To reduce pollutant loads on the main Area 1 wetland a limit of 12 ha was directed to that system with the balance 14.8 ha assumed to be directed to the other wetland on the northern frontage.

The model results summarised in Table 7 show that in regard to the Area 1-3 development generated loads, the proposed integrated wetland retarding storage system far exceeds best practice requirements and removes:

- 161% Total Suspended Solids (TSS),
- 139% Total Phosphorus (TP),
- 95% Total Nitrogen (TN) and
- 265% Gross Pollutants (GP)

Clearly, the proposed management system offers substantial benefits for receiving environmental values compared with existing conditions.

Yours faithfully,

Neil M Craigie
BECivil, MEng Sci, MIEAust, CPEng

Level (m)	Main wetland					Minor wetland					Total Increase in Storage (m3)
	Existing Surface Area (m2)	Existing Airspace Storage Volume (m3)	Future surface Area (m2)	Future Airspace Storage Volume (m3)	Increase in storage (m3)	Existing Surface Area (m2)	Existing Airspace Storage Volume (m3)	Future surface Area (m2)	Future Airspace Storage Volume (m3)	Increase in storage (m3)	
54.50	0	0	8,200	0	0	0	0	1,400	0	0	0
55.00	475	120	8,500	4,180	4,060	0	0	1,650	770	770	4,830
56.00	12,840	6,100	12,000	14,430	8,330	20	10	1,950	2,570	2,560	10,890

Property/ies	Total Area (ha)	Storage Need (m3)	Supplied in Area 1 wetlands	Balance needed in Area 2 frontage	Wetland area need (m2)	Supplied in Area 1 wetlands	Balance needed in Area 2 frontage
Area 1	17.7	5,575	10,890		3,540	9,600	
Area 2	26.8	8,440		3,125	5,360		-
Total	44.5	14,015	10,890	14,015	8,900	9,600	-

TABLE 7 MUSIC MODEL RESULTS FOR OVERALL AREA 1-3 SYSTEM (6 minute continuous rainfall sequence 1970-79)									
Wetland	Catchment Area (ha)	Parameter	Total Source Pollutant Loads	Area 1-3 Source Loads only	Residual Pollutant Loads	Loads Removed	Area 1-3 Load Removal (%)		Overall % removal
							Achieved	Best Practice Target	
Area 1 Wetlands	54.5	Flow (ML/yr)	262	140	249	13	9	-	5
		TSS (kg/yr)	50,200	26,800	11,400	38,800	145	80	77
		TP (kg/yr)	104	56	34	70	125	45	67
		TN (kg/yr)	740	397	386	354	89	45	48
		GP (kg/yr)	10,300	5,490	0	10,300	188	70	100
Balance Area 2 wetland	14.8	Flow (ML/yr)	70	70	65	5	7	-	7
		TSS (kg/yr)	13,300	13,300	1,100	12,200	87	80	87
		TP (kg/yr)	28	28	6	22	77	45	77
		TN (kg/yr)	197	197	85	112	57	45	57
		GP (kg/yr)	2,730	2,730	0	2,730	100	70	100
Area 3 wetland	134.8	Flow (ML/yr)	634	154	622	12	8	-	2
		TSS (kg/yr)	120,000	29,000	58,900	61,100	211	80	51
		TP (kg/yr)	251	61	142	109	179	45	44
		TN (kg/yr)	1,790	437	1,280	510	117	45	29
		GP (kg/yr)	24,900	6,060	0	24,900	410	70	100
Total for Areas 1-3 Systems	204.1	Flow (ML/yr)	966	364	936	30	8	-	3
		TSS (kg/yr)	183,000	69,100	72,000	111,000	161	80	61
		TP (kg/yr)	383	145	182	201	139	45	52
		TN (kg/yr)	2,730	1,031	1,750	980	95	45	36
		GP (kg/yr)	37,900	14,280	0	37,900	265	70	100

100 yr Flood Level 56.50 m in NW corner

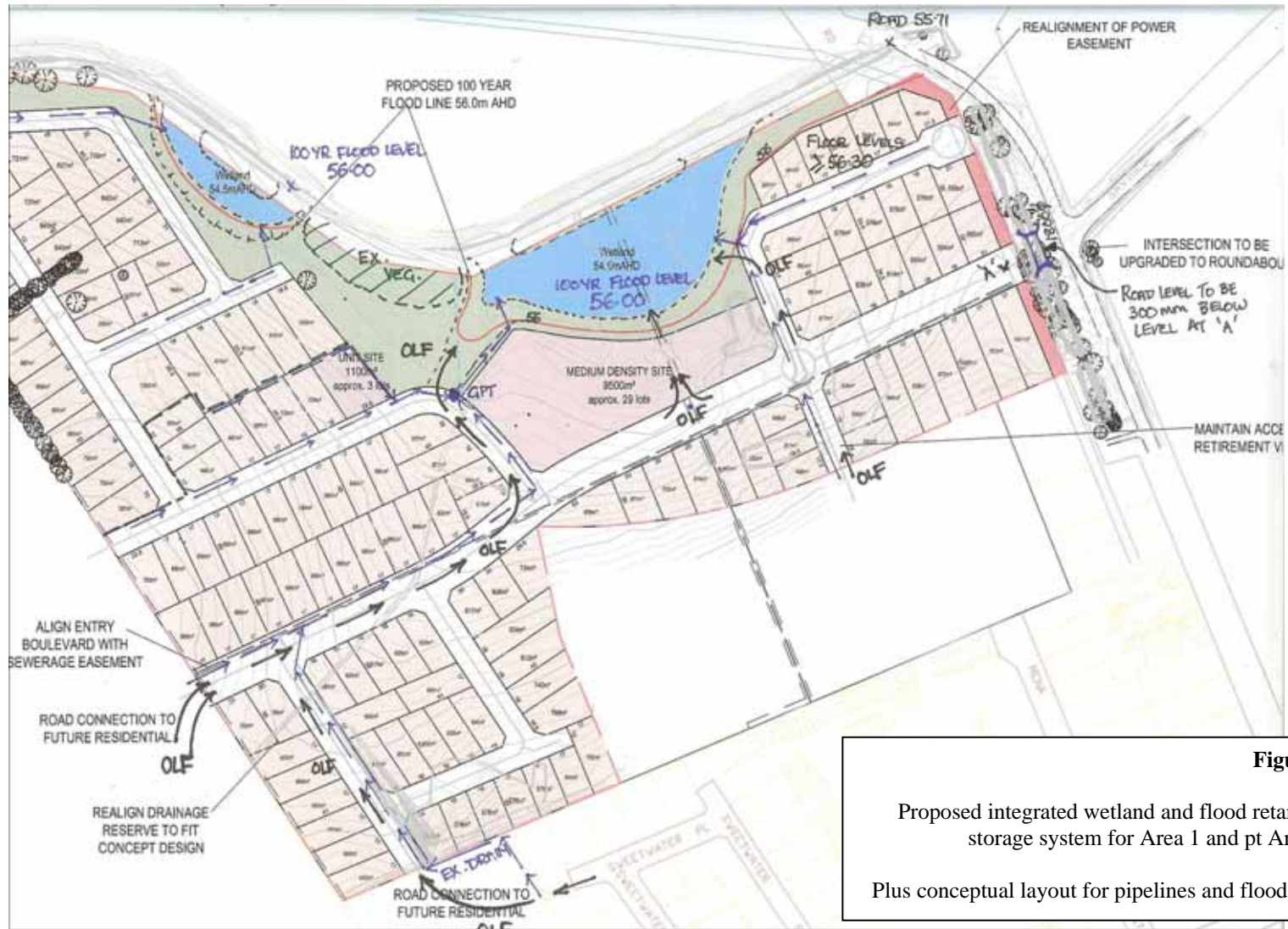
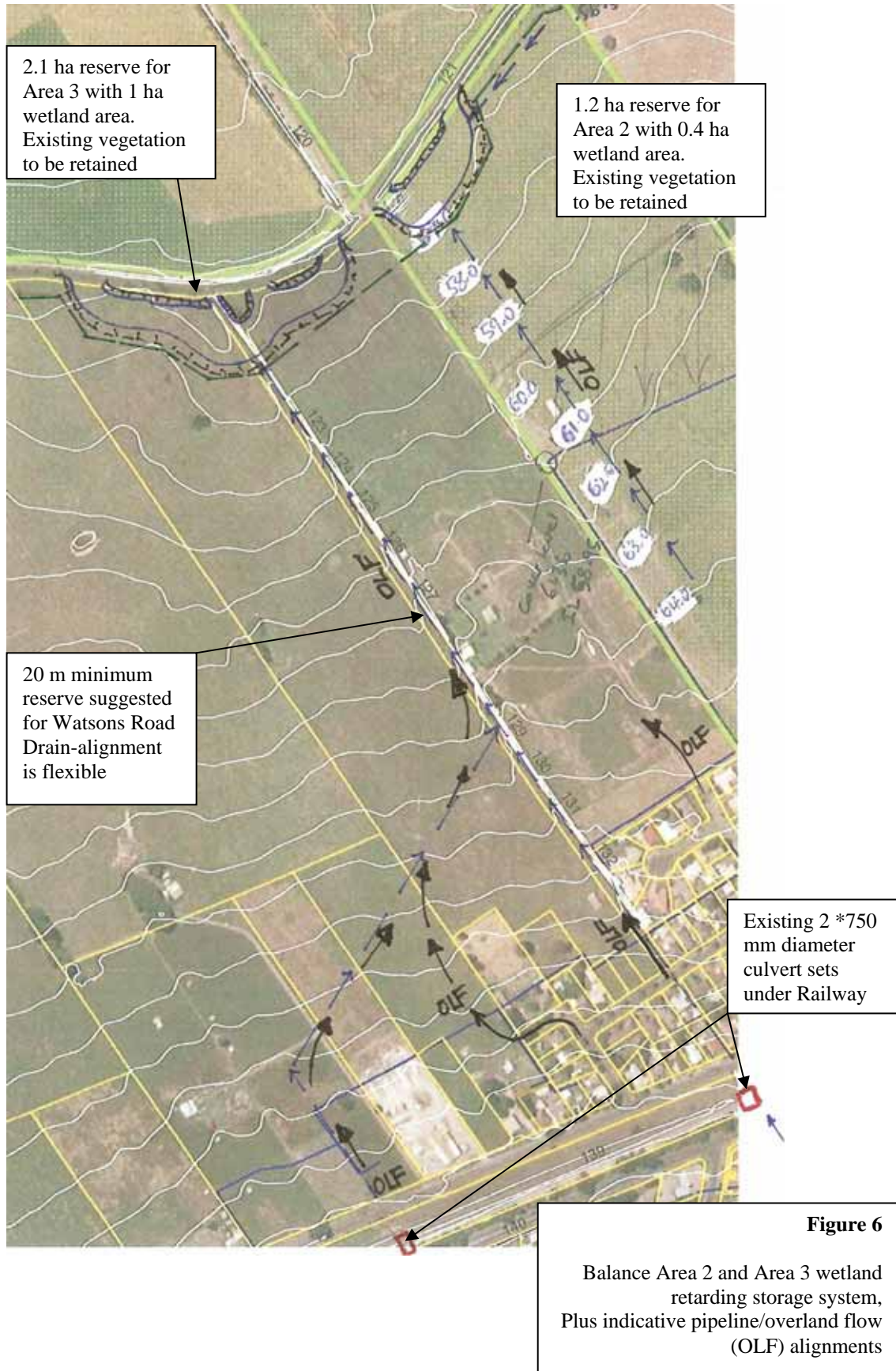


Figure 5
Proposed integrated wetland and flood retarding storage system for Area 1 and pt Area 2, Plus conceptual layout for pipelines and floodways



16 Appendix 10 – Review of Surface Water Management Strategy (concept)

Water Technology – 11th February 2013

11 February 2013

Scott McJannet
Millar Merrigan
126 Merrindale Drive
Croydon 3136

Our Ref: 2645L01v01.docx

Dear Scott,

Re: Review of Surface Water Management Strategy (concept) developed by Neil M Craigie Pty Ltd - Waterloo & Mitchell Grove, Moe

This letter outlines the findings of the review of the Surface Water Management Strategy (Concept) report developed by Neil M Craigie Pty Ltd for the proposed Waterloo & Mitchell Grove development in Moe, Victoria. Water Technology have undertaken this work in accordance with the detailed methodology as described in the proposal letter dated 13 December 2012. Key tasks in this review included:

- **Data Gathering** – Collecting and collating data (inc. modelling) used by Neil M Craigie Pty Ltd to develop the current Surface Water Management Strategy (SWMS);
- **Review Current SWMS** – Reviewing work completed by Neil M Craigie Pty Ltd including briefly sanity checking key assumptions and conclusions insuring they are consistent with current best practice methods;
- **Update where required the SWMS** – Consider impacts of changes to overall development plans since work by Neil M Craigie Pty Ltd was completed, update where required water quantity and quality requirements for the proposed development; and
- **Document findings in a brief addendum report (letter style).**

1. PROPOSED DEVELOPMENT

A preliminary Drainage Strategy was commissioned by the SMEC Urban group and completed by Neil M Craigie Pty Ltd in October 2010. The purpose of the document was to inform the preparation of an overall development plan for the site. This Drainage Strategy was provided to Water Technology for consideration in this study. Figure 1-1 demonstrates the general area considered in this study and provides an overall development concept plan.

The current concept plan shows predominately residential areas (of various densities), with reserve areas predominately found along the northern boundary of the development. The purpose of this study is to update any changes to the water quantity and quality requirements with the overall development area (the subject site) shown in Figure 1-1.



Figure 1-1 Overall Site Concept Plan by Millar Merrigan & NBA group (2012)

2. REVIEW OF CURRENT SWMS

Work by Neil M Craigie Pty Ltd (NMC) was of a high standard covering all typical aspects of surface water management at the subject site at the level commissioned to report on (concept). Based on localised drainage characteristics and site ownership, the site was split into 3 zones. These zones are shown in Figure 2-1.

Figure 2-1 gives visual appreciation of slight changes in study areas since the original investigation by NMC. Largely, the three areas are common with a small area within the south western corner of Zone 3 not included in the updated plans provided by Millar Merrigan (MM) for review in this study. Zone 2 area was reduced in the current overall concept plan (OCP) by approximately 8% while change in Zone 3 area equates to a 33% reduction. Some of the area removed from Zone 3 is zoned Multi Use Zone (MUZ) which could have some drainage implications if ultimately included in the OCP.

A comparison of study areas between the two concept plans is shown in Table 2-1. The changes in study areas are not considered significant and are assumed to have minimal impact of the water quantity and quality features required within the development. This has been investigated further in Section 3.3.

Table 2-1 Study Zone Areas

Zone	Area estimated (NMC)	Sanity Check (WT)	Latest OCP (MM)
Area 1	17.7	17.9	17.9
Area 2	26.8	27.3	24.6
Area 3	32.8	32.4	22.0



Figure 2-1 Study Zones as described by NMC & MM (2010 & 2012)

Work by NMC gave particular focus to the external catchments and flow paths which impact the study site. These flow paths were described as Waterloo Drain, Watsons Road Drain and Old Gippstown Drive Outfall. This information (catchment delineation, stormwater assets and overland flow paths) were reviewed against currently available data and found to be accurate. More detailed hydrologic (Rational Method) and hydraulic (pipe capacity checks) calculations were undertaken by NMC for Zone 1 of the 3 external flow paths impacting the development.

Overland flow paths were presented graphically in Figures 5 and 6 of NMC's report. Two of these flow paths are identified as designated waterways (Watsons Road Drain and Waterloo Drain). Under existing conditions, the Waterloo Drain nominally travels in a north westerly direction through Zone 2 of the development before turning due north and flowing through Zone 1 of the development. This feature has been removed in the current OCP. NMC notes in his report that the WGCMA would consider piping of this flow path providing:

- a. An effective wetland system was created in or adjacent to the Moe Contour Drain floodplain area to ensure best practise stormwater treatment standards were achieved;
- b. Wetland design was arranged to enhance and protect the values of the Moe Contour Drain.

It would appear at this preliminary stage in the development process that these conditions have been considered in the current arrangement of the OCP.

NMC reported on the estimated 100 year ARI flood levels in the Moe Contour Drain (north boundary of the development) across all of the development areas. This data was checked against data reported by Water Technology (Assessment of Land at Mitchells Road, Moe - November 2005) and was found to be accurate. Higher confidence in these results could be under taken via review of LiDAR now available for the subject site; however this is outside the scope of this assessment.

Basin storage requirements were nominated for each of the 3 Zones and were based on a storage requirement per hectare relationship established in a RORB model of an adjacent catchment (Cross' Road development). This relationship (315m³ per hectare) is considered consistent with work by Water Technology in the Moe / Morwell area. In an investigation of this nature (concept level) Water Technology would typically derive storage requirements with an empirical relationship such as Boyds method matching pre and post development hydrology (peak flows) to and appropriate storage volume.

Water quality requirements nominated by NMC were modelled in MUSIC. This modelling found that "for extended detention depth of 0.5 m, wetland area should be not less than 2% of the developed urban catchment", using the 2% relationship NMC has nominated wetland surface areas for all 3 Zones. This result is consistent with other wetland areas designed by Water Technology in the area. In an investigation of this nature (concept level) Water Technology would typically derive water quality requirements using MUSIC modelling of each unique area (or Zone) and not via a percentage of developed area relationship. MUSIC modelling by Water Technology in this study has found that wetland surface areas nominated by NMC for each Zone are appropriate.

3. REVIEW OF CURRENT OCP & UPDATES

The OCP provided by MM was checked against recommendations by NMC. The following items were considered:

- Basin location;
- Overland flow paths;
- Approximate basin footprints; and
- Development study area (Changes to Zones 1-3).

3.1 Basin locations, Overland flow paths and Footprints

Basin locations in Zone 1 are consistent with that described by NMC. The road network within Zone 1 follows the overland flow paths nominated by NMC. Approximate basin footprints were estimated using spatial software. Rough engineering calculations completed by Water Technology suggest that combined wetland / flood attenuation features could fit into the area allocated in the current OCP. Basin volumes (flood storage) were assumed to be 1 meter deep with 1 in 6 batter slopes.

The basin location within Zone 2 appears to be on the northern bank of the Moe Contour Drain. This location could present some significant engineering challenges and probably would be better sited on the southern bank of the Moe Contour Drain as originally recommended by NMC. The conceptual footprint shown in the MM drawing is the correct size to accommodate the water quality requirements (footprint of 0.4 ha) but not large enough to meet the flood storage requirements (1.2 ha). Overland flow paths have been well catered for in the current OCP, matching that recommended by NMC.

The basin located within Zone 3 is well sited and is consistent with that recommended by NMC. The conceptual footprint shown in the MM drawing is the correct size to accommodate the water quality requirements (footprint of 1 ha) but not large enough to meet the flood storage requirements (2.1 ha).

While flood storage basin footprints are not shown on the current OCP it is noted that the total reserve area available along the northern boundary of Zones 2 & 3 could likely accommodate the flood storage requirements of the development. This will need to be demonstrated at a later date with more detailed hydrological modelling and when more detailed survey is available.

3.2 MUSIC modelling

As a sanity check of NMC’s water quality modelling, an updated MUSIC model was built in the latest version of the software. Six minute rainfall from Morwell (38.19° S, 146.34°E ~13kms from the subject site) was used from 1961 – 1979, this is different rainfall to that used by NMC in his original work. MUSIC modelling by NMC used rainfall from Koo Wee Rup (~60km from the subject site). This data was modified by artificially increasing the average fraction imperviousness in the MUSIC model to achieve a balance with mean annual rainfall at Moe. Using both local (Water Technology) and scaled (NMC) rainfall were found to produce common results in MUSIC. As such all Wetland surface areas were found to be acceptable in treating stormwater using the updated software and rainfall.

3.3 Change in study area

The review of the SWMS concept report and the current OCP has shown that some of the study areas (Zones) are slightly different. As it has been established that methods used by NMC to estimate wetland surface area and flood storage requirements are sound and as such the same relationships have been used to update these values.

Table 3-1 Retarding Storage Requirements

Location	Total Area (Ha)	Storage Rate (m ³ /Ha)	Storage Volume Required (m ³)
Zone 1	17.9	315	5638.5 (+1%)
Zone 2	24.6		7749 (-8%)
Zone 3	22.0		6930 (-49%)
Total	64.5		20317.5 (-20%)

Table 3-2 Wetland Area Requirements

Location	Total Area (Ha)	Wetland Area Rate (m ² /Ha)	Wetland Area Required (m ²)
Zone 1	17.9	200	3580 (+1%)
Zone 2	24.6		4920 (-8%)
Zone 3	22.0		4400 (-49%)
Total	64.5		15460 (-24%)

The reduction in study area in Zones 2 and 3 has reduced both the water quality and flood storage requirements by approximately 20% (overall). If the additional area identified by NMC is to be developed as part of this overall development then the original wetland area and storage volume figures nominated by NMC should be applied.

4. CONCLUSIONS

The SWMS concept report developed by Neil M Craigie Pty Ltd was found to be a quality strategy covering off all the main requirements of a document pitched at the concept level. Overall Concept Plans developed by Millar Merrigan and the NBA group have adequately addressed overland flow paths water quality requirements (footprints) as identified by Neil M Craigie Pty Ltd. Flood storage requirements were not shown on the Overall Concept Plan but are assumed to be able to be accommodated in the reserve area available at the site.

The central basin location (Zone 2) was found to be at a location which would be difficult to serve the requirements of the drainage area. Moving the basin to the southern side of the Moe Contour Drain would make the feature more functional.

If the overall development area is to be restricted to that shown in the Overall Concept Plans reviewed in this study, then storage and water quality requirements can be reduced by approximately 20%. This is primarily due to the significant reduction in the size of Zone 3.

Analysis by NMC and Water Technology has been undertaken at a high (or concept) level and will need to be revisited and refined as the development process progresses. Water Technology look forward to working with Millar Merrigan and NBA group to progress this development to the next phase. Please don't hesitate to contact us to explain further the assumptions and key findings of this report or to discuss continuing with SWMS process in general.

Yours sincerely,

Thomas Cousland

Project Engineer

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17 Appendix 11 – Infrastructure Services Report

Millar Merrigan – April 2013



Waterloo Road, Moe

Infrastructure Services Report

Development Plan for land parcel on Waterloo Road, Moe

Municipality: Latrobe City Council

Prepared by: Millar Merrigan on behalf of
NBA Group Pty Ltd

Reference: 16315/8.1

Date: 16 May 2013

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Executive Summary

Millar Merrigan have been engaged by the NBA Group to provide an Infrastructure Services Report in support of the proposed Master Plan prepared for a land parcel on Waterloo Road Moe and to provide guidance on any additional information required to accompany a Development Plan and future planning permit application for the subdivision of the land. The subject site lies within the Latrobe City Council municipality and is in a Residential 1 Zone and covered by a Development Plan Overlay Schedule 5 (DPO5). The site is approximately 46.48ha in size situated within the Moe township boundary, having frontage to Desmond Street and Waterloo Road to the south.

A Surface Water Management Strategy (Craigie 2010) has previously been undertaken for the DPO5 area and has been reviewed by Water Technology (2013). The report provides recommendations to ensure best practice environmental outcomes for stormwater. The Moe Contour Drain (MCD) traverses the northern portion of the site and two minor designated waterways feed into this drain from the south. The proposed Development Plan redirects and rehabilitates these minor waterways within the proposed development. Retardation and wetland areas are proposed within a reserve abutting the MCD to ensure that best practice water quality stormwater management objectives are met. Part of this reserve provides an area for vegetation offsets that are required from the development of the adjacent Mitchell Grove development.

The cultural heritage values of the site have been assessed with positive outcomes. The majority of the site has been deemed to have low archaeological sensitivity. A portion of the site is in close proximity to a known artefact and requires the preparation of a CHMP.

A Traffic Impact Assessment has been carried out by GTA Consultants (2013) demonstrating that external traffic flow, internal traffic movements and the impact of the development are suitable. The internal road network and road network in the vicinity of the subject site are expected to operate satisfactorily following the proposed development.

Gippsland Water controls both sewer and water infrastructure in this area. A 300mm diameter water main will need to be constructed along Waterloo Road to service the proposed development. An interconnecting reticulation main will also need to be provided to link between Waterloo Road and Mitchells Road. Gravity outfall for the southern portion of the development will be made to the trunk sewer. The northern portion of the development will drain to a new pump station within the Mitchell Grove estate which will pump to the trunk sewer.

Based on advice from SP AusNet existing electricity lines in Waterloo Road can, at present, support the proposed subdivision based on 4kVA per lot. It is likely that costs for alteration and augmentation works will be at the full cost to the developer.

Envestra/APA Gas currently has 100mm high pressure mains located along Waterloo Road to the south of the site which are capable of supporting the proposed development.

Telecommunications and NBN infrastructure assets are located in close proximity to the site and it is envisaged that timely and cost effective provision of both is possible. Pit and pipe infrastructure will be required to be provided by the developer.

The servicing strategy means that the development could progress in a northerly direction from Waterloo Road with linkages to Mitchell Grove estate provided in due course. The site represents a viable development that can be serviced by the expansion of existing infrastructure. The development will provide new housing opportunities and the provision of infrastructure will not result in unreasonable environmental, cultural or amenity impacts on the site and surrounds.

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1 Introduction

Millar Merrigan have been engaged by the NBA Group to provide an Infrastructure Services Report for the area contained within the DPO5 overlay of the Latrobe City Council Planning Scheme. In order to inform this and other background reports, Millar Merrigan worked in conjunction with the NBA Group to prepare the Development Plan attached in Appendix A. The site is located on Waterloo Road, within the Moe township boundary and can be more specifically described as:

Table 1 - Property Titles

Address & Titles	Approx. Size (ha)
110-120 Waterloo Road <ul style="list-style-type: none">• Lot 1 on TP674252• Lot 3 on TP836437	20.92
98 Waterloo Road <ul style="list-style-type: none">• CP106601(part)	3.70
Desmond Street <ul style="list-style-type: none">• Lot A on LP208976• Lot 1 on LP67416• Lot 1 on TP822397	21.86

The land falls within the Latrobe City Council municipality and is currently Residential Zone 1. *Figure 1* shows the development's position in relation to the Moe Township, whilst *Figure 2* shows the extent of the DPO5.

Figure 1 - Locality Plan

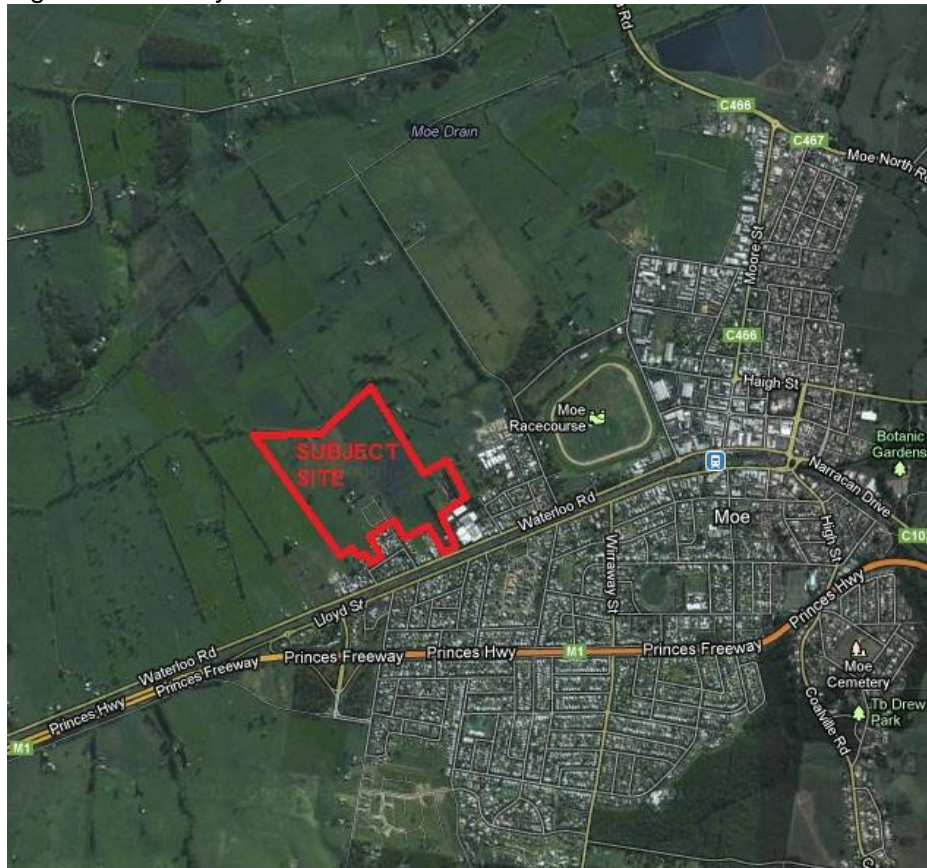


Figure 2 – Development Plan Overlay – Schedule 5



A summary of the key issues and concepts that have been used to guide the development of the attached Development Plan are as follows:

Topography

Topographically speaking, the site slopes steadily towards the northern most boundary of the site, where it meets the Moe Contour Drain. There is a centrally located, north south oriented depression, which captures runoff and also a drainage path entering the site at the south western corner. The drainage paths have been accommodated within the Development Plan via two parallel green spine arrangements which are aligned with roadways.

Site Access

The proposed development has frontage to Desmond Street and Waterloo Road from the south. The main access to the proposed development has been proposed from Waterloo Road which runs parallel to the Gippsland Railway on the northern side. There has also been provision for interconnection with the existing and future adjacent development.

Vegetation

Vegetation offsets are required on part of the site for the development of the adjacent Mitchell Grove estate and have been outlined in section 7. The reserve area adjacent to the Moe Contour Drain has been utilised to meet these requirements in a way that will also enhance the health of the waterway.

Drainage

There are three designated waterways which traverse the sight. The Moe Contour Drain runs from west to east and captures flows from two unnamed waterways coming from the south. The need to protect these waterways has been addressed in the Surface Water Management Strategy summarised in section 4.

Sewer

The topography of the site and its position relative to the outfall means that a pump station will be required to pump sewerage to the designated outfall point. There is also a trunk sewer which traverses the site and is contained within existing easements. Following advice from Gippsland Water the trunk sewer has been

contained within open space reserves, road reserves and pedestrian links to avoid impacting on the asset.

Cultural Heritage

Within the Waterloo Road reserve there is a registered artefact. A due diligence assessment has been undertaken and section 6 of this report provides further detail.

The proposed Development Plan has had regard to servicing requirements and information from discussions with the relevant servicing authorities. Details on existing infrastructure can be seen in section 3 of this report. This report has been prepared as part of the planning process to demonstrate the rationale for the proposal with regards to the provision of infrastructure.

2 Applicable Latrobe City Council Planning Provisions

Schedule 5 to the **Development Plan Overlay** requires a development plan to show:

Land Use & Subdivision

- *Street networks that support building frontages with two way surveillance.*
- *An accessible and integrated network of walking and cycling routes for safe and convenient travel to adjoining communities (including existing and future areas included in the DPO), local destinations or points of local interest, activity centres, community hubs, open spaces and public transport.*
- *The provision of any commercial facilities and the extent to which these can be co-located with community and public transport facilities to provide centres with a mix of land uses and develop vibrant, active, clustered and more walkable neighbourhood destinations.*

Infrastructure Services

- *An integrated stormwater management plan that incorporates water sensitive urban design techniques which provides for the protection of natural systems, integration of stormwater treatment into the landscape, improved water quality, and reduction and mitigation of run-off and peak flows, including consideration of downstream impacts.*
- *The pattern and location of the major arterial road network of the area including the location and details of any required:*
 - *road widening*
 - *intersections*
 - *access points*
 - *pedestrian crossings or safe refuges*
 - *cycle lanes*
 - *bus lanes and stops*
- *The pattern and location of any internal road system based on a safe and practical hierarchy of roads including safe pedestrian and bicycle connections and crossing points in accordance with Latrobe City Bicycle Plan 2007-2010, (as amended).*
- *In consultation with relevant agencies and authorities, provision of public transport stops where appropriate within easy walking distance to residential dwellings and key destinations. Stops should also be located near active areas where possible.*

The **State Planning Policy Framework** provides a context for spatial planning and decision making by planning and responsible authorities, and seeks to inform integrated decision making including the economic and sustainable development of land.

Provisions particularly relevant to infrastructure include:

Settlement (Clause 11): *Planning is to contribute to energy efficiency, prevention of pollution to land, water and air, protection of environmentally sensitive areas, and land use and transport integration.*

Planning for Growth Areas (11.02-2) includes the objective of *providing efficient and effective infrastructure* and the following strategies:

- *Deliver timely and adequate provision of public transport and local and regional infrastructure, in line with a preferred sequence of land release.*
- *Create well planned, easy to maintain and safe streets and neighbourhoods that reduce opportunities for crime, improve perceptions of safety and increase levels of community participation.*

Structure Planning (11.02-3) seeks to *facilitate the orderly development of urban areas* and strategies include *facilitating logical and efficient provision of infrastructure and use of existing infrastructure and services.*

Sequencing of Development (11.02-4) seeks to *manage the sequence of development in growth areas so that services are available from early in the life of new communities*, and contains the following strategies:

- *Define preferred development sequences in growth areas to better coordinate infrastructure planning and funding.*
- *Ensure that new land is released in growth areas in a timely fashion to facilitate coordinated and cost-efficient provision of local and regional infrastructure.*
- *Require new development to make a financial contribution to the provision of infrastructure such as community facilities, public transport and roads.*
- *Improve the coordination and timing of the installation of services and infrastructure in new development areas.*
- *Support opportunities to co-locate facilities.*
- *Ensure that planning for water supply, sewerage and drainage works receives high priority in early planning for new developments.*

Significant environments and landscapes (12.04) seeks to *protect and conserve environmentally sensitive areas.*

Floodplains (13.02) outlines the requirements for *Floodplain Management.*

Water (14.02) deals with the appropriate management of water catchments.

Neighbourhood and Subdivision Design (15.01-3) and Design for Safety (15.01-4) emphasises the importance of safe and convenient road networks, particularly for pedestrians and cyclists, it also emphasises the importance of improved energy efficiency and water conservation as does Sustainable Development (15.02)

Transport (Clause 18) outlines measures to ensure an integrated and sustainable transport system including taking advantage of all modes of transport and improving access to public transport, walking and cycling networks.

Infrastructure (Clause 19) seeks to ensure that physical infrastructure is provided in a way that is *efficient, equitable, accessible and timely*.

Water Supply, Sewerage and Drainage (19.03-2) has the following objective: *To plan for the provision of water supply, sewerage and drainage services that efficiently and effectively meet State and community needs and protect the environment*. The following strategies are particularly relevant:

- *Provide for sewerage at the time of subdivision, or ensure lots created by the subdivision are capable of adequately treating and retaining all domestic wastewater within the boundaries of each lot.*
- *Plan urban stormwater drainage systems to:*
 - *Coordinate with adjacent municipalities and take into account the catchment context.*
 - *Include measures to reduce peak flows and assist screening, filtering and treatment of stormwater, to enhance flood protection and minimise impacts on water quality in receiving waters.*
 - *Prevent, where practicable, the intrusion of litter.*

Stormwater (19.03-3) seeks to minimise the impact of stormwater in bays and catchments.

Telecommunications (19.03-4) seeks to facilitate the orderly development and extension of telecommunications infrastructure.

The **Municipal Strategic Statement** contains a number of policies relating to infrastructure provision that reinforce and emphasise a number of State Policies including encouragement of environmentally sensitive development and modes of transport other than private vehicles.

Environmental Sustainability Overview (21.03-2) outlines Latrobe City Council's overarching policy of 'Ecological Sustainable Development' which includes improving the ecological integrity of urban areas.

Greenhouse & Climate Change Overview (21.03-4) seeks to limit the impact of greenhouse gases and climate change including through the promotion of walking, cycling and public transport use.

Water Quality & Quantity (21.03-5) seeks improvement to river health and encourages Water Sensitive Urban Design.

Built Environmental Sustainability (21.04) contains the following vision statement:

Council will consider planning applications and make decisions in accordance with the following vision:

- *To promote the responsible and sustainable care of our built environment for the use and enjoyment of the people who make up the vibrant community of Latrobe Valley.*
- *To develop clear directions and strategies through consultation with the community ensuring sustainable and balanced development.*

The importance of high quality urban design is emphasised in 21.04-5.

Infrastructure Overview (21.04-6) notes that Council has adopted asset management plans (and standards) for a range of infrastructure items including

roads, footpaths, drains, culverts, signs, trees, streetlights as well as for community services.

Objectives include:

- *Ensure integration of roads, bike paths, footpaths and public transport options.*
- *To provide guidelines for developers regarding engineering requirements ensuring that minimum design standards are achieved.*

Strategies include:

- *Implement Latrobe City Council's Asset Management Strategy and associated guidelines.*

Specific Main Town Strategies – Moe/Newborough (21.05-4) references the Moe – Newborough Structure Plan and the subject site is shown as future residential, see Appendix B.

Liveability (21.08) outlines Council's vision to enhance quality of life through the provision of integrated services.

Healthy Urban Design Overview (21.08-3) states:

Healthy Urban Design Good Practice Guideline – Meeting Healthy by Design Objectives is an initiative of Latrobe City Council which aims to accommodate the community, pedestrians and cyclists as a first priority in street, building and open space design. The Healthy Urban Design Good Practice Guideline has been developed for guidance in designing and developing healthy lifestyles for the community. The Healthy Urban Design Good Practice Guideline supports state government initiatives such as Melbourne 2030 and it encourages:

- *Walkable neighbourhoods, including safe and attractive pedestrian and cycle routes to all key local destinations.*
- *Design of legible street networks that are clear and easy to navigate.*
- *Open space that incorporates a range of shade, shelter, seating and signage opportunities.*
- *Building design that maximises natural surveillance and active street frontages.*
- *Maximised public transport options and connections to all key destinations.*
- *Community spaces or buildings that incorporate a variety of uses.*
- *Avoiding opportunities for concealment and entrapment along paths and in community spaces.*
- *Minimal fencing and walls, with maximum lighting, windows, doors, articulation to facades and use of low walls and transparent fencing.*

*Issues associated with liveability and **residential** development include:*

- *The main towns of Latrobe City are experiencing growth. As these towns continue to grow, new residential development is located further from town centres, and therefore access to services and community facilities is reduced.*
- *Residents of Latrobe City have a lower average life expectancy due to higher incidences of cancer, cardiovascular disease and mental disorders. Council therefore recognises the need to influence health outcomes through the built environment by encouraging active living and social interaction for residents.*

Issues associated with liveability and **open space** and path networks include:

- Public transport opportunities, walking and cycling paths, and linkages between small and main towns in Latrobe City are not always available.
- Currently Latrobe City lacks appropriate alternatives for walking/cycle paths that provide both leisurely and direct routes. Providing paths that allow both recreational opportunities and destination based routes would benefit residents and visitors by enabling journey choice.

The objectives of this clause include: *to provide for walkable neighbourhoods, ensuring public transport, shops, public open space and mixed use community centres are close to all dwellings.*

Residential Subdivision (Clause 56) seeks in part to ensure residential subdivision design deals appropriately with access and mobility (56.06), integrated water management (56.07) and utilities (56.09).

The Decision Guidelines (65.01) requires consideration of:

- *Factors likely to cause or contribute to land degradation, salinity or reduce water quality.*
- *Whether the proposed development is designed to maintain or improve the quality of stormwater within and exiting the site.*
- *The extent and character of native vegetation and the likelihood of its destruction.*
- *Whether native vegetation is to be or can be protected, planted or allowed to regenerate.*
- *The degree of flood, erosion or fire hazard associated with the location of the land and the use, development or management of the land so as to minimise any such hazard.*

The above provisions have been considered in the formulation of the proposed Development Plan and are reflected in the associated preliminary infrastructure responses.

3 Utilities

Millar Merrigan has made enquiries of the following service authorities to determine the current location and capacity of existing infrastructure assets and the potential for these to cater for the development of the site for residential purposes as proposed:

Sewerage:	Gippsland Water
Water:	Gippsland Water
Electricity:	SP AusNet
Gas:	APA Group/Envestra
Telecommunications:	Telstra/NBN

All services will be designed in accordance with the requirements of the relevant supply authorities. It is envisaged that services can be provided to each lot in a timely, efficient and cost effective manner.

3.1 Sewer

The relevant service authority for sewer in the area is Gippsland Water. There has been extensive discussion between Gippsland Water, Kyle Miller and Millar Merrigan with regards to providing sewer outfall for the development. A preliminary sewer plan has been prepared to demonstrate the sewer strategy and is attached in Appendix C.

It is noted that there is currently a 450mm diameter Trunk Sewer that runs through the site between Waterloo Road and Mitchells Road which is sufficient to cater for the subject site. The southern portion of the site may be connected via gravity feed directly to the trunk sewer. A reticulation extension will be required to cater for land to the west of the Trunk Sewer.

A new gravity feeding reticulation line will be required along the south of the MCD to drain the northern portion of the site. This will feed to a pump station identified as either Pit 1 or more likely as Pit 7 on the attached plans. Sewerage will then be pumped via a rising main to the existing Trunk Sewer. Paul Young of Gippsland Water advised that based on an approximate density of 12 lots per hectare the total number of lots being serviced by the reticulation extension along the MCD would require a 225m diameter gravity main as an inlet to the proposed sewer pump station.

The trunk sewer which traverses the site is proposed to be contained within reserve areas to ensure the surveillance and maintenance requirements of Gippsland Water are met.

The main point of contact at Gippsland Water has been Paul Young (ph. 5177 4774).

3.2 Water Supply

The relevant service authority for water in the area is Gippsland Water. A new 300mm diameter water main is required to be constructed along Waterloo Rd to service this site and would be a shared asset. An interconnection main through the precinct of 150-225mm diameter is required to link between Waterloo Rd and Mitchells Rd. All remaining water assets will be standard reticulation size to supply water at Gippsland Water's standard requirements.

This office has been liaising with Paul Young of Gippsland Water (ph. 5177 4774).

3.3 Electricity

The relevant electricity supplier for the site is SPAusNet. There are no anticipated issues with regard to network capacity. SPAusNet has existing 22kV overhead power lines on the south side the development in Waterloo Road. There are 22kV overhead power lines at the start of Mervyn Street and there are also low voltage assets in Desmond Street. Advice from SP AusNet's Network Planner is that the 22kV line in Waterloo Road can support the proposed development based on 4kVA per lot.

These comments on cost contributions were provided by SPAusNet:

- *SP AusNet policy for alteration to existing assets requires the customer/developer to contribute the full cost of the augmentation works.*

Therefore, any alteration works to provide supply to the development (e.g. upgrade supply in Mervyn Street) would be at the customer/developer expense.

- *Services to any existing houses will be required to be relocated to the underground network within the estate at the customer/developer expense.*
- *SP AusNet's standard URD policy would apply for medium density housing i.e. lots sizes \leq 2000 square metres are entitled to a LV rebate of \$980.00 per lot in the subdivision.*
- *HV reimbursements apply for High Voltage works completed internal to the housing estate.*
- *If the average lot size is greater than 2000 square metres or non-residential, then the development would be classed as low density/commercial and the customer/developer would pay the total cost of works for HV and LV cables less SP AusNet's contribution based on expected revenue from assets installed.*

The current SP AusNet construction lead time for overhead works is 150 days after negotiations are complete (easements obtained, contracts signed and supply contribution paid) and 100 days underground works. Any works must comply with Victorian Electricity Supply Industry Code of Practice and Energy Safe Victoria Regulations - such as line clearances for persons, plant and structures.

This office has been liaising with John Barnett of SP AusNet (ph:5174 3218).

3.4 Gas

APA Gas/Envestra are the relevant gas suppliers for the subject site. Asset inquiries show 100mm high pressure natural gas mains located along Waterloo Road to the south of the subject property. Initial feasibility enquiries have found that these mains are capable of supplying gas to the development. These works may be subject to contributions from the developer. Detailed costs can be provided only at the time of formal application.

This office has been liaising with Julieanne Free of APA-group contractor to Envestra (ph:5173 9033).

3.5 Telecommunications

Telstra asset plans indicate the presence of telecommunications cables in the vicinity of the subject site. There are no anticipated issues with the provision of Telstra to each of the lots. As the development is to have more than 100 lots it may be considered viable for Fibre to the Premises (FTTP), instead of copper service, as part of the National Broadband Network. The necessary infrastructure will be provided to the requirements of Telstra and NBN Co.

The technology and services required would be determined closer to the time of development commencement, depending on Telstra/NBN Co. deployment of FTTP policy and any negotiations based on a commercial agreement.

4 Urban Runoff

Neil M Craigie Pty Ltd has previously been engaged to prepare conceptual arrangements to address stormwater management and floodplain management issues for the site. The 2010 Craigie report has been used to guide the Development Plan. Water Technology Pty Ltd has more recently (February 2013) been engaged by NBA Group to review and update the Surface Water Management Strategy undertaken by Neil Craigie.

The responsible authority for Main Drainage is the West Gippsland Catchment Management Authority (WGCMA). Local drainage is under the jurisdiction of Latrobe City Council. Design approval from the Council will be required prior to commencement of any drainage works and a Works on Waterways (WoW) Application will need to be submitted to and approved by the WGCMA.

Water Technologies commented that:

Work by Neil M Craigie Pty Ltd (NMC) was of a high standard covering all typical aspects of surface water management at the subject site at the level commissioned to report on (concept).

An overall Concept Plan was provided to Water Technology to facilitate comparison to the previous concept analysed by Neil Cragie. Figure 3 below demonstrated the differences in areas covered by each study.

Figure 3 - Difference in study zones

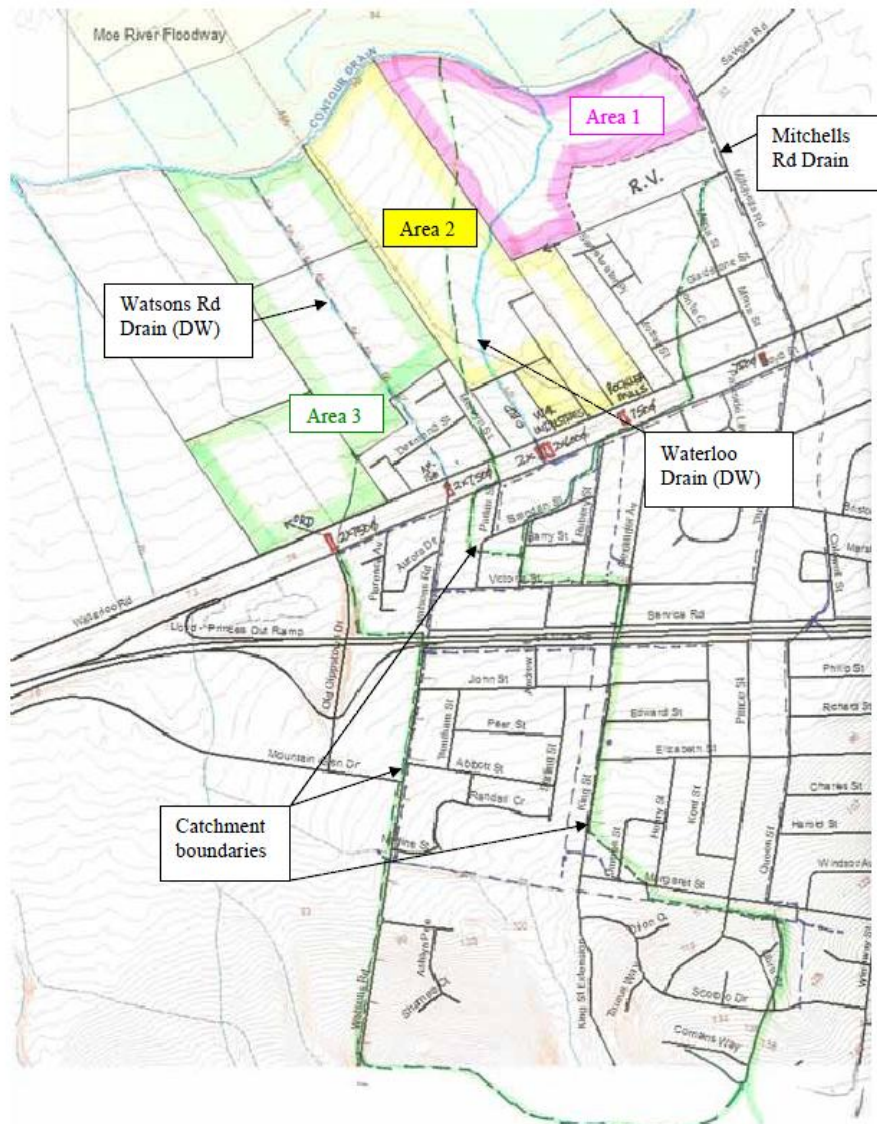


4.1 Catchments and Constraints

The site is bounded to the north by the Moe Contour Drain (MCD) which diverts minor flood flows from the southern hill slopes away from productive agricultural area adjacent the Moe River flood plain. The drain is a designated waterway which also receives urban stormwater from upstream catchments. The stormwater runoff from the subject land will be directed to the MCD. Figure 4 shows the subject properties (areas 2-3, area 1 is the Mitchell Grove estate), designated waterways and urban drainage catchment boundaries (extracted from Latrobe City Council Stormwater Management Plan (2002) and 1m basemap contours).

It is understood that studies have found populations of Dwarf Galaxias in the vicinity of the site and the Moe Contour Drain. The permit for the subdivision of the adjacent Mitchell Grove estate includes a requirement (permit number 2010/354, condition 23) for the preparation of a construction management plan to minimise environmental impacts and outlines actions to be taken should Dwarf Galaxias or any other threatened fauna species be encountered during development.

Figure 4 - Drainage Catchments (Neil Cragie)



In investigations of the overland flow path considerations, the pipe drainage networks were found to reflect constraints associated with major transport infrastructure such as the freeway and railway, more so than the natural catchment boundaries. Site inspections found that:

...the piped drainage system is likely to be overtaxed in events of at most 5-10 years Average Recurrence Interval. Larger events will activate available overland flowpaths and surface flows will be transported quickly down the steep slopes via roads and reserves, generally following the natural topography rather than pipe alignments.

Areas 2 and 3 (and 1 although not a component of the subject site) are reasonably well protected against uncontrolled surface flow from the upstream catchments as the freeway will redirect flows appropriately. The railway line is also a physical barrier to overland flow which would protect the area from flows from land between the freeway and railway. Numerous culverts would act to trap, disperse and direct flows. The culverts are as follows:

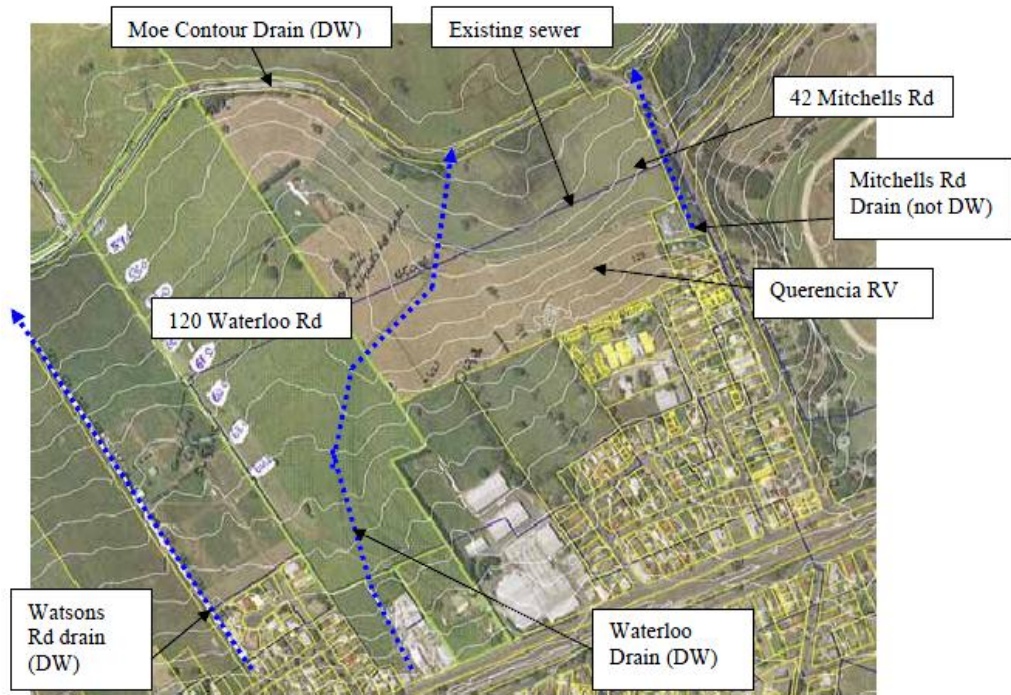
- *750 mm nominal diameter culvert near Alexander Avenue alignment which would operate for overland flows emanating in the Alexandra Avenue/Parkside Drive area (potentially affecting Rocklea Mills downstream-see photos 5 and 6);*
- *twin 2*600 mm nominal diameter culverts between Parkin and Rubery Streets which would operate for overland flows emanating in the Victoria Street/Alexandra Avenue/Parkside Drive area (potentially affecting the W4 Industries site);*
- *2*750 mm nominal diameter culverts around the Watsons Road alignment (potentially affecting housing downstream in Desmond Street/Mervyn Street);*
- *2*750 mm nominal diameter culverts around the Old Gippstown Drive alignment (potentially affecting development of the western end of Area 3).*

An un-named yet designated waterway affects the subject site and has been referred to as the Waterloo Drain throughout this report. Pipe diversions from most of the catchment direct drainage to the Mitchells Road drain. It serves an area of approximately 9ha.

The western waterway in an unnamed designated waterway also which has been referred to as the Watsons Road Drain. It is piped through the existing residential area and then passes through the subject site as an open drain. It serves an area of approximately 102ha.

Although not a designated waterway the subject site also receives flows from a small open earth drain which captures outfall from the twin culverts under the railway on the Old Gippstown Drive Alignment.

Figure 5 - Main Waterways affecting the subject site



The flow paths identified by Neil Cragie as Waterloo Drain, Watsons Road Drain and Old Gippstown Drive Outfall were reviewed by Water Technology and found to be accurate.

4.2 WGCMA

The WGCMA provides government with the collective strategic views of the region, which takes account of state and federal policy and the Triple Bottom Line (TBL) approach. Responsibilities under the *Catchment and Land Protection Act 1994* include development of the Regional Catchment Strategy and associated action plans. The WGCMA implements and maintains a strategic planning framework, including completion, oversight of implementation, monitoring and reporting against strategic targets. WGCMA have advised that best practice management objectives for the treatment of stormwater are required for the development's connection to all designated waterways. All of the proposed treatments will be maintained by Latrobe City Council as WGCMA have no on-ground responsibility.

Discussions have been held with Mr Adam Dunn of the WGCMA where it was confirmed that the Moe Contour Drain must be retained and protected as part of any development proposal. The aquatic and terrestrial values of the MCD and its vegetation will need to be protected, via appropriate setbacks, weed control and effective stormwater quality treatment.

Piping the Waterloo Drain would be considered given the small catchment area. In this case a wetland system would need to be created in or adjacent to the MCD floodplain area with a design that enhances and protects the values of the MCD as well.

It is expected that the piping of the Watsons Road Drain will not be acceptable to the WGCMA due to its large upstream catchment. The protection offered by the freeway and railway may allow for piping to be carried out if complying with floodway safety standards and (from the Craigie report):

...environmental "pluses" still outweigh the detriments of piping.

WGCMA have also made it clear that given the sensitivity of downstream rural lands the peak discharge must not be increased as a result of the development, and as such sufficient retardation is required.

4.3 Water Quantity

The peak flows in the Waterloo Drain between Waterloo Road and the MCD were determined using the Rational Method in accordance with Australian Rainfall and Runoff. In the absence of design plans for existing infrastructure and a full catchment model the following assumptions have been made:

- *that the Freeway will sever and divert all upstream catchment overland flows;*
- *that the pipe diversions to Mitchells Road Drain shown on Figure 3 have 5 year ARI capacity and will remain effective at all times;*
- *that the three sets of culverts under the Railway between Parkin Street and Alexander Avenue will operate to maximum capacity (3.5 m³/s in total);*
- *that the Railway will not be overtopped in the 100 year ARI flood event.*

Table 1 and 2 of the Surface Water Management Strategy report shows the results of this analysis. These show that the development of the subject site and surrounding areas will significantly increase peak discharges to the MCD if no detention is undertaken.

The maximum inlet capacity of the MCD at the western end is 0.9m³/s with higher flows overtopping the low points of the confining bank. This was determined by Water Technology Pty Ltd in November 2005 when they completed a flood level analysis of the drain. Craigie has provided the following commentary on the MCD flood levels:

- *The design 100 year ARI flood levels were set grading from 55.60 m at Mitchells Road (adopted to match the estimated lowpoint level of the road at the Drain Crossing) to 56.20 m at the western end of Area 1.*
- *Additional survey levels taken for this present study have revealed that the overtopping level of Mitchells Road is 55.70 m with lowpoint bank levels being 55.61m or higher throughout the Area 1 frontage.*
- *With inlet flows from the Area 1 catchments exceeding 8 m³/s for existing development conditions, it is considered that the adopted 100 year ARI flood level should be no lower than 56.00 m across most of the Area 1 frontage grading to 56.50m at the west end of Area 1.*
- *No survey of the drain invert and banks is available across the Area 2 or 3 frontages. However basemap levels indicate that nominal 100 year ARI flood levels could grade from 56.50 m at the Area 1/2 boundary to 57.00m at the west end of Area 3.*

The 100 year flood levels across the Moe Contour Drain were compared with other studies in the area by Water Technology and found to be accurate

Retardation is proposed to be provided for the subject site for all rainfall events up to and including the 1 in 100 year ARI event. A 50% impervious coefficient has been

used as the subject site is to be predominantly residential type development. In addition to the existing floodway storages on the site the retardation requirements (see Table 2) have been determined for each of the areas shown in Figure 4.

Table 2 - Retardation Requirements

Property	Total Area (ha)	Retardation Requirement (m ³)
Area 1	17.7	5,575
Area 2	26.8	8,440
Area 3	32.8	10,330
Total	77.3	24,345

The relationship between storage and developable hectares is consistent with work by Water Technology in the Moe/Morwell area:

Approximate basin footprints were estimated using spatial software. Rough engineering calculations completed by Water Technology suggest that combined wetland / flood attenuation features could fit into the area allocated in the current OCP. Basin volumes (flood storage) were assumed to be 1 meter deep with 1 in 6 batter slopes.

While flood storage basin footprints are not shown on the current OCP it is noted that the total reserve area available along the northern boundary of Zones 2 & 3 could likely accommodate the flood storage requirements of the development. This will need to be demonstrated at a later date with more detailed hydrological modelling and when more detailed survey is available.

Table 3 shows the updated retardation requirements devised by Water Technology.

Table 3 - Updated Retardation Requirements

Location	Total Area (Ha)	Storage Rate (m ³ /Ha)	Storage Volume Required (m ³)
Zone 1	17.9	315	5638.5 (+1%)
Zone 2	24.6		7749 (-8%)
Zone 3	22.0		6930 (-49%)
Total	64.5		20317.5 (-20%)

4.4 Water Quality

MUSIC modelling was used by Neil Craigie to establish the required areas of wetland to achieve best practice stormwater quality management standards. The results shown in Table 4 were derived for an extended detention depth of 0.5m.

Table 4 - Wetland Requirements

Property	Total Area (ha)	Wetland Requirement (m ²)
Area 1	17.7	3,540
Area 2	26.8	5,360
Area 3	32.8	6,560
Total	77.3	15,460

MUSIC Modelling by Water Technology have also found that wetland surface areas nominated by Neil Cragie are appropriate:

Using both local (Water Technology) and scaled (NMC) rainfall were found to produce common results in MUSIC. As such all Wetland surface areas were found to be acceptable in treating stormwater using the updated software and rainfall.

Table 5 shows the updated wetland requirements devised by Water Technology.

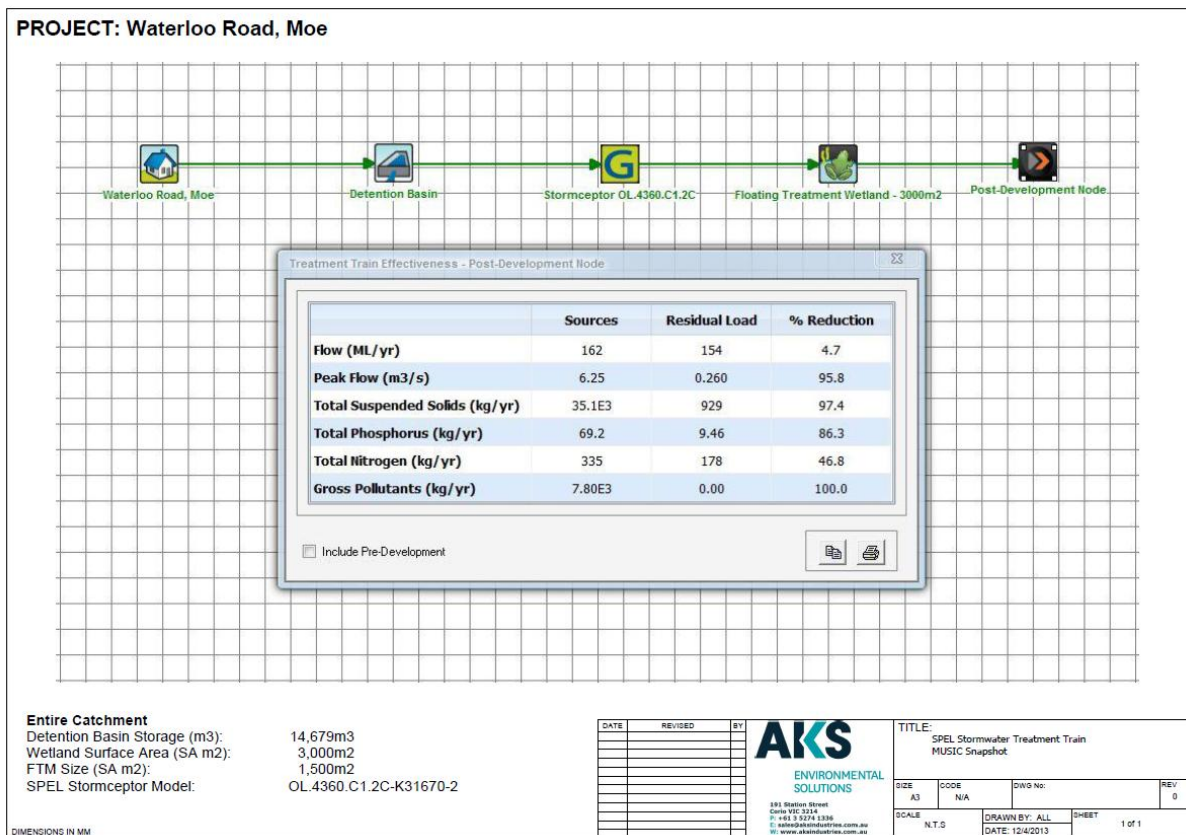
Table 5 - Updated Wetland Requirements

Location	Total Area (Ha)	Wetland Area Rate (m ² /Ha)	Wetland Area Required (m ²)
Zone 1	17.9	200	3580 (+1%)
Zone 2	24.6		4920 (-8%)
Zone 3	22.0		4400 (-49%)
Total	64.5		15460 (-24%)

AKS industries have been engaged to assess the viability of stormwater treatment alternatives. A floating wetland has been proposed and MUSIC modelling has been undertaken to determine the area requirements. Zones 2 and 3 have been analysed and the model is shown below in Figure 6. This shows that a total area of 1,500m² floating wetland is required within a body of water approximately 3,000m² (50% coverage).

Floating wetlands have a number of advantages over conventional shallow or fringing wetlands, the biological elements utilised are self-cleaning, which results in significant cost savings over its lifetime, and the floating wetland can deal with large fluctuations in water level (as it is located on the water surface) leading to high nutrient removal efficiency (as the microbes are consistently operating in optimal conditions). AKS industries advise that scientific trials over numerous installation sites show that floating wetlands have consistently achieved all the necessary bacteria counts and oxygen levels in treated water. By utilising floating wetlands an adequate area has been set aside in the Development Plan to accommodate the required water quality treatment.

Figure 6 - Floating Wetland MUSIC model



4.5 Integrated Surface Water Management Strategy

Figure 7 shows the strategy prepared by Craigie for Areas 2 and 3, which includes water quality and quantity components as well as provision for designated waterways. The Craigie report included the following commentary:

Although no survey of similar quality to Area 1 is available in Areas 2 or 3, Figure 6 (below) has been prepared to indicate a probable layout of integrated wetland retarding vegetation protection areas it is considered that:

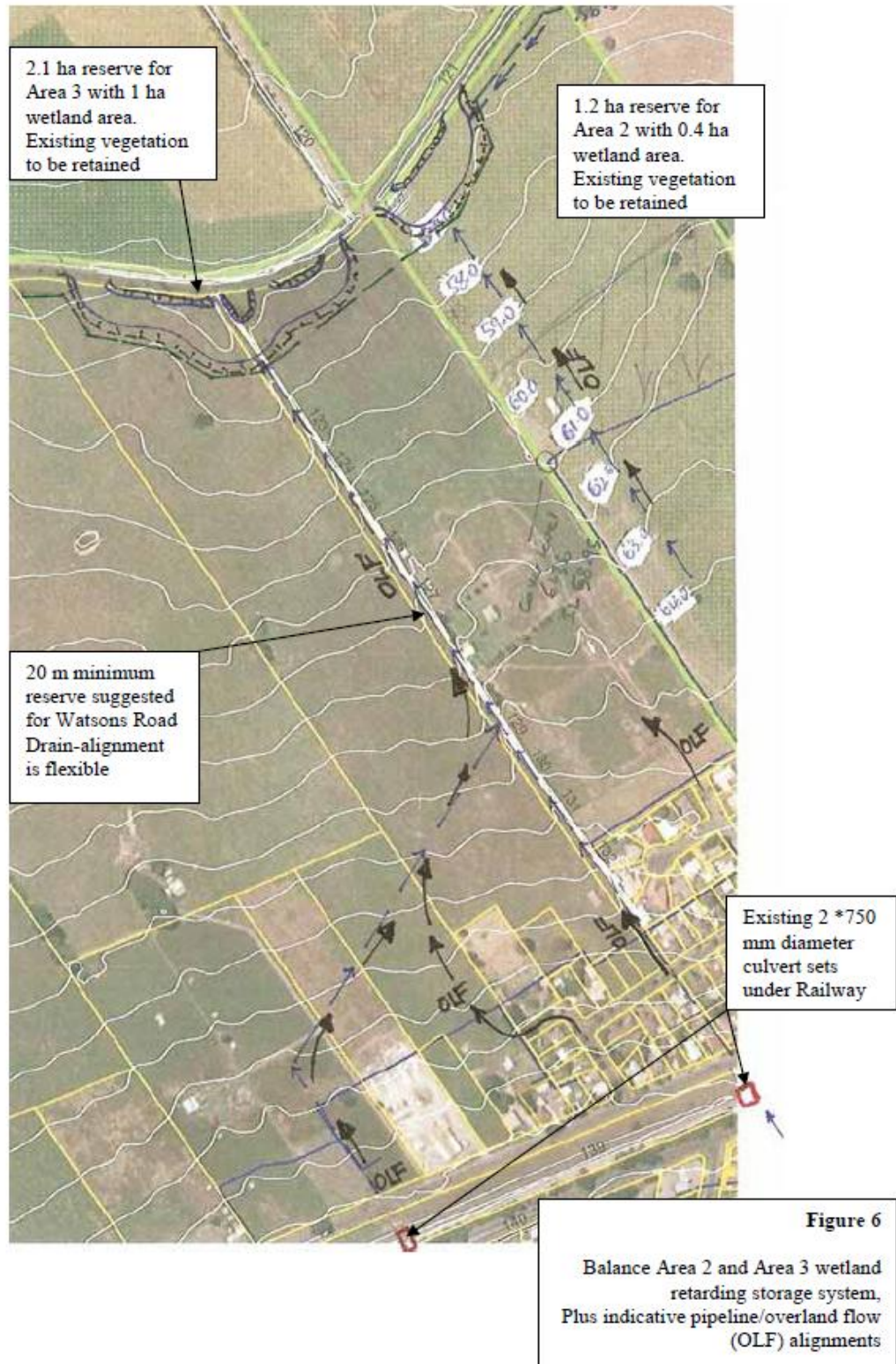
- *a 1.2 ha reserve will be required for the balance Area 2 frontage with wetland water surface area of about 0.4 ha;*
- *a 2.1 ha reserve will be required in Area 3, incorporating a 1 ha wetland.*

It is possible that these areas may be reduced once survey information is available.

Area 3 can be developed separately as a stand-alone exercise from Areas 1 and 2. It is suggested that for present purposes a floodway reserve of not less than 20m width should be assumed to be required in Area 3 along the current Watsons Road Drain alignment north of Desmond Street. If the integrated wetland retarding storage shown on Figure 6 (below) is provided, I am confident that the WGCMA would see the benefits for the Moe Contour Drain corridor and treatment of stormwater from the major upstream catchments as being sufficient

benefits to offset the piping of the drain in Area 3. However my expectation is that overland flow magnitudes will exceed the safe capacity of a roadway acting as a floodway.

Figure 7 - Surface Water Management Strategy (Neil Cragie Report)



A MUSIC model was set-up to check the overall quality performance of the proposed integrated wetland retarding storages detailed above and reflected in the Development Plan. The system was shown to greatly exceed best practice management requirements with:

- 161% Total Suspended Solids (TSS),
- 139% Total Phosphorus (TP),
- 95% Total Nitrogen (TN) and
- 265% Gross Pollutants (GP)

This clearly shows that:

...the proposed management system offers substantial benefits for receiving environmental values compared with existing conditions.

Water Technology commented on the proposed development of the site as follows:

The reduction in study area in Zones 2 and 3 has reduced both the water quality and flood storage requirements by approximately 20% (overall). If the additional area identified by NMC is to be developed as part of this overall development then the original wetland area and storage volume figures nominated by NMC should be applied.

The SWMS concept report developed by Neil M Craigie Pty Ltd was found to be a quality strategy covering off all the main requirements of a document pitched at the concept level. Overall Concept Plans developed by Millar Merrigan and the NBA group have adequately addressed overland flow paths water quality requirements (footprints) as identified by Neil M Craigie Pty Ltd. Flood storage requirements were not shown on the Overall Concept Plan but are assumed to be able to be accommodated in the reserve area available at the site.

The central basin location (Zone 2) was found to be at a location which would be difficult to serve the requirements of the drainage area. Moving the basin to the southern side of the Moe Contour Drain would make the feature more functional. If the overall development area is to be restricted to that shown in the Overall Concept Plans reviewed in this study, then storage and water quality requirements can be reduced by approximately 20%. This is primarily due to the significant reduction in the size of Zone 3.

All drainage elements previously shown to be on the northern side of the MCD have been relocated to the south side of the MCD as shown in the latest version of the Development Plan.

Input from AKS industries has also allowed for the reduction in required stormwater treatment area through the use of floating wetlands. This office has been dealing with Kurt Jensen of AKS industries (03 5274 1336).

5 Traffic Management

GTA Traffic Engineers were engaged by NBA Group to provide a Traffic Impact Assessment for the proposed development. Their report has factored in the draft Development Plan prepared by NBA Group and Millar Merrigan and includes consideration of:

- I. *Existing street network and traffic conditions surrounding the site*
- II. *Accessibility of the site by public transport and other non-vehicular modes of travel*
- III. *Potential road hierarchy within the site*
- IV. *Proposed access arrangements for the site*
- V. *Impact of the development on the surrounding road network.*

The Moe – Newborough Precinct Structure Plan is a key policy document applicable to the subject land, providing guidance on the suitability of the proposed development in the context of transport planning. This plan identifies the following relevant items in regard to the proposed site:

- *Provision of a future connector road that runs from Mitchells Road to Waterloo Road*
- *Possible future bus routes along Waterloo Road, Saviges Road and future connector road*
- *Possible future neighbourhood centre adjacent the site's entry point to Waterloo Road*

The traffic impact assessment has therefore concluded that:

- I. *The development of the site in accordance with the proposed structure plan could generate up to 9,540 vehicle movements per day and 901 vehicle movements per hour in the peak periods.*
- II. *There is sufficient capacity within the existing road network to accommodate the additional traffic movements.*
- III. *The indicative street network has been designed in accordance with Clause 56 of the Latrobe Planning Scheme and the Latrobe City Design Guidelines.*

5.1 Adjacent Subdivision

A permit has been granted (No. 2010/354) for a staged multi-lot subdivision located at 42 Mitchells Road (located adjacent subject site's eastern boundary). As a condition of permit, the provision of a channelised right turn intersection treatment was required at the intersection of Waterloo Road / Mitchells Road. It is envisaged that a similar condition of permit will be required for the subject site.

Using Figure 4.9(b) of the Austroads guide, a channelised right turn short treatment is required for the proposed intersection of Waterloo Road / site access. This treatment can be provided within the existing Waterloo Road carriageway by modifying existing line marking.

5.2 Road Network

The development has been assessed based on the potential development of three residential subdivisions which could be expected to accommodate approximately 1,060 lots. The GTA Report provides the following commentary on the surrounding road network:

Waterloo Road

Waterloo Road functions as a local road and is located within a Road Zone (Category 2) in the Latrobe Planning Scheme. It is a two-way road aligned in an east-west direction and configured with a two-lane, 11 metre wide carriageway set within a 15 metre wide road reserve (approx.). A parking lane is marked along

the northern side of Waterloo Road. Access to the south of the railway line and the Princes Freeway is provided via Waterloo Road and Lloyd Street (to the east of the subject site). Waterloo Road carries approximately 2,200 vehicles per day adjacent to the site...

Mervyn Street

Mervyn Street functions as a local road and is aligned in a north-south direction. It is configured with a two-lane, 7 metre wide carriageway set within a 14 metre wide road reserve (approx.). Kerbside parking is permitted along both sides of Mervyn Street.

Moffat Street

Moffat Street functions as a local road. It is a two-way road aligned in a north-south direction and configured with a two-lane, 9 metre wide carriageway set within a 15 metre wide road reserve (approx.). Kerbside parking is permitted along both sides of Moffat Street.

Mitchells Road

Mitchells Road functions as a collector road. It is a two-way road aligned in a north-south direction and configured with a two-lane, 7 metre wide carriageway set within an 18 metre wide road reserve (approx.). Kerbside parking is permitted along the western side of Mitchells Road.

There are a number of intersections in the vicinity of the site with the main access point being from Waterloo Road. As such this intersection has been assessed using SIDRA INTERSECTION which is a computer based modelling package. The Degree of Saturation (DOS) is a measure of intersection performance. A DOS of approximately 0.9 is typically considered the practical limit. The results can be seen in the Table 6 below and show that the proposed unsignalised access point can be expected to operate satisfactorily with minimal queues and delays.

The post development AM and PM Peak Hour Traffic volumes are displayed in

Figure 8 - Post Development Traffic Volumes

Figure 4.4: Post-Development AM Peak Hour Traffic Volumes

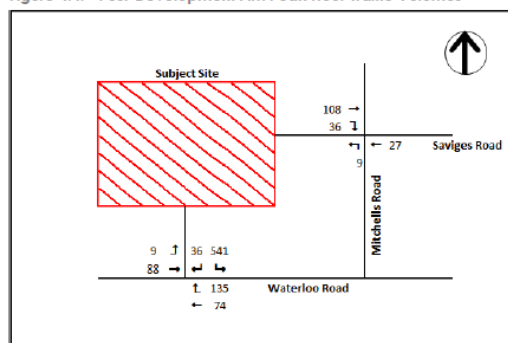


Figure 4.5: Post-Development PM Peak Hour Traffic Volumes

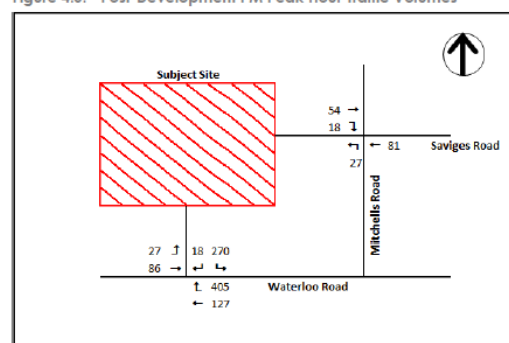


Table 6 - Intersection Analysis (from GTA Report)

Peak Hour	Approach	DOS	Average Delay (sec)	95 th Percentile Queue (m)
AM	Waterloo Road (East)	0.12	6 sec	3m
	Site Access (North)	# 0.48	8 sec	21m
	Waterloo Road (West)	0.05	1 sec	0m
PM	Waterloo Road (East)	# 0.36	7 sec	12m
	Site Access (North)	0.25	9 sec	8m
	Waterloo Road (West)	0.06	2 sec	0m

DOS – Degree of Saturation, # - Intersection DOS

Adjacent to the sites eastern boundary a multi-lot subdivision has been granted a permit. The provision of a channelised right turn intersection treatment was required at the intersection of Waterloo Road / Mitchells Road by the permit. It is envisaged that a similar condition of permit will be required for the subject site. Additionally, using Figure 4.9(b) of the Austroads guide, a channelised right turn short treatment is required for the proposed main access intersection from Waterloo Road. The line marking on Waterloo Road can be modified to accommodate this treatment within the existing carriageway.

5.3 Internal Road Layout

The potential road hierarchy is shown in Figure 9 below and includes a combination of Major Access Streets and Collector Roads in accordance with the Clause 56.06-8 of the Latrobe Planning Scheme and the Latrobe City Design Guidelines. The collector roads have been prepared with 4.2m lane widths, 2.3m indented parking lanes and 5.5m verges to match the approved plans for the adjacent subdivision at 42 Mitchells Road. These are in accordance with the Department of Transport Guidelines. Road reservations intersecting with the adjacent subdivision on the eastern boundary have also been coordinated.

Figure 9 - Road Hierarchy (from GTA Report)



GTA concluded that:

...the proposed road network will be generally capable of accommodating the traffic volumes expected to be generated by the subject site.

There will be a small section of the collector road adjacent near Waterloo Road where traffic volumes may exceed the desirable maximum volume for a collector road outlined in the Latrobe City Design Guidelines. However, it is expected that this volume of traffic will still be able to be accommodated by the road. The road network shown on the structure plan allows for a waste collection vehicle to circulate throughout the subdivision in a forward direction.

5.4 Shared Path Network

The GTA report has recommended that:

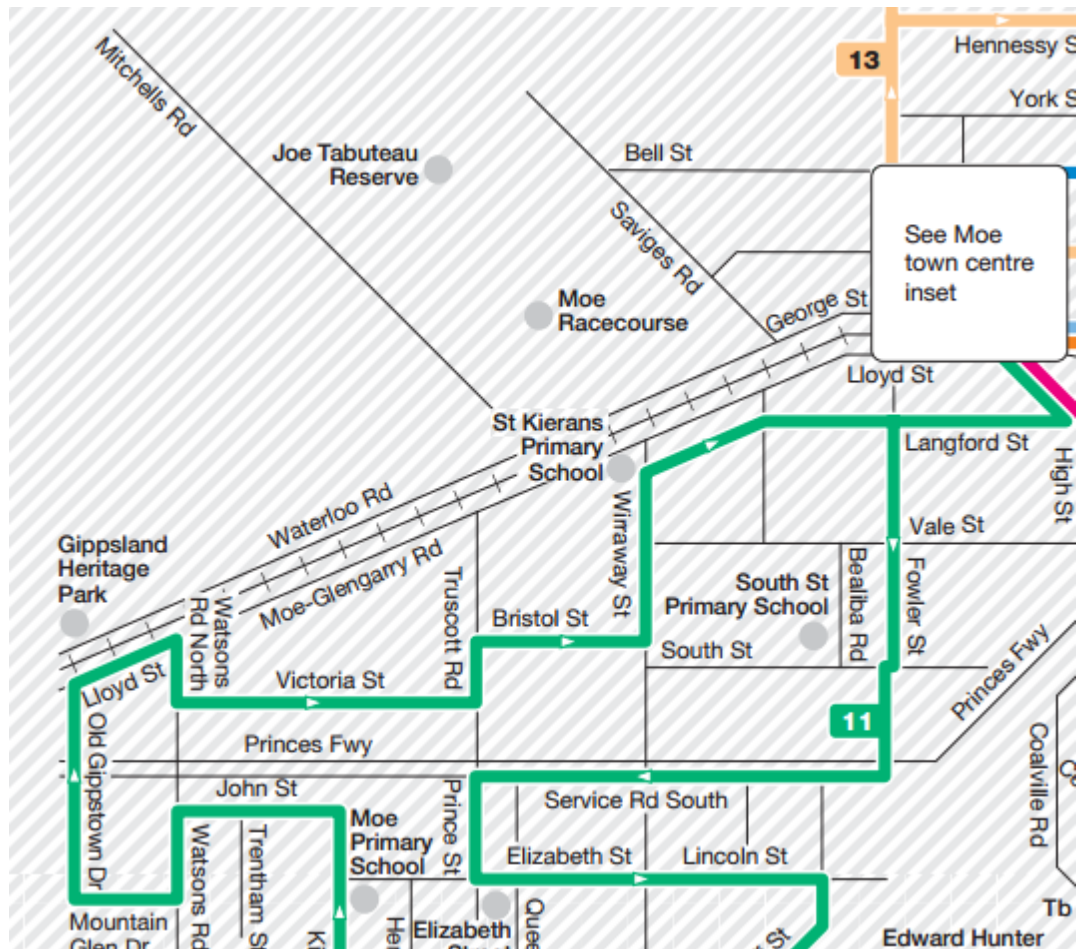
The roads within the site will have footpaths on both sides to encourage walking. The proposed road network is relatively linear which allows direct pedestrian and bicycle connections. Pedestrian and bicycle connections are to be provided from the subject site to the adjacent development and existing network via road connections and the dedicated north-south open space area.

A comprehensive and connected bicycle and pedestrian network is to be provided to encourage walking through provision of safe and direct movement paths within the neighbourhood. This, in turn, provides the opportunity for a reduction in air pollution and greenhouse gas emissions through decreases in car usage. The proposed network will provide an interconnected and a continuous network of safe, efficient and convenient footpaths and is to be based around the layout of neighbourhood streets and location of areas of public open space.

5.5 Public Transport

The existing public transport network within the target area of Moe is shown in Figure 10 below. Services can be connected to Elizabeth St Shops, Baringa Special School, Moe Primary School and Moe Station. The Moe Rail Station is located approximately 1.5km from the site and is serviced by the Traralgon to Melbourne V-Line. The proposed collector streets will be designed to allow for potential future bus services. As such each lot will be within 400m of a logical bus route.

Figure 10 - Moe Bus Network Map



GTA commented that:

Although the proposed sub division of approximately 1,060 dwellings is considered large enough to suggest that public transport services through the site could be viable, the implementation of these services is a matter for the public transport operators and the Department of Transport. However the indicative road network on the structure plan has been designed to allow buses to route along the collector roads through the site...

6 Cultural Heritage Management

There is a registered artefact between the train line and Waterloo Road in front of the subject land and the mapping shows the area of sensitivity dissecting the south east corner of the site adjacent to the existing dwelling (see Figure 11 below).

Figure 11 - Artifact location



A Due Diligence assessment of cultural heritage issues has been prepared for the subject site by Matthew Barker of Benchmark Heritage Management on behalf of Sure Constructions. The following recommendations were made by Matthew Barker as a result of the desktop assessment:

This desktop investigation has concluded that the southern end of the study area is of moderate archaeological sensitivity; and likely to contain Aboriginal cultural heritage. The presence of an archaeological site approximately 10m south of the boundary (within the rail reserve) is evidence of Aboriginal occupation on the former lowland forest. The remainder of the study area is considered of low archaeological sensitivity and comprises low lying swampland.

The report also concluded that based on statutory requirements:

Any future development of the property (being property within the vicinity of the registered artefact) which is defined as a high impact activity in the Aboriginal Heritage Regulations 2007 will require the preparation of a CHMP to the level of a complex assessment. Subdivision of land into more than three allotments for the purposes of constructing housing is one example of a high impact activity.

It is noted that a CHMP has now been prepared for 110-120 Waterloo Road (Benchmark Heritage Management, April 2013) which found no Aboriginal cultural heritage. It is therefore reasonable to assume that cultural heritage will pose no problems to the proposed infrastructure (and the Development Plan).

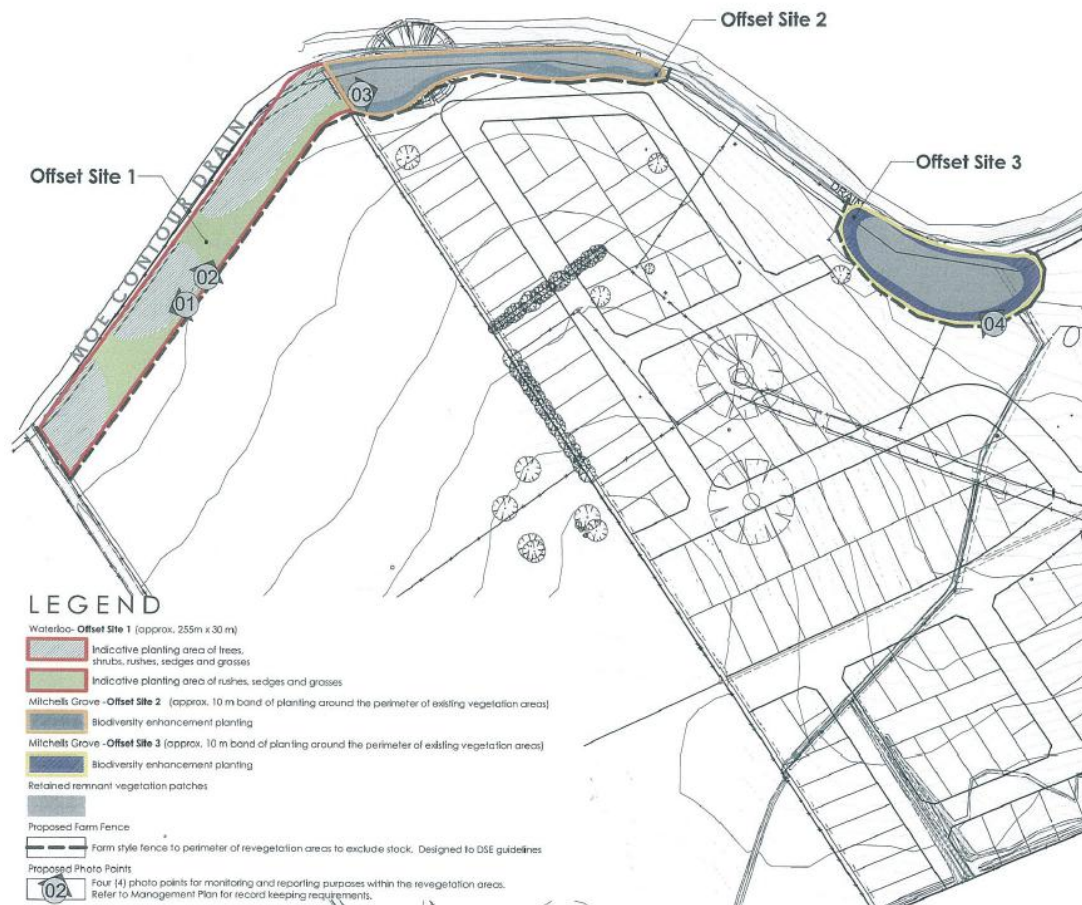
7 Vegetation

A vegetation offset management plan has been prepared by Mitchell Grove to outline the management obligations to compensate for permitted vegetation removal for this abutting estate. A net gain assessment and review was prepared by Paul Kelly and Associates to inform the vegetation offset management plan. To meet the offset requirements the net gain assessment and review proposed to:

Revegetate a 225m x 30m wide reserve (site 1 – 0.77ha) adjoining the Moe Contour Drain

Figure 12 shows the proposed offset arrangements with offset site 1 being within the subject site. Provision for this area has been made in the Development Plan and wetlands, retarding areas and drainage lines (also future sewers) have been chosen to best suit the offset area. The infrastructure for the development will therefore have no negative impact on the vegetation requirements.

Figure 12 - Offset Plan (from Net Gain Assessment and Review)



Paul Kelly and Associates Ecological Services has provided an assessment of the Ecological Features and Constraints for the site. It was found that:

The site does contain a remnant patch of Swampy Riparian Complex which has High Conservation Significance. Despite this conservation significance the remnant patch is of low quality and has low species richness and structural diversity. In its current state, it does provide limited sediment management function between the grazed land and the Contour Drain and a refuge for small bush birds. It is considered that the removal and replacement of this remnant patch with a more efficient storm water/drainage facility, preferably utilising indigenous plants, would improve water quality discharge to the Contour Drain.

The revegetation of the reserved area adjoining the drain with indigenous species will complement the conservation values of the storm water/drainage facility. If this vegetation (HZ1) was approved for removal it would require offsets equivalent to approximately 0.24 Habitat Hectares of High Conservation

Significance Swampy Riparian Complex vegetation or its approved like-for-like equivalent in the Gippsland Plain Bioregion. It is suggested that the offsets could be met, by agreement with Council, by revegetation works associated with the storm water/drainage facility and the drain reserve.

8 Development Sequencing and Staging

The alteration to designated waterways and the installation of stormwater quality and quantity treatment devices will need to be provided at an early stage to serve the development and fulfill stormwater best practice requirements of the WGCMA and Latrobe City Council. An appropriate management plan will be critical to the successful implementation of stormwater treatment techniques and the longevity of the system and must be put in place early on in the development staging.

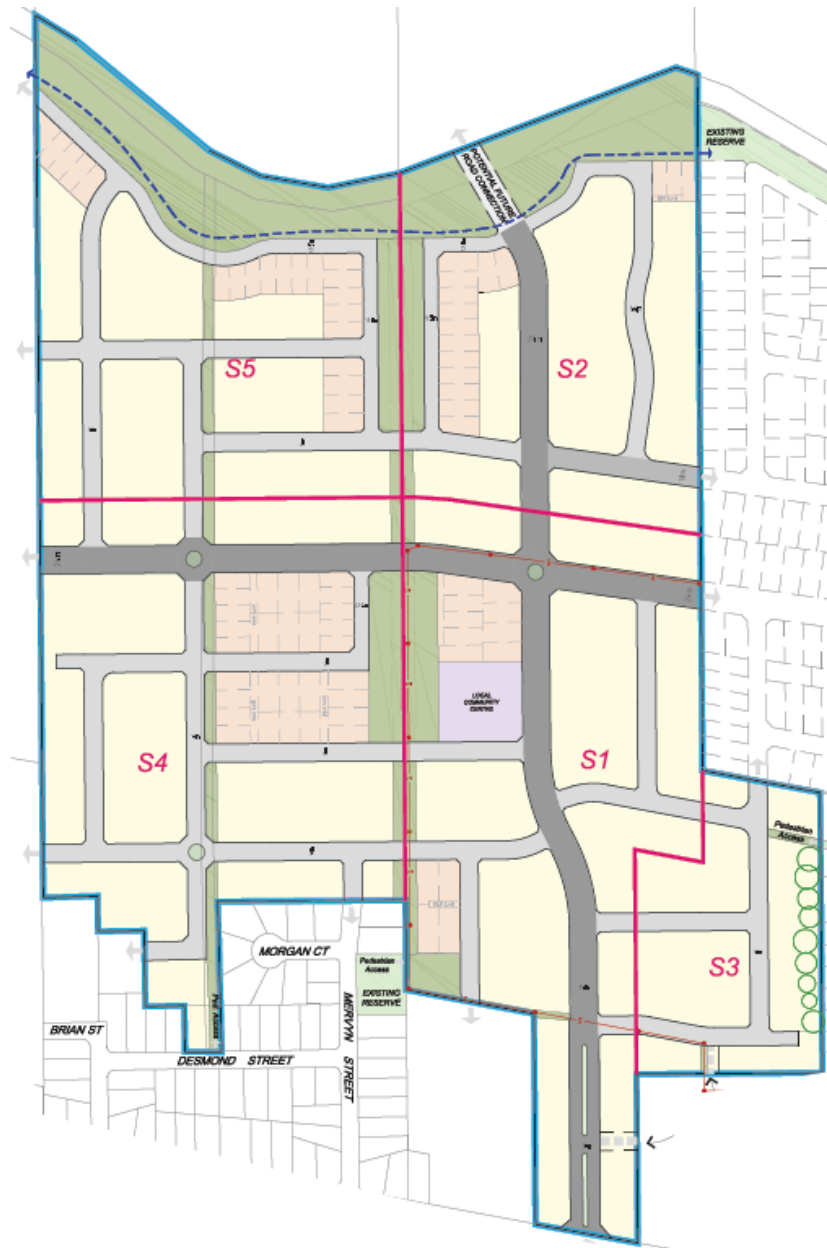
It would be logical that the development plan area be staged in accordance with the staging plan prepared (16315DP3 staging plan), an excerpt of which is shown below in Figure 13. The staging shown demonstrates the logical progression of development and is likely to be broken down further to sub-stages of 20-25 lots at the design phase.

Within S1 it is envisaged that the development commence at Waterloo Road and will trigger the need for a 300mm water main extension along Waterloo Road and intersection works. The development would then progress to the north with the aim of connecting the development to the Mitchell Grove development as soon as possible along the central boulevard. The entirety of the S1 area can be controlled by the existing sewer traversing the property and would have sewer and water mains interconnected with Mitchell Grove.

The development of S2 would trigger the need for outfall sewer to a pump station within the Mitchell Grove estate. It is also predicted that development would progress in a northerly direction with further interconnection of roads, sewer and water mains to Mitchell Grove.

The development of S3, S4 and S5 would be dependent on individual developers in these areas and is considered indicative only.

Figure 13 - Staging Plan



9 Conclusion & Recommendations

The site represents a viable development opportunity that can be serviced by the extension of existing infrastructure. Topographically speaking, the site falls steadily towards the Moe Contour Drain to the north. The proposed Development Plan features proposed standard residential and medium density housing as well as significant reserve areas, which accommodate drainage paths, the trunk sewer and pedestrian links.

Wetland areas and detention storage have been located within the environs of the Moe Contour Drain. An area of 1ha has been set aside for treatment which is more than adequate to achieve best practices management objectives. The existing designated waterways are proposed to be realigned within reserves and be revegetated, improving the existing conditions.

Requirements for vegetation offsets have been catered for within the Moe Contour Drain environ within a proposed reserve. The revegetation of the reserve area adjoining the drain with indigenous species is considered valuable in conserving the values of the storm water/drainage facility.

The due diligence assessment of Cultural Heritage issues returned a positive response with the majority of the site being found to have low archaeological sensitivity. A completed CHMP for 110-120 Waterloo Road found no Aboriginal cultural heritage.

The road layout and pedestrian network have been designed to integrate with existing and proposed developments. External traffic flow, internal traffic movements and the impact of the development are suitable. The internal road network, road network in the vicinity of the subject site, and main access from Waterloo Road are expected to operate satisfactorily following the proposed development.

The trunk sewer which traverses the site is proposed to be contained within reserve areas to ensure the surveillance and maintenance requirements of Gippsland Water are met. A large portion of the site extending from the southern boundary can be controlled by gravity feed to the existing trunk sewer. The land between the trunk sewer and the Moe Contour Drain will be controlled by gravity to a new pump station to be installed within the adjacent development.

Water can be provided to the site following the construction of a 300mm main along Waterloo Road which may require a developer contribution depending on timing. A main providing interconnection between Waterloo Road and Mitchells Road will also need to be provided.

It is envisaged that electricity, gas and telecommunications can be provided to the site in a timely and cost effective manner.

It is logical given the servicing strategy that staging would progress in a northerly direction from Waterloo Road and provide a road linkage to Mitchell Grove estate. Detailed design work will be required as part of the development phase, particularly in relation to sewer and drainage, to ensure appropriate outcomes.

Millar | Merrigan

Appendix A – Development Plan

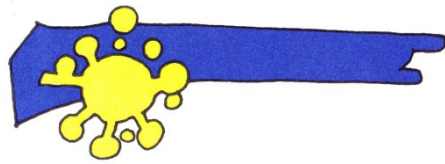
(Millar Merrigan, April 2013)

Appendix C – Preliminary Sewer Plan

Provided by Kyle Miller

18 Appendix 12 – Ecological Features & Constraints

Paul Kelly & Associates – 23rd January 2013



**Paul Kelly & Associates
Ecological Services**

Ecological Features and Constraints

Waterloo Road, Moe

23 January 2013

Prepared by PKA
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Issue Date	Revision No	Author	Checked	Approved
23 January 2013	01	PCK	PCK	

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Appendix 1 – Site Map

Appendix 2 – EPBC Report

1 Introduction

1.1 Project Background

PKA was commissioned by NBA Group on behalf of Waterloo Grazing to prepare an ecological assessment of a site at Waterloo Road, Moe. It is understood that the site is to be developed for residential purposes.

1.2 Site location

The study site is located west of the Moe township and adjoins Waterloo Road in the south and the Moe Contour Drain in the north (Appendix 1). It is immediately west of the Mitchells Run residential development. It is located within the Latrobe Local Government area and is zoned Residential 1 (R1Z). It is covered by Development Planning Overlay (DPO5). The site is within the Gippsland Plains Bioregion.

The site is approximately 50ha in area. The site is generally flat but has a slight northerly aspect grading to the Moe Contour Drain below.

Appendix 1 is a map of the site and includes elements of the flora and fauna of the site.

1.3 Objectives

The purpose of this assessment is to:

- Interrogate and analyse a range of biological databases and relevant references to provide a list of flora and fauna or their habitat that is or are potentially present on the site;
- Carry out an assessment of the quality of the vegetation of the site and record and map the location of any significant species including large trees;
- Map the limits of any remnant patches of native vegetation on the site;
- Classify the vegetation on the site in accordance with DSE (2006) ie Modified Treeless Vegetation, Scattered Tree or remnant patches of native vegetation;
- Carry out a Habitat Hectare assessment of the site if required;
- Prepare a report and map on the findings of this assessment; and
- Provide recommendations for any further targeted assessments for any significant flora and fauna likely to be present as revealed during database analysis and site assessment.

2 Methods

2.1 Literature and Database Review

Several databases and reports were interrogated and reviewed, these include;

- Flora and Fauna records within 5 km radius of the study area held in the Atlas of Victorian Wildlife, Flora Information System, Biodiversity Interactive Maps and Sites of Biological Significance - a state-wide database maintained by the Department of Sustainability and Environment (DSE) (DSE 2012):

- Federal Department of Sustainability Environment Water Population and Communities Protected Matters Database (DSEWPaC) (DSEWPaC 2012), using a 5 km radius search area (Appendix 2):
- Ecological Vegetation Class modelling of the study area (both extant and pre-1750) (DSE 2012)

2.1.1 Field Survey

The study area was assessed on 13 and 15 December 2012.

The field survey provides a comprehensive assessment of the flora and fauna habitat as observed at the time. The survey is considered to be a sample of the flora and fauna values of the entire site at the time of the assessment.

3 Results

3.1 Historic Land Use

Existing infrastructure, aerial images and extant vegetation indicate that the site has had a long history of agricultural use including Grazing, Dairying, Cropping and fodder conservation.

The site is bounded on the north by the Moe Contour Drain. This drain was constructed in the late 1800's, most likely in association with the removal of the majority of the native vegetation.

A plantation of indigenous plants has been installed on part of the easterly property adjacent to the Contour Drain. This plantation is a vegetation offset area for the adjoining Mitchell Run development

3.2 Flora

3.2.1 Database assessment

The modelled 1750 Ecological Vegetation Class (EVC) of the site consisted of EVC 16 – Lowland Forest in the southern half of the site with the northern half to the Moe Contour Drain being modelled as EVC 126 – Swampy Riparian Complex (DSE 2013a). None of these EVC are recorded as present in the 2005 EVC mapping (DSE 2013b).

3.2.2 Site Assessment

The majority of the indigenous vegetation on the site has been replaced by exotic plants mostly perennial pasture and weeds. The pasture is dominated by Cocksfoot *Dactylis glomerata*, Yorkshire Fog *Holcus lanatus*, Brown-top Bent *Agrostis capillaris*, Soft Brome *Bromus hordeaceus*, Perennial Rye-grass *Lolium perenne*, Paspalum *Paspalum dilatatum*, Water Couch *Paspalum distichum* and White Clover *Trifolium repens*.

The exception is an area of indigenous vegetation (HZ1) adjacent to the Contour Drain (Appendix 1). This area of vegetation is considered to be by definition (DSE 2007a) a remnant patch of native vegetation as the cover of native vegetation exceeds 25%. To enable an assessment of vegetation quality (DSE 2004), the benchmark for EVC 83 – Swampy Riparian Woodland was used as this benchmark was considered a best fit. EVC 83 – Swampy Riparian Woodland has an Endangered Conservation Status in the Gippsland Plain Bioregion. It is considered that this remnant patch has regrown after previously being removed. The remnant patch now has a closed canopy of Prickly Tea-tree *Leptospermum continentale* and is without emergent eucalypts or wattles. It has low structural diversity and low flora species richness and has a Habitat Hectare (Hha) score of 0.19 (Table 3-1). The understorey and fringing Prickly Tea-tree regeneration has been heavily grazed.

Indigenous species recorded in HZ1 include Common Spike-Sedge *Eleocharis acuta*; Creeping Raspwort *Gonocarpus micranthus*; Swamp Goodenia *Goodenia humilis*; Club Sedge *Isolepis subtilissima*; Finger Rush *Juncus subsecundus*; Prickly Tea-tree and Spotted Knotweed *Persicaria praetermissa*.

Table 3-1 - Quantification and significance of losses in patches of Native Vegetation

Habitat Zone			HZ1
Bioregion			Gipps Plain
EVC #: Name			83 - SRW
EVC Bioregional Conservation Status			Enc
		Max Score	Score
Site Condition	Large Old Trees	10	0
	Canopy Cover	5	0
	Understorey	25	5
	Lack of Weeds	15	7
	Recruitment	10	1
	Organic Matter	5	0
	Logs	5	0
	Total Site Score	75	13
	EVC standardiser (e.g. 75/55) [1]		1.0
	Adjusted Site Score		13
Landscape value	Patch Size	10	1
	Neighbourhood	10	2
	Distance to Core	5	3
Habitat Score		100	19
Habitat points = #/100		1	0.19
Habitat Zone area (ha)		(#. #)	0.9
Habitat Hectares		(#. #)	0.16
Conservation Significance	Conservation status x Habitat Score		High
	Threatened Species Rating		High
	Other Site Attribute Rating		Med
	Overall Conservation Significance (highest rating)		High
Net Outcome			1.5
Gain Target (Hha)			0.24

Despite the low quality of the remnant patch native vegetation; this remnant patch has a High Conservation significance on a scale of Very High, High, Medium and Low (DNRE 2002).

No threatened species of flora were recorded during the site assessments. Strzelecki Gum is an EPBC Listed eucalypt that has been recorded in the vicinity (Appendix 2). It is classified as Vulnerable on the DSE Advisory list of Rare or Threatened plants (DSE 2007b). None of these trees were recorded during the site assessment. Several were recorded in the Native Vegetation offset area in the adjoining Mitchells Run development (Appendix 1).

Grazing cattle has had a considerable impact on the quality of the vegetation on the site, particularly in areas close to the Contour Drain where the soil remains moist for longer periods. The majority of the site is 'pugged' leaving relatively large areas of bare ground with high organic matter.

3.2.3 Flora Significance

Table 3-2 lists those species of plants or their habitat recorded on the EPBC database and the Flora Information System (Viridans 2012a) within 5 km of the site

Table 3-2 Significant plant species recorded within 5km of the subject site

Species Name	Common Name	Likelihood of presence
Dianella amoena	Matted Flax-Lily	Unlikely - Modified habitat onsite, not recorded during site assessment
Eucalyptus strzeleckii	Strzeleckii Gum	Unlikely – None recorded on site. Modified habitat onsite.
Prasophyllum frenchii	Maroon Leek Orchid	Unlikely - Modified habitat onsite

None of these species were observed during the site assessment. Strzeleckii Gum was not recorded on the subject site but is recorded (protected) in the adjoining Native Vegetation Offset area on the Mitchells Run development site.

3.2.4 Habitat Zones & Scattered Trees

One remnant patch of native vegetation (HZ1) was recorded on the site (Table 3-1). No scattered native trees were recorded on the site.

3.2.5 EPBC Listed Communities

Gippsland Red Gum (*Eucalyptus tereticornis*) Grassy Woodland and associated Native Grassland is an EPBC listed community and according to the EPBC Map

search (Appendix 2) is likely to occur in the area. No Gippsland Red Gum or associated plants were recorded on the site. The listed community is not present on the site.

3.3 Fauna

3.3.1 Desktop Assessment

The EPBC search and the Atlas of Victorian Wildlife (Viridans 2012a) identified those species of animals or their habitat recorded that may occur or have been recorded within the vicinity of the site (Table 3-3).

Table 3-3 Significant fauna species potentially occurring within the vicinity

Species Name	Common Name	Likelihood of presence on site
<i>Anthochaera phrygia</i>	Regent Honeyeater	Unlikely, habitat absent on site
<i>Botaurus poiciloptilus</i>	Australasian Bittern	Unlikely, sub optimal habitat on site
<i>Galaxiella pusilla</i>	Eastern Dwarf Galaxias	Possibly in Contour drain; recent record from drain downstream. Assume presence in drain.
<i>Rostratula australis</i>	Australian Painted Snipe	Unlikely, sub optimal habitat on site
<i>Prototroctes maraena</i>	Australian Grayling	Unlikely in Moe Contour Drain; no recent records from vicinity.
<i>Potorous tridactylus</i>	Long-nosed Potoroo	Unlikely, sub optimal habitat on site; no records from the vicinity.
<i>Lathamus discolor</i>	Swift Parrot	Unlikely, habitat absent on site
<i>Litoria raniformis</i>	Growling Grass Frog	Unlikely; sub optimal habitat on site. No records from the vicinity. Potential for use of the drain as dispersal passage.
<i>Heleioporus australiacus</i>	Giant Burrowing Frog	Unlikely, habitat grossly modified, majority of moist areas on site extensively pugged.
<i>Isoodon obesulus</i>	Southern Brown Bandicoot	Unlikely, sub optimal habitat on site, no records from vicinity

Species Name	Common Name	Likelihood of presence on site
<i>Pseudomys fumeus</i>	Smoky Mouse	Unlikely, habitat absent on site
<i>Pteropus poliocephalus</i>	Grey-headed Flying-fox	Unlikely, No records for the vicinity may overfly.
<i>Rostratula australis</i>	Australian Painted Snipe	Unlikely incidental visitor. Habitat on site modified

3.3.2 Field Assessment:

No EPBC or FFG listed fauna species were observed during field investigations,

The riparian on the site and aquatic vegetation in the drain adjoining the site is considered to be the most likely site for the presence of any threatened species of fauna. The riparian habitat was highly modified by the dominance of exotic vegetation particularly the introduced Cumbungi *Typha latifolia* but more importantly the extensive pugging and trampling of the vegetation and waterway by cattle. The water of the drain was turbid most likely emanating from catchment runoff and cattle grazing close to the drain.

It is considered that the site does not contain critical habitat for any threatened species that potentially occur in the vicinity. However, there is potential for both Growling Grass Frog (GGF) and Dwarf Galaxias to utilise the adjoining drain. For the purposes of management it is assumed that both species may at times use the drain.

3.4 Sites of Biological Significance (SOBS)

Sites of Biological Significance have been determined by DSE staff using a set of five broad criteria. The classification of SOBS ranges from International, National, State, Regional and Local. The classification of SOBS has no legislative authority but is used by DSE to evaluate potential impact.

No SOBS are located in the vicinity of the subject site..

4 Legislative Requirements

4.1 Environment Protection and Biodiversity Conservation (EPBC) Act

The site is not located within the vicinity any listed Wetland of International significance but is located in the catchment of the listed Gippsland Lakes. The site is a considerable distance from Lake Wellington via the Latrobe River.

EPBC listed nationally significant Flora and Fauna species (or their habitat) and the threatened vegetation community are not considered to be present on the site

or in the vicinity. The development is not expected to have a significant detrimental impact on any matter of National Environmental Significance. (Appendix 2- EPBC Report).

4.2 **Planning and Environment Act 1987**

A planning permit from the Latrobe Council is required to remove, destroy or lop any native vegetation as part of any proposed works.

The permit application must demonstrate the Net Gain Trinity of:

1. To avoid adverse impacts, particularly through vegetation clearance.
2. If impacts cannot be avoided, to minimise impacts through appropriate consideration in the planning process and expert input to project design or management.
3. Identify appropriate offset plan.

For the purposes of the Latrobe Planning Scheme, the majority of the site is classified as degraded treeless vegetation and will not require a planning permit for its removal. The site contains one remnant patch of native vegetation (HZ1) and no scattered trees. The approved removal of this remnant patch will require an offset of 0.24 Hha of High Conservation Significance EVC 83 – Swampy Riparian Woodland or its approved like-for-like equivalent.

5 **Proposed Development**

It is understood that the site is to be developed for residential purposes. The proposed development will include a significant vegetated reserve adjoining the drain and a constructed wetland to assist in managing storm water.

6 **Discussion & Conclusion**

The ecological significance of the site is much reduced by historic and current land use. If current management was to continue, the biodiversity values and ecological significance of the site will continue to decrease.

The Development Planning Overlay (DPO5) on the site requires several specific ecological considerations including GGF, Dwarf Galaxias and Native Vegetation.

The site does contain a remnant patch of Swampy Riparian Complex which has High Conservation Significance. Despite this conservation significance the remnant patch is of low quality and has low species richness and structural diversity. In its current state, it does provide limited sediment management function between the grazed land and the Contour Drain and a refuge for small bush birds. It is considered that the removal and replacement of this remnant patch with a more efficient storm water/drainage facility, preferably utilising indigenous plants, would improve water quality discharge to the Contour Drain.

The revegetation of the reserved area adjoining the drain with indigenous species will complement the conservation values of the storm water/drainage facility. If this vegetation (HZ1) was approved for removal it would require offsets equivalent to approximately 0.24 Habitat Hectares of High Conservation Significance Swampy Riparian Complex vegetation or its approved like-for-like equivalent in the Gippsland Plain Bioregion. It is suggested that the offsets could be met, by agreement with Council, by revegetation works associated with the storm water/drainage facility and the drain reserve.

The presence of Dwarf Galaxias in the Contour Drain is assumed. As such there will be a planning requirement to ensure that Galaxias habitat is not compromised. A similar assumption was made for the presence of Galaxias habitat in the adjoining Mitchell Run development. The Planning Permit issued for that site (Latrobe 2010/354) includes two conditions that specifically relate to the conservation of Galaxias. In summary these conditions require the preparation and approval of a Construction Management Plan to identify and mitigate impacts on existing populations of Dwarf Galaxias and that the design and construction of wetlands on the site address the specified habitat requirements of the species. Wetland design which accounts for Dwarf Galaxias could include complementary habitat for a range of amphibians including GGF.

Revegetation works on the site should consider using Strzelecki Gums in the planting mix.

An EPBC referral of the development to the federal Minister for the Environment is not considered essential but may provide improved certainty to the construction program.

7 **References**

DNRE 2002 **Victoria's Native Vegetation Management: A Framework for Action**. Department of Natural Resources and Environment: East Melbourne.

DSE 2004 **Vegetation Quality Assessment Manual – Guidelines for applying the habitat hectares scoring method. Version 1.3**. Department of Sustainability & Environment, Melbourne

DSE 2005 **Advisory List of rare or threatened plants in Victoria – 2005**
Department of Sustainability & Environment, Melbourne

DSE 2007 **Advisory List of rare or threatened vertebrate fauna in Victoria – 2007** Department of Sustainability & Environment, Melbourne

DSE 2007a **Native Vegetation – Guide for assessment of referred planning permit applications** April 2007. Department of Sustainability & Environment, Melbourne

DSE 2013a pre 1750 EVC Website – Biodiversity Interactive Mapping
<http://mapshare2.dse.vic.gov.au/MapShare2EXT/imf.jsp?site=bim> Department of Sustainability & Environment, Melbourne

DSE 2013b 2005 EVC mapping website Biodiversity Interactive Mapping
<http://mapshare2.dse.vic.gov.au/MapShare2EXT/imf.jsp?site=bim> Department of Sustainability & Environment, Melbourne

DSEWPac 2012 – Protected Matters Search Tool.
<http://www.environment.gov.au/epbc/pmst/index.html> Website - Department of Sustainability, Environment, Water, Populations and Community, Canberra.

Viridans 2011a Flora /Viridians Biological Databases: Bentleigh East.

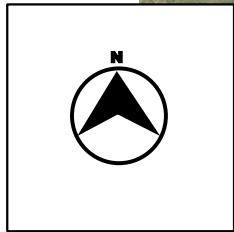
Viridans 2011b Fauna DSE/Viridians Biological Databases: Bentleigh East.

Appendix 1 Site Map

**Waterloo Road
Preliminary Ecological Assessment
December 2012**

Moe Contour Drain

Mitchells Run
Estate



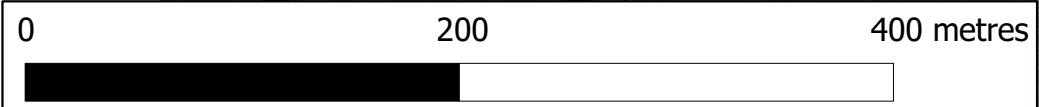
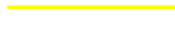
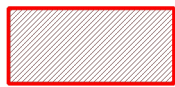
Legend

Site Boundary

HZ1 - EVC 83 - SRW

Mitchells Run Offset area

Strezlecki Gum (Approx)



Paul Kelly & Associates

Waterloo Road

Appendix 2 EPBC Report



EPBC Act Protected Matters Report

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected.

Information on the coverage of this report and qualifications on data supporting this report are contained in the caveat at the end of the report.

Information is available about [Environment Assessments](#) and the EPBC Act including significance guidelines, forms and application process details.

Report created: 16/12/12 07:33:51

[Summary](#)

[Details](#)

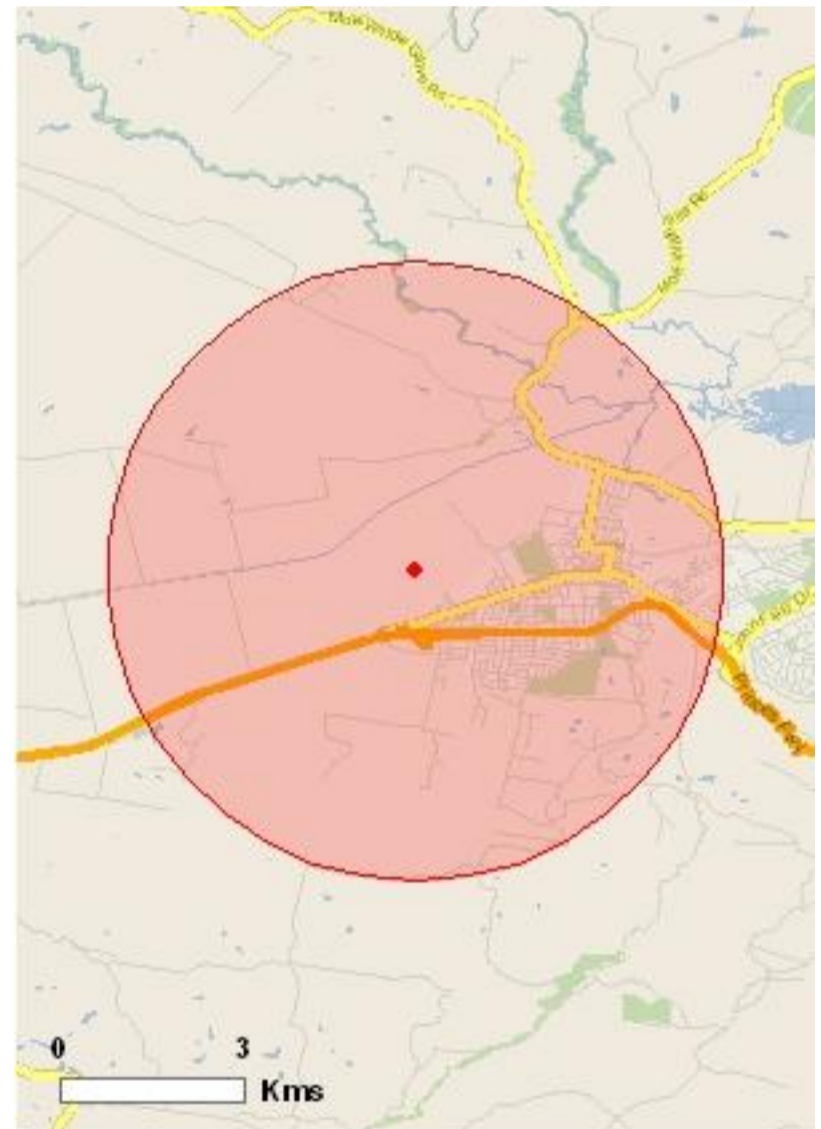
[Matters of NES](#)

[Other Matters Protected by the EPBC Act](#)

[Extra Information](#)

[Caveat](#)

[Acknowledgements](#)



This map may contain data which are
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[Coordinates](#)

[Buffer: 5.0Km](#)



Summary

Matters of National Environmental Significance

This part of the report summarises the matters of national environmental significance that may occur in, or may relate to, the area you nominated. Further information is available in the detail part of the report, which can be accessed by scrolling or following the links below. If you are proposing to undertake an activity that may have a significant impact on one or more matters of national environmental significance then you should consider the [Administrative Guidelines on Significance](#).

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance:	1
Great Barrier Reef Marine Park:	None
Commonwealth Marine Areas:	None
Listed Threatened Ecological Communities:	1
Listed Threatened Species:	19
Listed Migratory Species:	15

Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the environment anywhere.

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by Commonwealth agencies. As [heritage values](#) of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place and the heritage values of a place on the Register of the National Estate.

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the environment anywhere.

A [permit](#) may be required for activities in or on a Commonwealth area that may affect a member of a listed threatened species or ecological community, a member of a listed migratory species, whales and other cetaceans, or a member of a listed marine species.

Commonwealth Land:	None
Commonwealth Heritage Places:	None
Listed Marine Species:	12
Whales and Other Cetaceans:	None
Critical Habitats:	None
Commonwealth Reserves:	None

Extra Information

This part of the report provides information that may also be relevant to the area you have nominated.

Place on the RNE:	2
State and Territory Reserves:	1
Regional Forest Agreements:	2
Invasive Species:	13
Nationally Important Wetlands:	None
Key Ecological Features (Marine)	None

Details

Matters of National Environmental Significance

Wetlands of International Importance (RAMSAR) [\[Resource Information \]](#)

Name	Proximity
Gippsland lakes	Upstream from Ramsar

Listed Threatened Ecological Communities [\[Resource Information \]](#)

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Name	Status	Type of Presence
Gippsland Red Gum (Eucalyptus tereticornis subsp. mediana) Grassy Woodland and Associated Native Grassland	Critically Endangered	Community likely to occur within area

Listed Threatened Species [\[Resource Information \]](#)

Name	Status	Type of Presence
Birds		
Anthochaera phrygia Regent Honeyeater [82338]	Endangered	Species or species habitat may occur within area
Botaurus poiciloptilus Australasian Bittern [1001]	Endangered	Species or species habitat known to occur within area
Lathamus discolor Swift Parrot [744]	Endangered	Species or species habitat may occur within area
Leipoa ocellata Malleefowl [934]	Vulnerable	Species or species habitat may occur within area
Rostratula australis Australian Painted Snipe [77037]	Vulnerable	Species or species habitat may occur within area
Sternula nereis nereis Fairy Tern (Australian) [82950]	Vulnerable	Species or species habitat may occur within area
Fish		
Galaxiella pusilla Eastern Dwarf Galaxias, Dwarf Galaxias [56790]	Vulnerable	Species or species

Name	Status	Type of Presence
Prototroctes maraena Australian Grayling [26179]	Vulnerable	habitat likely to occur within area Species or species habitat likely to occur within area
Frogs		
Heleioporus australiacus Giant Burrowing Frog [1973]	Vulnerable	Species or species habitat likely to occur within area
Litoria raniformis Growling Grass Frog, Southern Bell Frog, Green and Golden Frog, Warty Swamp Frog [1828]	Vulnerable	Species or species habitat likely to occur within area
Mammals		
Dasyurus maculatus maculatus (SE mainland population) Spot-tailed Quoll, Spotted-tail Quoll, Tiger Quoll (southeastern mainland population) [75184]	Endangered	Species or species habitat may occur within area
Isoodon obesulus obesulus Southern Brown Bandicoot (Eastern) [68050]	Endangered	Species or species habitat may occur within area
Petrogale penicillata Brush-tailed Rock-wallaby [225]	Vulnerable	Species or species habitat may occur within area
Potorous tridactylus tridactylus Long-nosed Potoroo (SE mainland) [66645]	Vulnerable	Species or species habitat may occur within area
Pseudomys fumeus Konoom, Smoky Mouse [88]	Endangered	Species or species habitat may occur within area
Pteropus poliocephalus Grey-headed Flying-fox [186]	Vulnerable	Foraging, feeding or related behaviour may occur within area
Plants		
Dianella amoena Matted Flax-lily [64886]	Endangered	Species or species habitat likely to occur within area
Eucalyptus strzeleckii [55400]	Vulnerable	Species or species habitat likely to occur within area
Prasophyllum frenchii Maroon Leek-orchid, Slaty Leek-orchid, Stout Leek-orchid, French's Leek-orchid, Swamp Leek-orchid [9704]	Endangered	Species or species habitat likely to occur within area
Listed Migratory Species		[Resource Information]
* Species is listed under a different scientific name on the EPBC Act - Threatened Species list.		
Name	Threatened	Type of Presence
Migratory Marine Birds		
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area
Ardea alba Great Egret, White Egret [59541]		Species or species habitat may occur within area
Ardea ibis Cattle Egret [59542]		Species or species habitat may occur within area
Migratory Terrestrial Species		

Name	Threatened	Type of Presence
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		Species or species habitat likely to occur within area
Hirundapus caudacutus White-throated Needletail [682]		Species or species habitat known to occur within area
Leipoa ocellata Malleefowl [934]	Vulnerable	Species or species habitat may occur within area
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area
Monarcha melanopsis Black-faced Monarch [609]		Species or species habitat known to occur within area
Myiagra cyanoleuca Satin Flycatcher [612]		Species or species habitat known to occur within area
Rhipidura rufifrons Rufous Fantail [592]		Species or species habitat known to occur within area
Xanthomyza phrygia Regent Honeyeater [430]	Endangered*	Species or species habitat may occur within area

Migratory Wetlands Species

Ardea alba Great Egret, White Egret [59541]		Species or species habitat may occur within area
Ardea ibis Cattle Egret [59542]		Species or species habitat may occur within area
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]		Species or species habitat may occur within area
Rostratula benghalensis (sensu lato) Painted Snipe [889]	Vulnerable*	Species or species habitat may occur within area

Other Matters Protected by the EPBC Act

Listed Marine Species [\[Resource Information \]](#)

* Species is listed under a different scientific name on the EPBC Act - Threatened Species list.

Name	Threatened	Type of Presence
Birds		
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area
Ardea alba Great Egret, White Egret [59541]		Species or species habitat may occur within area
Ardea ibis Cattle Egret [59542]		Species or species habitat may occur within area

Name	Threatened	Type of Presence
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]		Species or species habitat may occur within area
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		Species or species habitat likely to occur within area
Hirundapus caudacutus White-throated Needletail [682]		Species or species habitat known to occur within area
Lathamus discolor Swift Parrot [744]	Endangered	Species or species habitat may occur within area
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area
Monarcha melanopsis Black-faced Monarch [609]		Species or species habitat known to occur within area
Myiagra cyanoleuca Satin Flycatcher [612]		Species or species habitat known to occur within area
Rhipidura rufifrons Rufous Fantail [592]		Species or species habitat known to occur within area
Rostratula benghalensis (sensu lato) Painted Snipe [889]	Vulnerable*	Species or species habitat may occur within area

Extra Information

Places on the RNE [\[Resource Information \]](#)

Note that not all Indigenous sites may be listed.

Name	State	Status
Historic		
Eastern Railway Line	VIC	Indicative Place
Loren	VIC	Registered

State and Territory Reserves [\[Resource Information \]](#)

Name	State
Westbury	VIC

Regional Forest Agreements [\[Resource Information \]](#)

Note that all areas with completed RFAs have been included.

Name	State
Central Highlands RFA	Victoria
Gippsland RFA	Victoria

Invasive Species [\[Resource Information \]](#)

Weeds reported here are the 20 species of national significance (WoNS), along with other introduced plants that are considered by the States and Territories to pose a particularly significant threat to biodiversity. The following feral animals are reported: Goat, Red Fox, Cat, Rabbit, Pig, Water Buffalo and Cane Toad. Maps from Landscape Health Project, National Land and Water Resources Audit, 2001.

Name	Status	Type of Presence
------	--------	------------------

Name	Status	Type of Presence
Mammals		
Felis catus Cat, House Cat, Domestic Cat [19]		Species or species habitat likely to occur within area
Oryctolagus cuniculus Rabbit, European Rabbit [128]		Species or species habitat likely to occur within area
Sus scrofa Pig [6]		Species or species habitat likely to occur within area
Vulpes vulpes Red Fox, Fox [18]		Species or species habitat likely to occur within area
Plants		
Asparagus asparagoides Bridal Creeper, Bridal Veil Creeper, Smilax, Florist's Smilax, Smilax Asparagus [22473]		Species or species habitat likely to occur within area
Carrichtera annua Ward's Weed [9511]		Species or species habitat may occur within area
Chrysanthemoides monilifera Bitou Bush, Boneseed [18983]		Species or species habitat may occur within area
Genista sp. X Genista monspessulana Broom [67538]		Species or species habitat may occur within area
Lycium ferocissimum African Boxthorn, Boxthorn [19235]		Species or species habitat may occur within area
Olea europaea Olive, Common Olive [9160]		Species or species habitat may occur within area
Rubus fruticosus aggregate Blackberry, European Blackberry [68406]		Species or species habitat likely to occur within area
Salix spp. except S.babylonica, S.x calodendron & S.x reichardtii Willows except Weeping Willow, Pussy Willow and Sterile Pussy Willow [68497]		Species or species habitat likely to occur within area
Ulex europaeus Gorse, Furze [7693]		Species or species habitat likely to occur within area

Coordinates

-38.17658 146.23686

Caveat

The information presented in this report has been provided by a range of data sources as acknowledged at the end of the report.

This report is designed to assist in identifying the locations of places which may be relevant in determining obligations under the Environment Protection and Biodiversity Conservation Act 1999. It holds mapped locations of World Heritage and Register of National Estate properties, Wetlands of International Importance, Commonwealth and State/Territory reserves, listed threatened, migratory and marine species and listed threatened ecological communities. Mapping of Commonwealth land is not complete at this stage. Maps have been collated from a range of sources at various resolutions.

Not all species listed under the EPBC Act have been mapped (see below) and therefore a report is a general guide only. Where available data supports mapping, the type of presence that can be determined from the data is indicated in general terms. People using this information in making a referral may need to consider the qualifications below and may need to seek and consider other information sources.

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

For species where the distributions are well known, maps are digitised from sources such as recovery plans and detailed habitat studies. Where appropriate, core breeding, foraging and roosting areas are indicated under 'type of presence'. For species whose distributions are less well known, point locations are collated from government wildlife authorities, museums, and non-government organisations; bioclimatic distribution models are generated and these validated by experts. In some cases, the distribution maps are based solely on expert knowledge.

Only selected species covered by the following provisions of the EPBC Act have been mapped:

- migratory and
- marine

The following species and ecological communities have not been mapped and do not appear in reports produced from this database:

- threatened species listed as extinct or considered as vagrants
- some species and ecological communities that have only recently been listed
- some terrestrial species that overfly the Commonwealth marine area
- migratory species that are very widespread, vagrant, or only occur in small numbers

The following groups have been mapped, but may not cover the complete distribution of the species:

- non-threatened seabirds which have only been mapped for recorded breeding sites
- seals which have only been mapped for breeding sites near the Australian continent

Such breeding sites may be important for the protection of the Commonwealth Marine environment.

Acknowledgements

This database has been compiled from a range of data sources. The department acknowledges the following custodians who have contributed valuable data and advice:

- [-Department of Environment, Climate Change and Water, New South Wales](#)
- [-Department of Sustainability and Environment, Victoria](#)
- [-Department of Primary Industries, Parks, Water and Environment, Tasmania](#)
- [-Department of Environment and Natural Resources, South Australia](#)
- [-Parks and Wildlife Service NT, NT Dept of Natural Resources, Environment and the Arts](#)
- [-Environmental and Resource Management, Queensland](#)
- [-Department of Environment and Conservation, Western Australia](#)
- [-Department of the Environment, Climate Change, Energy and Water](#)
- [-Birds Australia](#)
- [-Australian Bird and Bat Banding Scheme](#)
- [-Australian National Wildlife Collection](#)
- Natural history museums of Australia
- [-Museum Victoria](#)
- [-Australian Museum](#)
- [-SA Museum](#)
- [-Queensland Museum](#)
- [-Online Zoological Collections of Australian Museums](#)
- [-Queensland Herbarium](#)
- [-National Herbarium of NSW](#)
- [-Royal Botanic Gardens and National Herbarium of Victoria](#)
- [-Tasmanian Herbarium](#)
- [-State Herbarium of South Australia](#)
- [-Northern Territory Herbarium](#)
- [-Western Australian Herbarium](#)
- [-Australian National Herbarium, Atherton and Canberra](#)
- [-University of New England](#)
- [-Ocean Biogeographic Information System](#)
- [-Australian Government, Department of Defence](#)
- [-State Forests of NSW](#)
- [-Geoscience Australia](#)
- [-CSIRO](#)
- Other groups and individuals

The Department is extremely grateful to the many organisations and individuals who provided expert advice and information on numerous draft distributions.

Please feel free to provide feedback via the [Contact Us](#) page.

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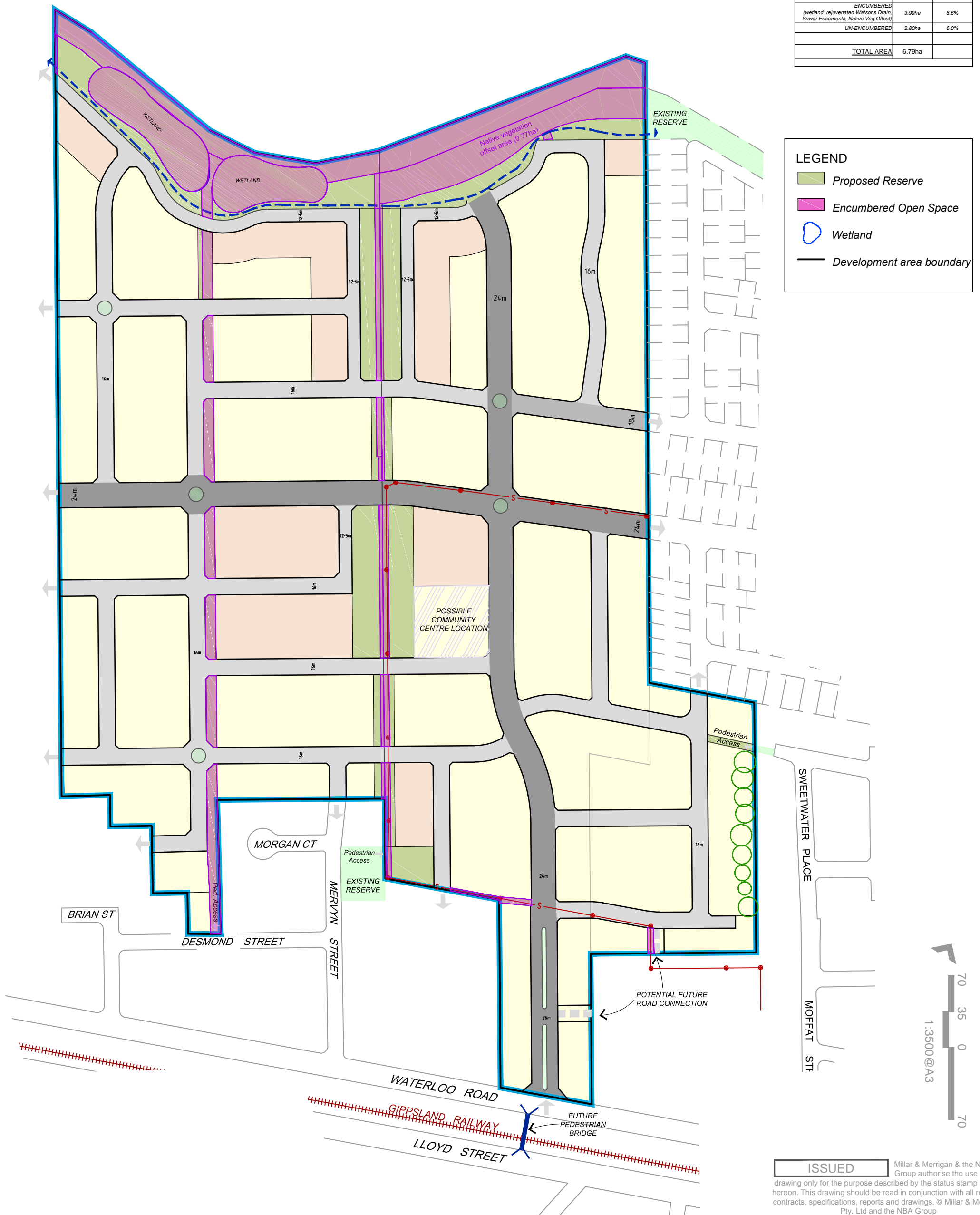
19 Appendix 13 – Open Space Plan

Reference 16315DP7

PUBLIC OPEN SPACE		
TOTAL SITE AREA	46.48ha	
TOTAL OPEN SPACE	6.79ha	14.6%
ENCUMBERED (wetland, rejuvenated Watsons Drain, Sewer Easements, Native Veg Offset)	3.99ha	8.6%
UN-ENCUMBERED	2.80ha	6.0%
TOTAL AREA	6.79ha	

LEGEND

- Proposed Reserve
- Encumbered Open Space
- Wetland
- Development area boundary



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OPEN SPACE PLAN

Moe Urban Growth Area
 Waterloo Road, Moe
 Latrobe City Council
 16315DP7
 Version 2



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20 Appendix 14 – Certificates of Title

Register Search Statement - Volume 11238 Folio 392

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REGISTER SEARCH STATEMENT (Title Search) Transfer of Land Act 1958

VOLUME 11238 FOLIO 392

Security no : 124048726881B
Produced 23/12/2013 09:29 am

LAND DESCRIPTION

Lot 3 on Title Plan 836437J.
PARENT TITLE Volume 09069 Folio 017
Created by instrument AH580647A 27/10/2010

REGISTERED PROPRIETOR

Estate Fee Simple
Sole Proprietor
WATERLOO GRAZING PTY LTD of 9 BURKE STREET WARRAGUL VIC 3820
AH236385C 20/05/2010

ENCUMBRANCES, CAVEATS AND NOTICES

MORTGAGE AJ674496E 18/05/2012
NATIONAL AUSTRALIA BANK LTD

Any encumbrances created by Section 98 Transfer of Land Act 1958 or Section
24 Subdivision Act 1988 and any other encumbrances shown or entered on the
plan set out under DIAGRAM LOCATION below.

AGREEMENT Section 173 Planning and Environment Act 1987
AK591374W 13/09/2013

DIAGRAM LOCATION

SEE TP836437J FOR FURTHER DETAILS AND BOUNDARIES

ACTIVITY IN THE LAST 125 DAYS

NUMBER	AGREEMENT	STATUS	DATE
AK591374W		Registered	13/09/2013

-----END OF REGISTER SEARCH STATEMENT-----

Additional information: (not part of the Register Search Statement)

Street Address: 110-120 WATERLOO ROAD MOE VIC 3825

DOCUMENT END

Delivered from the Landata ® System by SAI Global Property Division Pty Ltd
Delivered at 23/12/2013, for Order Number 18502872. Your reference: waterloo title.

Application by a Responsible Authority for the making of a Recording of an Agreement
Section 181 Planning and Environment Act 1987



Lodged by:

Name: McKenzie Allen
Phone: 03 5625 4688
Address: DX 38903 Drouin
Reference: JVA:RC:16116
Customer Code: 5102N

The Responsible Authority having made an agreement referred to in Section 181(1) of the *Planning and Environment Act 1987* requires a recording to be made in the Register.

Land: *(volume and folio)*

Volume 11238 Folio 392

Responsible Authority: *(full name and address including postcode)*

Latrobe City Council of 141 Commercial Road, Morwell 3840

Section and Act under which agreement made:

Section 173 of the Planning and Environment Act 1987

A copy of the agreement is attached to this Application.

Date: 10/9/13.

Signature for Responsible Authority:

Name of Officer:

L. S. AKAKSU

(full name)

PLANNING AND ENVIRONMENT ACT 1987

AK591374W

13/09/2013

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SECTION 173 AGREEMENT

Between

LATROBE CITY COUNCIL

and

WATERLOO GRAZING PTY LTD

in relation to

110-120 WATERLOO ROAD, MOE

McKenzie Allen Lawyers

28 Princes Way

DROUIN 3818

Phone: (03) 5625 4688

Fax: (03) 5625 4686

Ref: JVA:RC:16116

THIS AGREEMENT is made the *10th* day of *September* 2013

AK591374W

BETWEEN



1. **LATROBE CITY COUNCIL** of 141 Commercial Road, Morwell (hereinafter called "the Responsible Authority") and
2. **WATERLOO GRAZING PTY LTD** of Suite 10 22-26 Princes Way, Drouin (hereinafter called "the Owner"):

WHEREAS:

- A. The Owner is the owner and registered by the Registrar of Titles as the proprietor of an estate in fee simple in the land situate at 110-120 Waterloo Road, Moe, being the land more particularly described in Certificate of Title Volume 11238 Folio 392 (hereinafter called "the Land").
- B. The Responsible Authority is responsible for the administration and enforcement of the Latrobe Planning Scheme (hereinafter called "the Planning Scheme") pursuant to the provisions of the Planning and Environment Act 1987 (hereinafter called "the Act")
- C. On 9 November 2011, the Responsible Authority issued Planning Permit PLA2010/354 in respect of the neighbouring property, 42 Mitchells Road, Moe, being the land more particularly described in Certificate of Title Volume 11291 Folio 732 authorising the staged multi-lot subdivision and removal of native vegetation (hereinafter called "the Planning Permit").
- D. The Planning Permit and associated Vegetation Offset Management Plan, attached and marked 'A' (hereinafter called "the Management Plan") requires the creation and management of a vegetation offset site on the Land.
- E. The Responsible Authority and the Owner have agreed that, without restricting or limiting their respective powers to enter into this Agreement,

and insofar as it can be so treated, this Agreement is an agreement entered into pursuant to Section 173 of the Act.

IT IS AGREED AS FOLLOWS:

AK591374W



Definitions

1. In this Agreement unless inconsistent with the context or subject matter:
 - 1.1. "Act" means the Planning and Environment Act 1987;
 - 1.2. "Agreement" means this Agreement and any agreement executed by the parties varying or expressed to be supplemental to this Agreement;
 - 1.3. "Land" means the land situate at 110-120 Waterloo Road, Moe more particularly described in Certificate of Title Volume 11238 Folio 392;
 - 1.4. "Owner" means the owner for the time being of the Land and the person or persons entitled from time to time to be registered by the Registrar of Titles as the proprietor of an estate in fee simple in the Land or any part thereof, and includes a Mortgagee in possession;
 - 1.5. "Planning Permit" means Latrobe City Council Planning Permit PLA2010/354 referred to in Recital C including any plans endorsed under the approved Planning Permit and any subsequent amendments to this permit;
 - 1.6. "Planning Scheme" means the Latrobe Planning Scheme and any successor instrument or other planning scheme which applies to the Land;
 - 1.7. "Responsible Authority" means the Latrobe City Council or its successor as the authority responsible for administering and enforcing the Planning Scheme and includes its agents, officers, employees, servants, workers and contractors; and,

- 1.8. "Tribunal" means the Victorian Civil and Administrative Tribunal or any successor tribunal, court, institution or body.

Interpretation

2. In this Agreement unless inconsistent with the context or subject matter:
 - 2.1 The singular includes the plural and the plural includes the singular;
 - 2.2 A reference to a gender includes a reference to each other gender;
 - 2.3 A reference to a person includes a reference to a firm, corporation, association or other entity and their successors in law;
 - 2.4 If a party consists of more than one person this Agreement binds them jointly and each of them severally;
 - 2.5 A reference to a statute includes any statute amending, consolidating or replacing that statute and includes any subordinate instruments made under that statute;
 - 2.6 The Recitals to this Agreement are and will be deemed to form part of this Agreement including any terms defined within the Recitals.

Specific Obligations of the Owner

3. The Owner covenants with the Responsible Authority that:
 - 3.1 It shall revegetate the land identified as offset site 1 in Appendix 2 to the Management Plan in accordance with the requirements set out in the Management Plan;
 - 3.2 It shall manage and continue to manage offset site 1 until 2022 in accordance with the requirements of the Management Plan.

AK591374W



Further Obligations of the Owner

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4. The Owner further covenants that:
 - 4.1. The Owner will not sell, transfer, dispose of, assign, mortgage or otherwise part with possession of the Land or any part of it without first disclosing to its successors the existence and nature of this Agreement.
 - 4.2. The Owner will do all that is necessary to enable the Responsible Authority to make an application to the Registrar of Titles to make a recording of this Agreement on the Certificate of Title to the Land in accordance with Section 181 of the Act, including the signing of any further agreement, acknowledgment or other document.
 - 4.3. The Owner will do all that is necessary to enable the Responsible Authority to make an application to the Registrar of Titles to remove Agreement AJ757797D from the Certificate of Title to the Land in accordance with Section 183 of the Act, including the signing of any further agreement, acknowledgment or other document.
 - 4.4. The Owner shall immediately on demand pay the Responsible Authority's reasonable legal costs and fees incurred and incidental to the preparation and execution of this Agreement and the registration hereof pursuant to Sections 181 of the Act and removal under Section 183 of the Act, together with all costs of enforcing this Agreement if deemed necessary by the Responsible Authority. The Owner hereby agrees that any such costs are and remain a charge on the Land until paid, and consents to the Responsible Authority registering a caveat on the Certificate of Title to the Land in respect of any such costs and acknowledges that any such costs shall be capable of being recovered by the Responsible Authority in any court of competent jurisdiction as a civil debt recoverable.
 - 4.5. That until such time as this Agreement is registered on the title to the Land, the Owner shall ensure that successors in title will give effect to this Agreement, and do all acts and sign all documents

which will require those successors to give effect to this Agreement, including executing a deed agreeing to be bound by the terms of this Agreement.

- 4.6. The Owner agrees to indemnify and keep both the Responsible Authority indemnified from and against all costs, expenses, losses or damages that it may sustain, incur, suffer or be or become liable for or in respect of any suit, action, proceeding, judgment or claim brought by any person arising from or referable to this Agreement and/or any non-compliance with this Agreement.
- 4.7. The Owner agrees to allow the Responsible Authority to enter the Land at any reasonable time to assess compliance with this Agreement.

Owner's Warranties and Acknowledgements



5. The Owner warrants that:
 - 5.1. It is the registered proprietor (or entitled to be so) of the Land;
 - 5.2. There are no mortgages, liens, charges or other encumbrances affecting the Land which are not disclosed by the usual searches;
 - 5.3. If the Land is affected by a mortgage, the Mortgagee of the Land consents to the Owner entering into this Agreement and the Agreement being registered on the title to the Land.
6. The Owner acknowledges that any obligations imposed on the Owner under this Agreement take effect as separate and several covenants which are annexed to the Land and run at law and in equity with the Land and every part thereof and bind the Owner, its successors, assigns and transferees, and the registered proprietor for the time being of the whole or any part of the Land.

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Further assurance

7. The parties to this Agreement must do or cause to be done all things that are reasonably necessary to give effect to this Agreement.

Default

8. If the Owner defaults or fails to perform any of its obligations under this Agreement the Responsible Authority may, without prejudice to any other remedies, rectify and remedy such default and the cost of doing so shall be borne by the Owner. The Owner hereby consents to the Responsible Authority registering a caveat on the Certificate of Title to the Land in respect of any such costs, and acknowledges that any such costs shall be capable of being recovered by the Responsible Authority in any court of competent jurisdiction as a civil debt recoverable.

No waiver

9. Any time or other indulgence granted by the Responsible Authority to the Owner or any variation of the terms and conditions of this Agreement or any judgment or order obtained by the Responsible Authority against the Owner will not in any way amount to a waiver of any of the rights or remedies of the Responsible Authority in relation to the terms of this Agreement.

No Fettering of Powers of Responsible Authority

10. The Owner expressly acknowledges and agrees that nothing in this Agreement nor the performance by the Owner of any of its obligations under this Agreement does or will restrain, limit or otherwise fetter the exercise by the Responsible Authority of the powers, duties and discretions that they have or may have (as planning authority, responsible authority or otherwise) under the Act or under the Planning Scheme to consider, approve, amend or to make any decision or impose any requirements or conditions in connection with the granting of any planning approval or certification relating to any use or development, or in relation

to the commencement or initiation of any enforcement action or proceeding whatsoever.

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Entire Agreement

11. This Agreement constitutes the entire agreement between the parties in connection with its subject matter and supersedes all previous Agreements or understandings between the parties in connection with its subject matter.

Severability

12. If a court, arbitrator, tribunal or other competent authority determines that a word, phrase, sentence, paragraph or clause of this Agreement is unenforceable, illegal or void then it shall be severed and the other provisions of this Agreement shall remain operative and be of full force and effect.

Disputes

13. If there is a dispute between the parties concerning the interpretation or implementation of this Agreement, that dispute must be referred to the Tribunal for resolution to the extent permitted by the Act.
14. If there is a dispute concerning any matter which is not referable to the Tribunal under the Act, that dispute must be referred for arbitration by an Arbitrator agreed upon in writing by the parties, or, in the absence of such agreement the Chair of the Victorian Chapter of the Institute of Arbitrators Australia or his or her nominee, for arbitration.
15. The parties shall each be entitled to legal representation for the purposes of any proceedings or arbitration referred to clause 14 or 15 of this Agreement unless the Tribunal or arbitrator otherwise directs, and each party must bear its own costs.

Commencement of Agreement

16. Unless otherwise provided in this Agreement, this Agreement shall commence on the date of this Agreement.

EXECUTED by the parties on the date set out at the commencement of this Agreement:

The common seal of Latrobe City Council)
was affixed in accordance with Local Law)
No. 1 this 4th day of September 2013 in)
the presence of:



[Handwritten signature of Paul Buckley]
.....
Paul Buckley
Chief Executive Officer

SIGNED, SEALED and DELIVERED by)
WATERLOO GRAZING PTY LTD)
ACN 137 026 192 in accordance with)
section 127 of the Corporations Act)
2001 in the presence of:)

AK591374W



.....
Director Signature

[Handwritten signature]
.....
Director/Secretary Signature

IAN EDWIN SOWERBY
.....

DAVID SOWERBY
.....

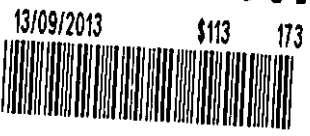
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Print Name

'A'

COOPY

AK591374W



VEGETATION OFFSET MANAGEMENT PLAN

MITCHELL GROVE


MOE

PLANNING & ENVIRONMENT ACT 1987
 LATROBE CITY COUNCIL

Plan Approved Under
 Planning Permit No. 2010/354

Sheet 3 of 3 sheet(s)

Date: 21/03/2012


 Council Delegate

This Document 30 Pages



MITCHELL GROVE

19/12/2012

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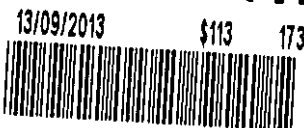
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2	DESCRIPTION OF VEGETATION APPROVED FOR REMOVAL.	3
3	OFFSET REQUIREMENTS	3
4	OFFSET LOCATION AND PROTECTION	3
5	OFFSET PROPOSAL	4
6	OFFSET IMPLEMENTATION AND MANAGEMENT	5

APPENDICES

AUTHOR

APPENDIX 1	NET GAIN ASSESSMENT AND REVIEW	PAUL KELLY AND ASSOCIATES
APPENDIX 2	VEGETATION OFFSET PLAN-LO1 & LO2	HENRY ARCHITECTS
APPENDIX 3	IMPLEMENTATION & MANAGEMENT PLAN	BAW BAW NATIVE PLANTS

AK591374W



1 Introduction

Planning Permit No. 2010/354

Planning Scheme Latrobe Planning Scheme

Responsible Authority Latrobe City Council

2 Description of Vegetation approved for removal.

Permit No. 2010/354 allows for the removal of the following native vegetation:

- i) 0.07 Habitat Hectares(HHa) of High Conservation significance Ecological Vegetation class (EVC) 16 Lowland Forest including 3 large old trees(LOT's)
- ii) 0.08 HHa of High conservation significance EVC 53 Swamp Scrub
- iii) 1 medium conservation significance LOT from EVC 16 Lowland Forest
- iv) 2 high significance LOT's from EVC 53 Swamp scrub

3 Offset Requirements

The offset requirements for the removal of the above vegetation are detailed in "Net gain Assessment & Review prepared by Paul Kelly & Associates Ecological services (Appendix 1)

The offset requirements for the removal of the native vegetation on the site are

- i) 0.11 HHa of High Conservation Significance EVC 16 Lowland Forest
- ii) 0.12 Ha of High Conservation Significance EVC 53 Swamp scrub
- iii) Protect 12 High Conservation Significance LOT
- iv) Plant 510 new plants

The offset is proposed to be achieved by protection and management of retained remnant patches and provide the deficit offset as revegetation/recruitment on part of the southern bank of the Moe Contour Drain within Mitchell Grove and the adjoining property to the west referred to as "Waterloo".(As detailed in Appendix 1 Net gain Assessment and Review)

4 Offset Location and Protection

Offset site 1 – "Waterloo" is an area of 0.765Ha adjoining the Moe contour drain on Lot 3 on Title plan 836437J Volume 11238 Folio 392. A section 173 agreement with the owner of this land is proposed as the method of legal protection.

Offset 2 and 3 –Remnant Vegetation patches on Mitchell Grove Site are located on reserve areas that will ultimately become the responsibility of Latrobe City Council. The developer is willing to undertake to maintain these areas for the required period or transfer the responsibility to Council

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via a financial agreement after an initial 2 years establishment period or once compliance is sought for the relevant stage of the development.

5 Offset Proposal

To meet the offset requirement the "Net gain Assessment and Review" proposes to:

- 1 Revegetate a 255m x 30m wide reserve (Site 1- 0.77Ha) adjoining the Moe contour drain and
- 2 Retain and manage two existing patches of remnant vegetation
 - a. sites 2 – 0.24Ha Very High Conservation Significance EVC 937
 - b. site 3- 0.13 Ha –High Conservation Significance EVC Swamp Scrub

Table 4.1 extracted from Appendix 1 Net gain Review and Assessment identifies a suggested plant list and associated quantities of plants for each site.

Table -1 Recommended Planting List (revised) – Waterloo and Mitchells Grove

Species Name	Common Name	Suggested Planting Density/ha	Site 1 – Waterloo (0.77ha)	Site 2 – Mitchell Grove (0.20ha)	Site 3 – Mitchell Grove (0.19ha)
Eucalyptus ovata	Swamp Gum	50	20	0	0
Eucalyptus strzeleckii	Strzelecki Gum		19	0	0
Leptospermum continentale	Prickly Tea-tree	400	83	22	21
Leptospermum lanigerum	Woolly Tea-tree		82	22	21
Melaleuca ericifolia	Swamp Paperbark		82	22	21
Bursaria spinosa	Sweet Bursaria		82	22	21
Coprosma quadrifida	Prickly Currant-bush		82	22	21
Pultenaea gunnii	Golden Bush-pea	100	60	16	16

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Pomaderris elliptica	Smooth Pomaderris		59	16	15
Lomandra longifolia	Spiny-headed Mat-rush	1000	175	47	45
Dianella revoluta s.l.	Black-anther Flax-lily		175	47	44
Poa labillardieri	Common Tussock-grass		175	47	44
Gahnia radula	Thatch Saw-sedge		175	46	44
Juncus procerus	Tall Rush		175	46	44
Total		1500	1444	375	357

Henry Architects have prepared a plan(Appendix 2) that identifies the areas and details the proposed sites, planting, fencing and monitoring photo points.

6 Offset Implementation and Management

Baw Baw Native Plants have been engaged to provide an Implementation and Management strategy for the Mitchell Grove Offset proposal(Appendix 3) This proposal details the following:

- i) sourcing of local provenance seed for the required EVC,
- ii) site preparation prior to planting
- iii) timing of works
- iv) monitoring of plantings
- v) management and maintenance of plantings

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APPENDIX 1
MITCHELL GROVE NET GAIN
REVIEW

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**Paul Kelly & Associates
Ecological Services**

Net Gain Assessment & Review

Mitchells Grove, Moe

11 January 2012

Prepared by Paul Kelly & Associates (PKA)

**Mitchells Grove, Moe
Net Gain Assessment and Review (revised)**

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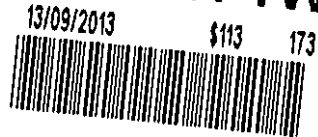
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2 Offset requirements

The offset requirements for the removal of the native vegetation on the site are:

- 0.11 Hha of High Conservation Significance EVC 16 Lowland Forest ;
- 0.12 Hha of High Conservation Significance EVC 53 Swamp Scrub
- Protect 12 High Conservation Significance LOT and
- Plant 510 new plants

To meet the offset requirement, it is proposed to retain and manage HZ1A and HZ2A and provide the deficit offset as revegetation/recruitment part of the southern bank of the Moe Contour Drain on part of both Waterloo and Mitchells Grove.

2.1 Protection and management of the retained remnant patches

Table 3-1 calculates the Habitat Hectare gains for protecting and managing HZ1A and HZ2A.

Management of these remnant patches will provide a total of:

- 0.07Hha of Very High Conservation Significance EVC 937 Swampy Woodland; (or 0.11 Hha of High Conservation significance EVC Swampy Woodland if trading up) and
- 0.03Hha of High Conservation Significance EVC 53 Swamp Scrub.

EVC 937 Swampy Woodland and EVC 53 Swamp Scrub are considered to be the same habitat type with a similar or more effective ecological function (WGCMA 2008) and as such are considered to meet the like for like attributes. Hence the protection and management of HZ1A and HZ 2A will provide 0.10 Hha of High Conservation Significance offsets leaving a deficit of 0.13 Hha of High Conservation significance offsets and the protection of 12 High Conservation Significance LOT and the provision of 510 new plants.

2.2 Meeting the offset deficit

2.2.1 Waterloo

It is proposed to revegetate a 255m x 30m wide reserve adjoining the Moe Contour Drain in the Waterloo development The Waterloo revegetation will provide an area of 0.77ha.

It is proposed to convert the offset deficit to recruitment within the proposed vegetation reserve.

In accordance with DSE (2006a), revegetation can provide up to 25 gain points /ha. At this rate, the 0.77ha of revegetation works for the Waterloo site will provide an additional 0.19 Hha/ha offset.

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Table 3-1 Quantification of offset gains available – protection and management of a patch of native vegetation

Offset Zone		HZ1			HZ2			
Land tenure		Freehold			Freehold			
Patch size		0.24ha			0.13ha			
Security arrangement		S173			S173			
Bioregion		Gipp Plain			Gipp Plain			
EVC #: Name		Swampy Woodland			53 Swamp Scrub			
EVC Bioregional Conservation Status		Vulnerable			Endangered			
		Max Possible Score	Current Site Condition	Maintenance	Improvement	Current Site Condition	Maintenance	Improvement
Scores	Large Old Trees	10	10	2.0		0	0.0	
	Tree Canopy Cover	5	3	0.6	0.4	3	0.6	0.4
	Understorey	25	15	1.5	2.5	15	1.5	2.5
	Lack of Weeds	15	2		2.0	4		2.0
	Recruitment	10	10	1.0	2.0	10	1.0	2.0
	Organic Matter	5	5	0.5	0.0	3	0.3	2.0
	Logs	5	4	4.4	0.0	0	0.4	0.0
	Standardised Site Condition [3]		49			35		
	Landscape Context	25	2			2		
	Current habitat score of zone	100	51			37		
Conservation Significance	Conservation status x Habitat Score		VH			H		
	Threatened Species Rating		L			L		
	Other Site Attribute Rating		L			L		
	Overall Conservation Significance		VH			H		
Subtotals of maintenance & improvement gains		##		10	6.9		3.8	8.9
Standardised sum of maintenance and improvement gain/ha [4]		##			16.9			12.7
Prior management gain/ha		##			5.1			3.7
Security gain/ha		##			5.1			3.7
Total Gain points per hectare		##			27.1			20.1
Habitat Score gained per hectare (gain points/100)		0.##			0.27			0.2
Size of the offset zone (ha)		##			0.24			0.13
Total Gain (Hha) [5]		###			0.07			0.03
Very large old trees available for protection		#			0			0
Large old trees available for protection		#			0			0
Medium old trees available for protection		#			0			0

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Table 4-1 Recommended Planting List (revised) – Waterloo and Mitchells Grove

Species Name	Common Name	Suggested Planting Density/ha	Site 1 – Waterloo (0.77ha)	Site 2 – Mitchell Grove (0.20ha)	Site 3 – Mitchell Grove (0.19ha)
<i>Eucalyptus ovata</i>	Swamp Gum	50	20	0	0
<i>Eucalyptus strzeleckii</i>	Strzelecki Gum		19	0	0
<i>Leptospermum continentale</i>	Prickly Tea-tree	400	83	22	21
<i>Leptospermum lanigerum</i>	Woolly Tea-tree		82	22	21
<i>Melaleuca ericifolia</i>	Swamp Paperbark		82	22	21
<i>Bursaria spinosa</i>	Sweet Bursaria		82	22	21
<i>Coprosma quadrifida</i>	Prickly Currant-bush		82	22	21
<i>Pultenaea gunnii</i>	Golden Bush-pea	100	60	16	16
* <i>Pomaderris elliptica</i>	Smooth Pomaderris		59	16	15
<i>Lomandra longifolia</i>	Spiny-headed Mat-rush	1000	175	47	45
<i>Dianella revoluta</i> s.l.	Black-anther Flax-lily		175	47	44
<i>Poa labillardieri</i>	Common Tussock-grass		175	47	44
<i>Gahnia radula</i>	Thatch Saw-sedge		175	46	44
<i>Juncus procerus</i>	Tall Rush		175	46	44
Total		1500	1444	375	357

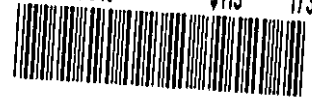
* Options to be considered inc *Platysace lanceolata*, *Platylobium formosum*, *Pimelea humilis* if available from Nursery

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







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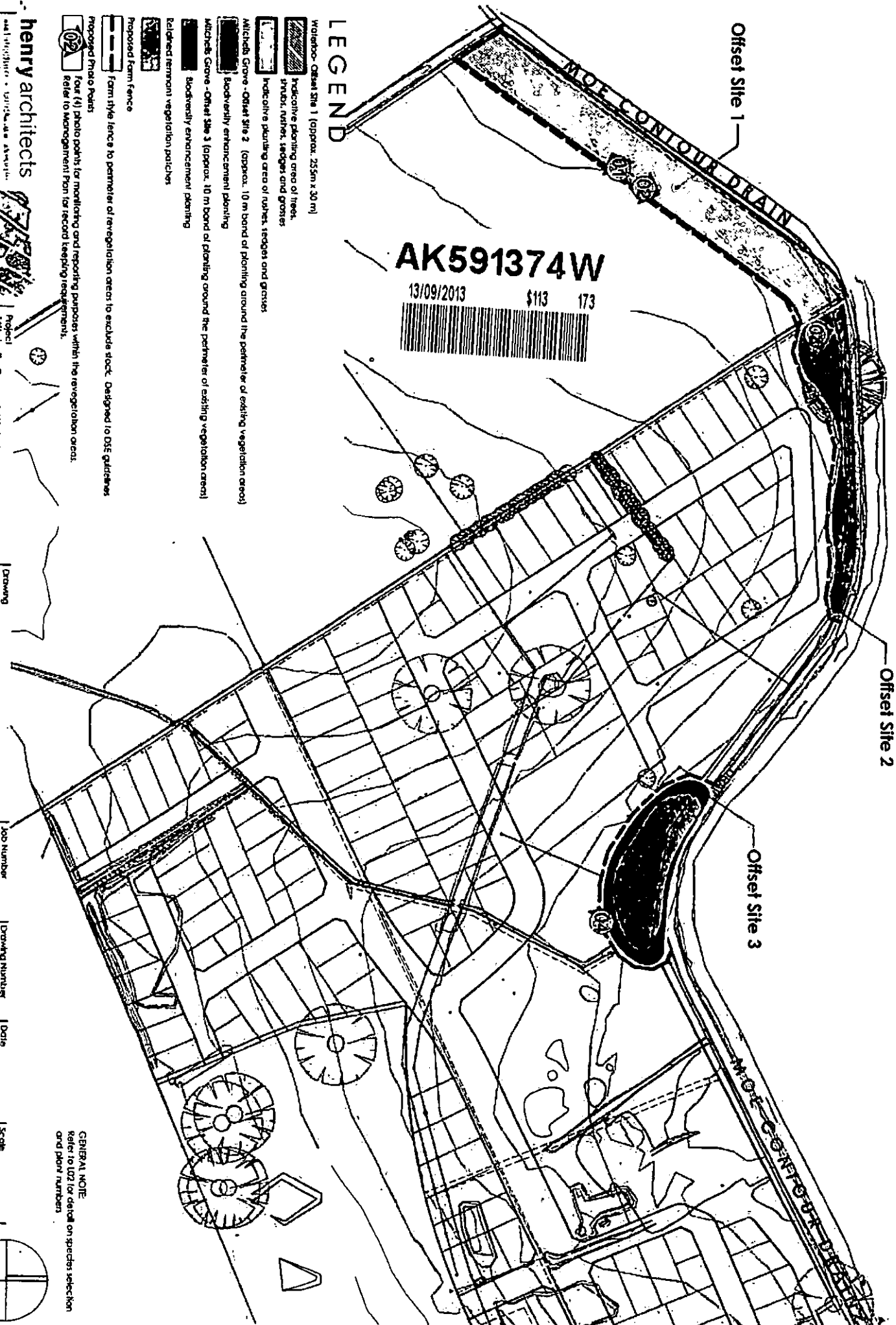
APPENDIX 2
VOMP PLANTING PLAN &
SCHEDULE

LEGEND

-  Volcanic - Offset Site 1 (approx. 25.5m x 30 m)
-  Inducitive planting area of trees, shrubs, rushes, sedges and grasses
-  Inducitive planting area of rushes, sedges and grasses
-  Mitchell Grove - Offset Site 2 (approx. 10 m band of planting around the perimeter of existing vegetation areas)
-  Mitchell Grove - Offset Site 3 (approx. 10 m band of planting around the perimeter of existing vegetation areas)
-  Biodiversity enhancement planting
-  Biodiversity enhancement planting
-  Relict remnant vegetation patches
-  Proposed Farm Fence
-  Form style fence to perimeter of revegetation areas to exclude stock. Designed to DSE guidelines.
-  Proposed Photo Point
-  Four (4) photo points for monitoring and reporting purposes, within the revegetation areas. Refer to Management Plan for record keeping requirements.

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Project
Mitchells Grove & Waterloo
 M06

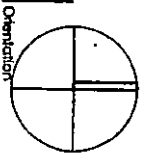
Drawing
VEGETATION OFFSET
MANAGEMENT PLAN

Job Number
L1599

Drawing Number
L01

Date
16.12.11

Scale
1:2000 @ A3



GENERAL NOTE
 Refer to U02 for detail on species selection and plan numbers

PLANT SCHEDULE

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PLANT COMMUNITY	SPECIES	NUMBER OF
	Botanical Name	Common Name
TREES & SHRUBS		
	<i>Acacia melanoxylon</i>	Blackwood
	<i>Coprosma quadrifida</i>	Prickly Currant-bush
	<i>Acacia verticillata</i>	Prickly Moses
	<i>Bursaria spinosa</i>	Sweet Bursaria
	<i>Eucalyptus ovata</i>	Swamp Gum
	<i>Eucalyptus strzeleckii</i>	Strzelecki Gum
	<i>Goodenia ovata</i>	Hop Goodenia
	<i>Leptospermum continentale</i>	Prickly Tea-tree
	<i>Leptospermum lanigerum</i>	Woolly Tea-tree
	<i>Mitella ericifolia</i>	Swamp Paperbark
	<i>Pomadouria elliptica</i>	Smooth Pomadouria
	<i>Prostanthera lasiantha</i>	Victorian Christmas-bush
	TOTAL	669
GRASSES, SEDGES & RUSHES		
	<i>Carex appressa</i>	Tall Sedge
	<i>Schoenoplectus tabernaemontani</i>	River Club-sedge
	Terrestrial planting	
	<i>Poa labillardierei</i>	Common Tussock
	<i>Dianella tasmanica</i>	Tasman Flax-lily
	<i>Gahria siebertiana</i>	Thatch Saw-sedge
	<i>Lomandra longifolia</i>	Spiry-headed Mat-rush
	TOTAL	875
SHRUBS		
	<i>Coprosma quadrifida</i>	Prickly Currant-bush
	<i>Acacia verticillata</i>	Prickly Moses
	<i>Bursaria spinosa</i>	Sweet Bursaria
	<i>Goodenia ovata</i>	Hop Goodenia
	<i>Leptospermum continentale</i>	Prickly Tea-tree
	<i>Leptospermum lanigerum</i>	Woolly Tea-tree
	<i>Mitella ericifolia</i>	Swamp Paperbark
	<i>Pomadouria elliptica</i>	Smooth Pomadouria
	<i>Prostanthera lasiantha</i>	Victorian Christmas-bush
	TOTAL	142
GRASSES, SEDGES & RUSHES		
	<i>Carex appressa</i>	Tall Sedge
	<i>Cyperus lucidus</i>	Leaky Flat-sedge
	<i>Juncus procerus</i>	Tall Rush
	<i>Schoenoplectus tabernaemontani</i>	River Club-sedge
	Terrestrial planting	
	<i>Dianella tasmanica</i>	Tasman Flax-lily
	<i>Gahria siebertiana</i>	Thatch Saw-sedge
	<i>Lomandra longifolia</i>	Spiry-headed Mat-rush
	<i>Poa labillardierei</i>	Common Tussock
	TOTAL	233
SHRUBS		
	<i>Coprosma quadrifida</i>	Prickly Currant-bush
	<i>Acacia verticillata</i>	Prickly Moses
	<i>Bursaria spinosa</i>	Sweet Bursaria
	<i>Goodenia ovata</i>	Hop Goodenia
	<i>Leptospermum continentale</i>	Prickly Tea-tree
	<i>Leptospermum lanigerum</i>	Woolly Tea-tree
	<i>Mitella ericifolia</i>	Swamp Paperbark
	<i>Pomadouria elliptica</i>	Smooth Pomadouria
	<i>Prostanthera lasiantha</i>	Victorian Christmas-bush
	TOTAL	153
GRASSES, SEDGES & RUSHES		
	<i>Carex appressa</i>	Tall Sedge
	<i>Cyperus lucidus</i>	Leaky Flat-sedge
	<i>Juncus procerus</i>	Tall Rush
	Terrestrial planting	
	<i>Dianella tasmanica</i>	Tasman Flax-lily
	<i>Gahria siebertiana</i>	Thatch Saw-sedge
	<i>Lomandra longifolia</i>	Spiry-headed Mat-rush
	<i>Poa labillardierei</i>	Common Tussock
	TOTAL	221
TOTAL		2,193

GENERAL NOTES -
Revision A (07.02.12):

- Proposed plant numbers are based on the revised recommendations in the Net Gain Assessment produced by Paul Kelly
- All plants must be of local provenance and grown from seed, cutting or division from stock within 25kms from the site
- Plantings are to achieve a 10-year plant density targets based on the relevant EVC benchmarks

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Project
Michell's Grove & Waterloo
MOE

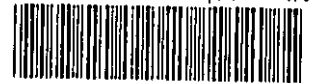
Drawing
VEGETATION OFFSET MANAGEMENT
PLAN - Plant Schedule

Job No.	Drawing No.	Date	Revision
L1599	L02	16.12.11	A

APPENDIX 3
MITCHELL GROVE
IMPLEMENTATION
MANAGEMENT PLAN

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Contact: Steve Houghton
Mobile: 0409 783 866
Email: bbnp@dcsi.net.au
Postal: PO BOX 1451
Warragul VIC 3820
NURSERY LOCATED IN ROKEBY

27th January 2012

Martin Neville
Projectman Pty Ltd
Email: mneville@projectman.com.au

Re: Implementation and Management Plan

Dear Martin,

Thank you for the opportunity to provide an Implementation and Management Plan for the three sites at Mitchell Grove and Waterloo. In this cover letter we will include information regarding the sourcing of local provenance seed for the required EVC. In the attached Implementation and Management Plan we will include details of site preparation prior to planting, timing of the supply and installation of plants and fencing, monitoring of plantings and a ten year management and maintenance program.

Baw Baw Native Plants specialise in growing indigenous native plants for revegetation sites, offset planting sites, wetlands and farm projects across Gippsland. Seed is collected specifically for each project to meet the needs of local provenance plants. We also provide a planting service and offer on-going site maintenance.

Our clients include Melbourne Water, Landcare, West Gippsland Catchment Management Authority, Baw Baw Shire Council, Sure Constructions and Millar Merrigan Land Development Consultants. Recent projects include:

- Providing and installing 52,000 plants with 2 years maintenance at Amberly Acres wetland in Drouin (Millar Merrigan)
- Providing and installing 3,000 plants at Woondella Estate bio-retention swale in Sale (Sure Constructions)
- Providing and installing 22,000 plants in 2011 on five farms within the Tarago Reservoir catchment in the Neerim district. (Tarago Catchment Sustainable Farms Project - Melbourne Water and Neerim & District Landcare Group)
- Providing terrestrial plants with 4 years maintenance at Gum Scrub Creek in Drouin (Drouin Landcare Group)

Following the Net Gain Assessment & Review report put together by Paul Kelly & Associates Ecological Services, Baw Baw Native Plants have discussed a planting plan and plant schedule with Jo Henry at Henry Architects Pty. The EVC's listed in the report are EVC 16 Lowland Forest, EVC 53 Swamp Scrub and EVC 937 Swampy Woodland. The species that Baw Baw Native Plants will provide and install at the three offset sites will be of local provenance seed and will suit the EVC's listed. Generally seed collected within a radius of 25km from the planting site is considered satisfactory for local provenance. This is a requirement for Melbourne Water who we supply many of our plants to.

90% of the seed we have collected for this project comes from within a 10km radius and the remaining 10% collected within a 20km radius of the planting site at Mitchell Grove and Waterloo.

Should you need any more information regarding the Implementation and Management Plan, please feel free to contact my mobile on 0409 783 866 or email me at bbnp@dcsi.net.au.

Yours sincerely,



Steve Haughton
Baw Baw Native Plants

AK591374W



Personal Profile

Steve Haughton

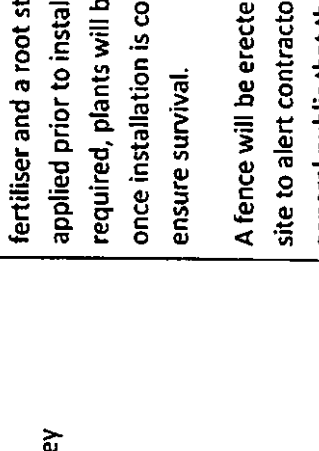
Steve has achieved a Diploma in Natural Resource Management at Holmesglen Institute of TAFE and went on to further his studies completing a Bachelor of Park (Environmental) Management at Deakin University.

After completing studies, Steve went on to work with the Department of Primary Industries at Ellinbank where he was an Extension Officer for three years. His main roles included nutrient management on beef and dairy farms, soil testing, soil test analysis and preparing nutrient and effluent management plans for landholders. Other roles included providing technical information for milking sheds, feed pads, track management and sustainable water management on farms.

During Steve's time at TAFE, University and at DPI, he casually worked with his father, Mike Haughton at Neerim Native Flora which was a wholesale indigenous tubestock nursery specialising in growing tubestock for local Landcare projects. Steve also provided a planting service early on and was able to develop his skills not only in plant propagation but also in installation and ecosystem management.

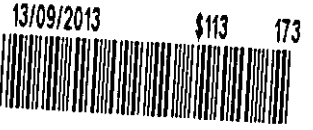
Steve's passion for streamside and wetland enhancement comes from his interest of fishing. Steve has been writing for the Victoria and Tasmania Fishing Monthly Magazine for four years and more recently AFN's Freshwater Fishing Australia magazine.

Implementation and Management Plan

Year	Activity	Standard Achieved	Frequency
2012	<p>Site preparation</p> <ul style="list-style-type: none"> Mow the three offset sites Spot spray areas for plantings Mark out where the fences will be erected 		Completed by 29th February 2012
	<p>Plants & installation</p> <ul style="list-style-type: none"> Supply 1500 plants as per Recommended Plant List (Appendix 1) Install 1500 plants across the three sites Install 1500 treeguards and weedmats for trees and understorey Install fencing for the three sites 	<p>Tubestock plants will be installed with a slow release granular native fertiliser and a root stimulant applied prior to installation. If required, plants will be watered once installation is complete to ensure survival.</p> <p>A fence will be erected around each site to alert contractors and the general public that the area is a revegetation area to prevent site traffic and damage to the plants.</p>	<p>Completed by 31st March 2012</p> <div style="text-align: center;">  <p>AK591374W 13/09/2013 \$113 173</p> </div>
	<p>Project Management</p> <p>Monitoring</p> <ul style="list-style-type: none"> Take photos from the 4 photo points and prepare progress report annually. Monitor and record weed growth and species present. Identify areas where native vegetation canopy has not closed and monitor. Particular species to monitor are Blackberry spp., Flat Drain-sedge, Thistle spp. and other broadleaf and introduced grass spp. of environmental significance. Monitor and record plant condition. Look for signs of disease, pest infection and stunted growth. Monitor and record vandalism and report if necessary. <p>Maintenance</p> <ul style="list-style-type: none"> Plant out areas where canopy has not closed to reduce weed growth. 	<p>Weeds will be sprayed with a recommended herbicide unless within close proximity to sensitive areas such as watercourses, drainage points and native plants. Where spraying is not possible, weeds will be removed physically or mechanically. Blackberry and Thistle species will be removed 150mm</p>	<p>20 hours (over 12 months)</p> <p>April – May 2013 (2 visits) June – August 2013 (1 visit) September–December 2013 (4 visits) January – March 2014 (1 visit) TOTAL – 8 visits (10 hours each)</p>

	<ul style="list-style-type: none">• Control weed growth by selective herbicide application (only using registered herbicide for use near waterways), physical weed removal or mechanical weed control.• Remove dead native plants and replant. Control plant disease or pest infection by selective fungicide or insecticide application (only using products that will not impact on wetland environment) or remove affected plants or segments of plants physically or mechanically.• Infill planting.• Fixing or removing treeguards.• Remove litter.• Brushcutting grass and herbicide application (only using registered herbicide for use near waterways) around native vegetation to ensure best possible growing conditions for terrestrial plants.	<p>below topsoil level. Flat Drain-sedge control will be mechanically managed by brushcutting/slashing green seed heads off during seeding periods. This will ensure the sedge cannot reproduce.</p> <p>Treeguards will be removed to ensure the native plants are not restricted. They are initially used for the first 12 months to protect the plant from the elements and from maintenance work.</p>	
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Year	Activity	Standard Achieved	Frequency
2013	<p>Project Management</p>	<p>20 hours (over 12 months)</p>	<p>April – May 2013 (2 visits) June – August 2013 (1 visit) September – December 2013 (4 visits) January – March 2014 (1 visit) TOTAL – 8 visits (10 hours each)</p>
	<p>Monitoring</p> <ul style="list-style-type: none"> Take photos from the 4 photo points and prepare progress report annually. Monitor and record weed growth and species present. Identify areas where native vegetation canopy has not closed and monitor. Particular species to monitor are Blackberry spp., Flat Drain-sedge, Thistle spp. and other broadleaf and introduced grass spp. of environmental significance. Monitor and record plant condition. Look for signs of disease, pest infection and stunted growth. Monitor and record vandalism and report if necessary. <p>Maintenance</p> <ul style="list-style-type: none"> Plant out areas where canopy has not closed to reduce weed growth. Control weed growth by selective herbicide application (only using registered herbicide for use near waterways), physical weed removal or mechanical weed control. Remove dead native plants and replant. Control plant disease or pest infection by selective fungicide or insecticide application (only using products that will not impact on wetland environment) or remove affected plants or segments of plants physically or mechanically. Infill planting. Fixing or removing treeguards. Remove litter. Brushcutting grass and herbicide application (only using registered herbicide for use near waterways) around native vegetation to ensure best possible growing conditions for terrestrial plants. 	<p>Weeds will be sprayed with a recommended herbicide unless within close proximity to sensitive areas such as watercourses, drainage points and native plants. Where spraying is not possible, weeds will be removed physically or mechanically. Blackberry and Thistle species will be removed 150mm below topsoil level. Flat Drain-sedge control will be mechanically managed by brushcutting/slashing green seed heads off during seeding periods. This will ensure the sedge cannot reproduce.</p> <p>Treeguards will be removed to ensure the native plants are not restricted. They are initially used for the first 12 months to protect the plant from the elements and from maintenance work.</p>	



Year	Activity	Standard Achieved	Frequency
2014	<p>Project Management</p> <p>Monitoring</p> <ul style="list-style-type: none"> Take photos from the 4 photo points and prepare progress report annually. Monitor and record weed growth and species present. Identify areas where native vegetation canopy has not closed and monitor. Particular species to monitor are Blackberry spp., Flat Drain-sedge, Thistle spp. and other broadleaf and introduced grass spp. of environmental significance. Monitor and record plant condition. Look for signs of disease, pest infection and stunted growth. Monitor and record vandalism and report if necessary. <p>Maintenance</p> <ul style="list-style-type: none"> Plant out areas where canopy has not closed to reduce weed growth. Control weed growth by selective herbicide application (only using registered herbicide for use near waterways), physical weed removal or mechanical weed control. Remove dead native plants and replant. Control plant disease or pest infection by selective fungicide or insecticide application (only using products that will not impact on wetland environment) or remove affected plants or segments of plants physically or mechanically. Infill planting. Fixing or removing treeguards. Remove litter. Brushcutting grass and herbicide application (only using registered herbicide for use near waterways) around native vegetation to ensure best possible growing conditions for terrestrial plants. 	<p>Weeds will be sprayed with a recommended herbicide unless within close proximity to sensitive areas such as watercourses, drainage points and native plants. Where spraying is not possible, weeds will be removed physically or mechanically. Blackberry and Thistle species will be removed 150mm below topsoil level. Flat Drain-sedge control will be mechanically managed by brushcutting/slashing green seed heads off during seeding periods. This will ensure the sedge cannot reproduce.</p>	<p>20 hours (over 12 months)</p> <p>April – May 2013 (2 visits)</p> <p>June – August 2013 (1 visit)</p> <p>September – December 2013 (4 visits)</p> <p>January – March 2014 (1 visit)</p> <p>TOTAL – 8 visits (10 hours each)</p>

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Year	Activity	Standard Achieved	Frequency
2015	<p>Project Management</p> <p>Monitoring</p> <ul style="list-style-type: none"> Take photos from the 4 photo points and prepare progress report annually. Monitor and record weed growth and species present. Identify areas where native vegetation canopy has not closed and monitor. Particular species to monitor are Blackberry spp., Flat Drain-sedge, Thistle spp. and other broadleaf and introduced grass spp. of environmental significance. Monitor and record plant condition. Look for signs of disease, pest infection and stunted growth. Monitor and record vandalism and report if necessary. <p>Maintenance</p> <ul style="list-style-type: none"> Plant out areas where canopy has not closed to reduce weed growth. Control weed growth by selective herbicide application (only using registered herbicide for use near waterways), physical weed removal or mechanical weed control. Remove dead native plants and replant. Control plant disease or pest infection by selective fungicide or insecticide application (only using products that will not impact on wetland environment) or remove affected plants or segments of plants physically or mechanically. Infill planting. Fixing or removing treeguards. Remove litter. Brushcutting grass and herbicide application (only using registered herbicide for use near waterways) around native vegetation to ensure best possible growing conditions for terrestrial plants. 	<p>Weeds will be sprayed with a recommended herbicide unless within close proximity to sensitive areas such as watercourses, drainage points and native plants. Where spraying is not possible, weeds will be removed physically or mechanically. Blackberry and Thistle species will be removed 150mm below topsoil level. Flat Drain-sedge control will be mechanically managed by brushcutting/slashing green seed heads off during seeding periods. This will ensure the sedge cannot reproduce.</p>	<p>15 hours (over 12 months)</p> <p>Quarterly visits</p> <p>TOTAL – 4 visits (10 hours each)</p>

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Year	Activity	Standard Achieved	Frequency
2016	<p>Project Management</p> <p>Monitoring</p> <ul style="list-style-type: none"> Take photos from the 4 photo points and prepare progress report annually. Monitor and record weed growth and species present. Identify areas where native vegetation canopy has not closed and monitor. Particular species to monitor are Blackberry spp., Flat Drain-sedge, Thistle spp. and other broadleaf and introduced grass spp. of environmental significance. Monitor and record plant condition. Look for signs of disease, pest infection and stunted growth. Monitor and record vandalism and report if necessary. <p>Maintenance</p> <ul style="list-style-type: none"> Plant out areas where canopy has not closed to reduce weed growth. Control weed growth by selective herbicide application (only using registered herbicide for use near waterways), physical weed removal or mechanical weed control. Remove dead native plants and replant. Control plant disease or pest infection by selective fungicide or insecticide application (only using products that will not impact on wetland environment) or remove affected plants or segments of plants physically or mechanically. Infill planting. Fixing or removing treeguards. Remove litter. Brushcutting grass and herbicide application (only using registered herbicide for use near waterways) around native vegetation to ensure best possible growing conditions for terrestrial plants. 	<p>Weeds will be sprayed with a recommended herbicide unless within close proximity to sensitive areas such as watercourses, drainage points and native plants. Where spraying is not possible, weeds will be removed physically or mechanically. Blackberry and Thistle species will be removed 150mm below topsoil level. Flat Drain-sedge control will be mechanically managed by brushcutting/slashing green seed heads off during seeding periods. This will ensure the sedge cannot reproduce.</p>	<p>15 hours (over 12 months)</p> <p>Quarterly visits</p> <p>TOTAL – 4 visits (10 hours each)</p>

AK591374W

13/09/2013

\$113

173



Year	Activity	Standard Achieved	Frequency
2017	<p>Project Management</p> <p>Monitoring</p> <ul style="list-style-type: none"> Take photos from the 4 photo points and prepare progress report annually. Monitor and record weed growth and species present. Identify areas where native vegetation canopy has not closed and monitor. Particular species to monitor are Blackberry spp., Flat Drain-sedge, Thistle spp. and other broadleaf and introduced grass spp. of environmental significance. Monitor and record plant condition. Look for signs of disease, pest infection and stunted growth. Monitor and record vandalism and report if necessary. <p>Maintenance</p> <ul style="list-style-type: none"> Plant out areas where canopy has not closed to reduce weed growth. Control weed growth by selective herbicide application (only using registered herbicide for use near waterways), physical weed removal or mechanical weed control. Remove dead native plants and replant. Control plant disease or pest infection by selective fungicide or insecticide application (only using products that will not impact on wetland environment) or remove affected plants or segments of plants physically or mechanically. Infill planting. Fixing or removing treeguards. Remove litter. Brushcutting grass and herbicide application (only using registered herbicide for use near waterways) around native vegetation to ensure best possible growing conditions for terrestrial plants. 	<p>Weeds will be sprayed with a recommended herbicide unless within close proximity to sensitive areas such as watercourses, drainage points and native plants. Where spraying is not possible, weeds will be removed physically or mechanically. Blackberry and Thistle species will be removed 150mm below topsoil level. Flat Drain-sedge control will be mechanically managed by brushcutting/slashing green seed heads off during seeding periods. This will ensure the sedge cannot reproduce.</p>	<p>15 hours (over 12 months)</p> <p>Quarterly visits</p> <p>TOTAL – 4 visits (8 hours each)</p>

AK591374W

13/09/2013

\$113

173



Year	Activity	Standard Achieved	Frequency
2018	<p>Project Management</p>		<p>15 hours (over 12 months)</p>
	<p>Monitoring</p> <ul style="list-style-type: none"> • Take photos from the 4 photo points and prepare progress report annually. • Monitor and record weed growth and species present. Identify areas where native vegetation canopy has not closed and monitor. Particular species to monitor are Blackberry spp., Flat Drain-sedge, Thistle spp. and other broadleaf and introduced grass spp. of environmental significance. • Monitor and record plant condition. Look for signs of disease, pest infection and stunted growth. • Monitor and record vandalism and report if necessary. <p>Maintenance</p> <ul style="list-style-type: none"> • Plant out areas where canopy has not closed to reduce weed growth. • Control weed growth by selective herbicide application (only using registered herbicide for use near waterways), physical weed removal or mechanical weed control. • Remove dead native plants and replant. Control plant disease or pest infection by selective fungicide or insecticide application (only using products that will not impact on wetland environment) or remove affected plants or segments of plants physically or mechanically. • Infill planting. • Fixing or removing treeguards. • Remove litter. • Brushcutting grass and herbicide application (only using registered herbicide for use near waterways) around native vegetation to ensure best possible growing conditions for terrestrial plants. 	<p>Weeds will be sprayed with a recommended herbicide unless within close proximity to sensitive areas such as watercourses, drainage points and native plants. Where spraying is not possible, weeds will be removed physically or mechanically. Blackberry and Thistle species will be removed 150mm below topsoil level. Flat Drain-sedge control will be mechanically managed by brushcutting/slashing green seed heads off during seeding periods. This will ensure the sedge cannot reproduce.</p>	<p>Quarterly visits</p> <p>TOTAL – 4 visits (8 hours each)</p>

AK591374W

13/09/2013 \$113 173



Year	Activity	Standard Achieved	Frequency
2019	<p>Project Management</p>	<p>15 hours (over 12 months)</p>	<p>Quarterly visits</p> <p>TOTAL – 4 visits (8 hours each)</p>
	<p>Monitoring</p> <ul style="list-style-type: none"> • Take photos from the 4 photo points and prepare progress report annually. • Monitor and record weed growth and species present. Identify areas where native vegetation canopy has not closed and monitor. Particular species to monitor are Blackberry spp., Flat Drain-sedge, Thistle spp. and other broadleaf and introduced grass spp. of environmental significance. • Monitor and record plant condition. Look for signs of disease, pest infection and stunted growth. • Monitor and record vandalism and report if necessary. 	<p>Weeds will be sprayed with a recommended herbicide unless within close proximity to sensitive areas such as watercourses, drainage points and native plants. Where spraying is not possible, weeds will be removed physically or mechanically. Blackberry and Thistle species will be removed 150mm below topsoil level. Flat Drain-sedge control will be mechanically managed by brushcutting/slashing green seed heads off during seeding periods. This will ensure the sedge cannot reproduce.</p>	
	<p>Maintenance</p> <ul style="list-style-type: none"> • Plant out areas where canopy has not closed to reduce weed growth. • Control weed growth by selective herbicide application (only using registered herbicide for use near waterways), physical weed removal or mechanical weed control. • Remove dead native plants and replant. Control plant disease or pest infection by selective fungicide or insecticide application (only using products that will not impact on wetland environment) or remove affected plants or segments of plants physically or mechanically. • Infill planting. • Fixing or removing treeguards. • Remove litter. • Brushcutting grass and herbicide application (only using registered herbicide for use near waterways) around native vegetation to ensure best possible growing conditions for terrestrial plants. 		

AK591374W

13/09/2013 \$113 173



Year	Activity	Standard Achieved	Frequency
2020	<p>Project Management</p> <p>Monitoring</p> <ul style="list-style-type: none"> • Take photos from the 4 photo points and prepare progress report annually. • Monitor and record weed growth and species present. Identify areas where native vegetation canopy has not closed and monitor. Particular species to monitor are Blackberry spp., Flat Drain-sedge, Thistle spp. and other broadleaf and introduced grass spp. of environmental significance. • Monitor and record plant condition. Look for signs of disease, pest infection and stunted growth. • Monitor and record vandalism and report if necessary. <p>Maintenance</p> <ul style="list-style-type: none"> • Plant out areas where canopy has not closed to reduce weed growth. • Control weed growth by selective herbicide application (only using registered herbicide for use near waterways), physical weed removal or mechanical weed control. • Remove dead native plants and replant. Control plant disease or pest infection by selective fungicide or insecticide application (only using products that will not impact on wetland environment) or remove affected plants or segments of plants physically or mechanically. • Infill planting. • Fixing or removing treeguards. • Remove litter. • Brushcutting grass and herbicide application (only using registered herbicide for use near waterways) around native vegetation to ensure best possible growing conditions for terrestrial plants. 	<p>Weeds will be sprayed with a recommended herbicide unless within close proximity to sensitive areas such as watercourses, drainage points and native plants. Where spraying is not possible, weeds will be removed physically or mechanically. Blackberry and Thistle species will be removed 150mm below topsoil level. Flat Drain-sedge control will be mechanically managed by brushcutting/slashing green seed heads off during seeding periods. This will ensure the sedge cannot reproduce.</p>	<p>15 hours (over 12 months)</p> <p>Half yearly visits</p> <p>TOTAL – 2 visits (8 hours each)</p>

AK591374W

13/09/2013

\$113

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Year	Activity	Standard Achieved	Frequency
2021	<p>Project Management</p>		<p>15 hours (over 12 months)</p>
	<p>Monitoring</p> <ul style="list-style-type: none"> • Take photos from the 4 photo points and prepare progress report annually. • Monitor and record weed growth and species present. Identify areas where native vegetation canopy has not closed and monitor. Particular species to monitor are Blackberry spp., Flat Drain-sedge, Thistle spp. and other broadleaf and introduced grass spp. of environmental significance. • Monitor and record plant condition. Look for signs of disease, pest infection and stunted growth. • Monitor and record vandalism and report if necessary. <p>Maintenance</p> <ul style="list-style-type: none"> • Plant out areas where canopy has not closed to reduce weed growth. • Control weed growth by selective herbicide application (only using registered herbicide for use near waterways), physical weed removal or mechanical weed control. • Remove dead native plants and replant. Control plant disease or pest infection by selective fungicide or insecticide application (only using products that will not impact on wetland environment) or remove affected plants or segments of plants physically or mechanically. • Infill planting. • Fixing or removing treeguards. • Remove litter. • Brushcutting grass and herbicide application (only using registered herbicide for use near waterways) around native vegetation to ensure best possible growing conditions for terrestrial plants. 	<p>Weeds will be sprayed with a recommended herbicide unless within close proximity to sensitive areas such as watercourses, drainage points and native plants. Where spraying is not possible, weeds will be removed physically or mechanically. Blackberry and Thistle species will be removed 150mm below topsoil level. Flat Drain-sedge control will be mechanically managed by brushcutting/slashing green seed heads off during seeding periods. This will ensure the sedge cannot reproduce.</p>	<p>Half yearly visits</p> <p>TOTAL – 2 visits (8 hours each)</p>

AK591374W

13/09/2013

\$113

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Year	Activity	Standard Achieved	Frequency
2022	<p>Project Management</p> <p>Monitoring</p> <ul style="list-style-type: none"> Take photos from the 4 photo points and prepare progress report annually. Monitor and record weed growth and species present. Identify areas where native vegetation canopy has not closed and monitor. Particular species to monitor are Blackberry spp., Flat Drain-sedge, Thistle spp. and other broadleaf and introduced grass spp. of environmental significance. Monitor and record plant condition. Look for signs of disease, pest infection and stunted growth. Monitor and record vandalism and report if necessary. <p>Maintenance</p> <ul style="list-style-type: none"> Plant out areas where canopy has not closed to reduce weed growth. Control weed growth by selective herbicide application (only using registered herbicide for use near waterways), physical weed removal or mechanical weed control. Remove dead native plants and replant. Control plant disease or pest infection by selective fungicide or insecticide application (only using products that will not impact on wetland environment) or remove affected plants or segments of plants physically or mechanically. Infill planting. Fixing or removing treeguards. Remove litter. Brushcutting grass and herbicide application (only using registered herbicide for use near waterways) around native vegetation to ensure best possible growing conditions for terrestrial plants. 	<p>Weeds will be sprayed with a recommended herbicide unless within close proximity to sensitive areas such as watercourses, drainage points and native plants. Where spraying is not possible, weeds will be removed physically or mechanically. Blackberry and Thistle species will be removed 150mm below topsoil level. Flat Drain-sedge control will be mechanically managed by brushcutting/slashing green seed heads off during seeding periods. This will ensure the sedge cannot reproduce.</p>	<p>15 hours (over 12 months)</p> <p>1 visit in April-May</p> <p>TOTAL – 1 visit (8 hours)</p>

AK591374W

13/09/2013 \$113 173



ALL MONITORING AND MAINTENANCE WORK IS RECORDED

AK591374W

13/09/2013

\$113

173



Appendix 1

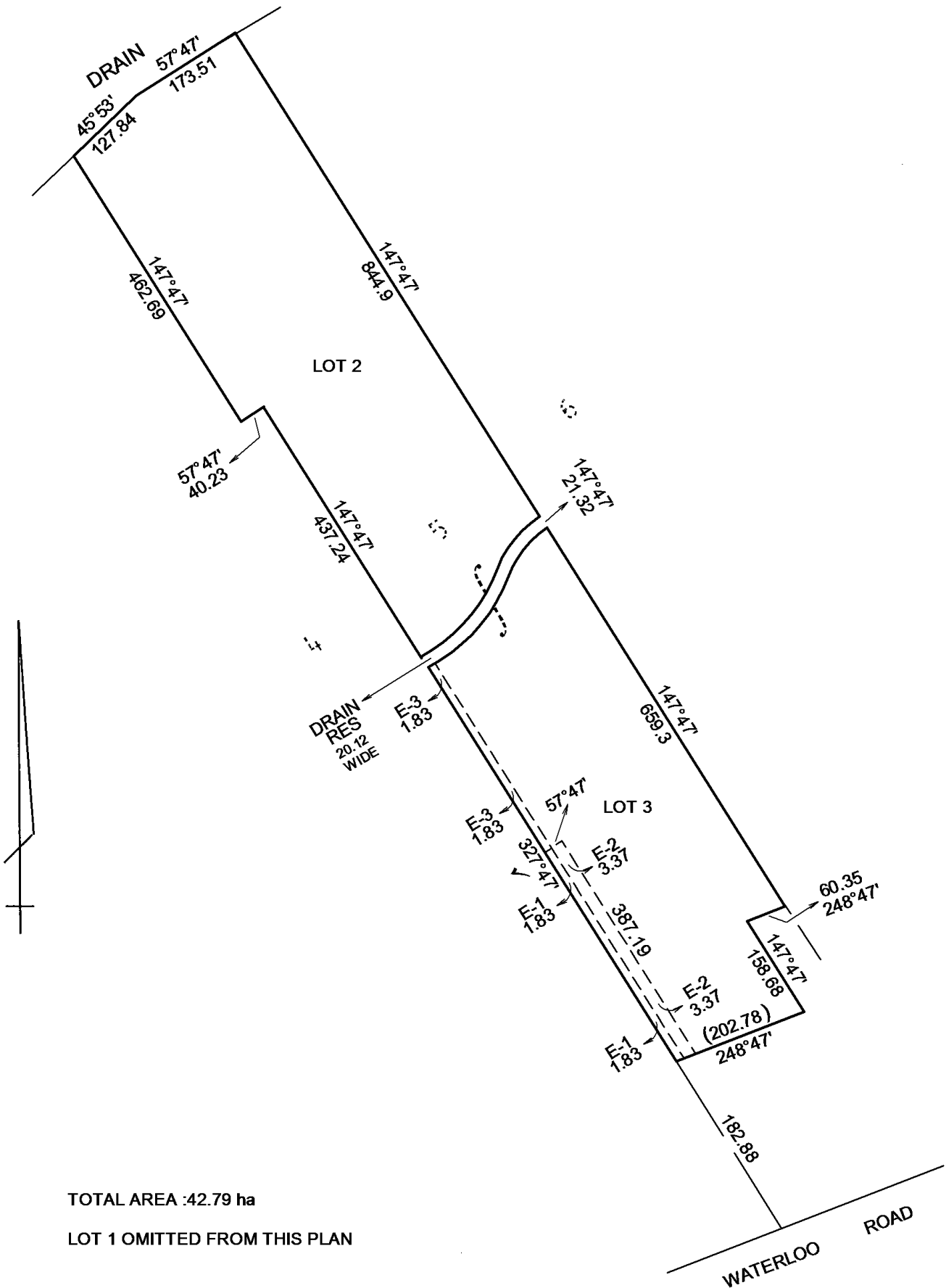
Table Error! No text of specified style in document.-1 Recommended Planting List (revised) – Waterloo and Mitchell Grove

Species Name	Common Name	Suggested Planting Density/ha	Site 1 – Waterloo (0.77ha)	Site 2 – Mitchell Grove (0.20ha)	Site 3 – Mitchell Grove (0.19ha)
<i>Eucalyptus ovata</i>	Swamp Gum	50	20	0	0
<i>Eucalyptus strzeleckii</i>	Strzelecki Gum		19	0	0
<i>Leptospermum continentale</i>	Prickly Tea-tree	400	83	22	21
<i>Leptospermum lanigerum</i>	Woolly Tea-tree		82	22	21
<i>Melaleuca ericifolia</i>	Swamp Paperbark		82	22	21
<i>Bursaria spinosa</i>	Sweet Bursaria		82	22	21
<i>Coprosma quadrifida</i>	Prickly Currant-bush		82	22	21
<i>Pultenaea gunnii</i>	Golden Bush-pea	100	60	16	16
<i>Pomaderris elliptica</i>	Smooth Pomaderris		59	16	15
<i>Lomandra longifolia</i>	Spiny-headed Mat-rush	1000	175	47	45
<i>Dianella revoluta</i> s.l.	Black-anther Flax-lily		175	47	44
<i>Poa labillardieri</i>	Common Tussock-grass		175	47	44
<i>Gahnia radula</i>	Thatch Saw-sedge		175	46	44
<i>Juncus procerus</i>	Tall Rush		175	46	44
Total		1500	1444	375	357

TITLE PLAN	EDITION 2	TP 836437J			
<p>Location of Land</p> <p>Parish : YARRAGON Township : - Crown Allotment: 5 (PT) Section : F</p> <p>Base record : DCMB Last Plan Reference : Derived From : VOL. 9069 FOL. 017</p> <p>Depth Limitation : 15.24 METRES</p>	<p style="text-align: center;">Notations</p> <p style="text-align: center;">THE DRAIN IS NOT INCLUDED IN THE FEE OF THE TITLE</p> <p style="text-align: center;">ANY REFERENCE TO MAP IN THE TEXT MEANS THE DIAGRAM SHOWN ON THIS TITLE PLAN</p>				
<p style="text-align: center;">Description of Land/ Easement Information</p> <p>ENCUMBRANCES THE RESERVATION SET OUT IN CROWN GRANT VOL. 4478 FOL. 505</p> <p>AS TO THE LAND MARKED E-1 & E-3 THE DRAINAGE EASEMENTS (IF ANY) EXISTING OVER THE SAME BY VIRTUE OF SECTION 98 OF THE TRANSFER OF LAND ACT VIDE L.P. 47119</p> <p>AS TO THE LAND MARKED E-1 & E-2 THE SEWERAGE EASEMENT TO MOE WATER BOARD CREATED BY INSTRUMENT R349198M</p>		<p>THIS PLAN HAS BEEN PREPARED BY LAND REGISTRY, LAND VICTORIA FOR TITLE DIAGRAM PURPOSES</p> <p>COMPILED: Date 1/07/05 VERIFIED: A. DALLAS <i>Assistant Registrar of Titles</i></p>			
<p style="font-size: 2em; margin-top: 100px;">FOR DIAGRAM SEE SHEET 2</p>					
<table border="1" style="margin: auto; border-collapse: collapse;"> <tr> <td style="text-align: center; padding: 5px;">TABLE OF PARCEL IDENTIFIERS</td> </tr> <tr> <td style="text-align: center; padding: 5px; font-size: 0.8em;">WARNING: Where multiple parcels are referred to or shown on the Title Plan this does Not imply separately disposable parcels under Section 8A of the Sale of Land Act 1962</td> </tr> <tr> <td style="text-align: center; padding: 5px; font-size: 0.8em;">LOT 1 = C.A. 5 (PT) SECTION F</td> </tr> </table>			TABLE OF PARCEL IDENTIFIERS	WARNING: Where multiple parcels are referred to or shown on the Title Plan this does Not imply separately disposable parcels under Section 8A of the Sale of Land Act 1962	LOT 1 = C.A. 5 (PT) SECTION F
TABLE OF PARCEL IDENTIFIERS					
WARNING: Where multiple parcels are referred to or shown on the Title Plan this does Not imply separately disposable parcels under Section 8A of the Sale of Land Act 1962					
LOT 1 = C.A. 5 (PT) SECTION F					
LENGTHS ARE IN METRES	Metres = 0.3048 x Feet Metres = 0.201168 x Links	Sheet 1 of 2 Sheets			

TITLE PLAN

TP 836437J



TOTAL AREA :42.79 ha

LOT 1 OMITTED FROM THIS PLAN

LENGTHS ARE IN METRES

Metres = 0.3048 x Feet
Metres = 0.201168 x Links

Sheet 2 of 2 Sheets

VOLUME 09069 FOLIO 016

Security no : 124045470540D
Produced 16/04/2013 10:18 am

LAND DESCRIPTION

Lot 1 on Title Plan 674252W.
PARENT TITLE Volume 07085 Folio 807
Created by instrument F251359 27/03/1974

REGISTERED PROPRIETOR

Estate Fee Simple
Sole Proprietor
WATERLOO GRAZING PTY LTD of 9 BURKE STREET WARRAGUL VIC 3820
AH236385C 20/05/2010

ENCUMBRANCES, CAVEATS AND NOTICES

MORTGAGE AJ674496E 18/05/2012
NATIONAL AUSTRALIA BANK LTD

Any encumbrances created by Section 98 Transfer of Land Act 1958 or Section 24 Subdivision Act 1988 and any other encumbrances shown or entered on the plan set out under DIAGRAM LOCATION below.

DIAGRAM LOCATION

SEE TP674252W FOR FURTHER DETAILS AND BOUNDARIES

ACTIVITY IN THE LAST 125 DAYS

NIL

-----END OF REGISTER SEARCH STATEMENT-----

Additional information: (not part of the Register Search Statement)

Street Address: 110-120 WATERLOO ROAD MOE VIC 3825

DOCUMENT END

Imaged Document Cover Sheet

The document following this cover sheet is an imaged document supplied by LANDATA®, Land Victoria.

Document Type	plan
Document Identification	TP674252W
Number of Pages (excluding this cover sheet)	1
Document Assembled	16/04/2013 10:20

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The document is invalid if this cover sheet is removed or altered.

TITLE PLAN	EDITION 1	TP 674252W
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Location of Land

Parish: YARRAGON
 Township:
 Section: F
 Crown Allotment: 5(PT)
 Crown Portion:

Last Plan Reference: LP 47119
 Derived From: VOL 9069 FOL 016
 Depth Limitation: 15.24 m

Notations

ANY REFERENCE TO MAP IN THE TEXT MEANS THE DIAGRAM SHOWN ON THIS TITLE PLAN

Description of Land / Easement Information

ENCUMBRANCES REFERRED TO

THE RESERVATION set out in Crown Grant - Vol.4478 Fol.505 -

As to the land coloured blue -

THE EASEMENTS(if any) existing over - -- the same by virtue of Section 98 of - -- the Transfer of Land Act -

THIS PLAN HAS BEEN PREPARED FOR THE LAND REGISTRY, LAND VICTORIA, FOR TITLE DIAGRAM PURPOSES AS PART OF THE LAND TITLES AUTOMATION PROJECT

COMPILED: 01/11/2000
 VERIFIED: EWA

COLOUR CODE
 BL = BLUE

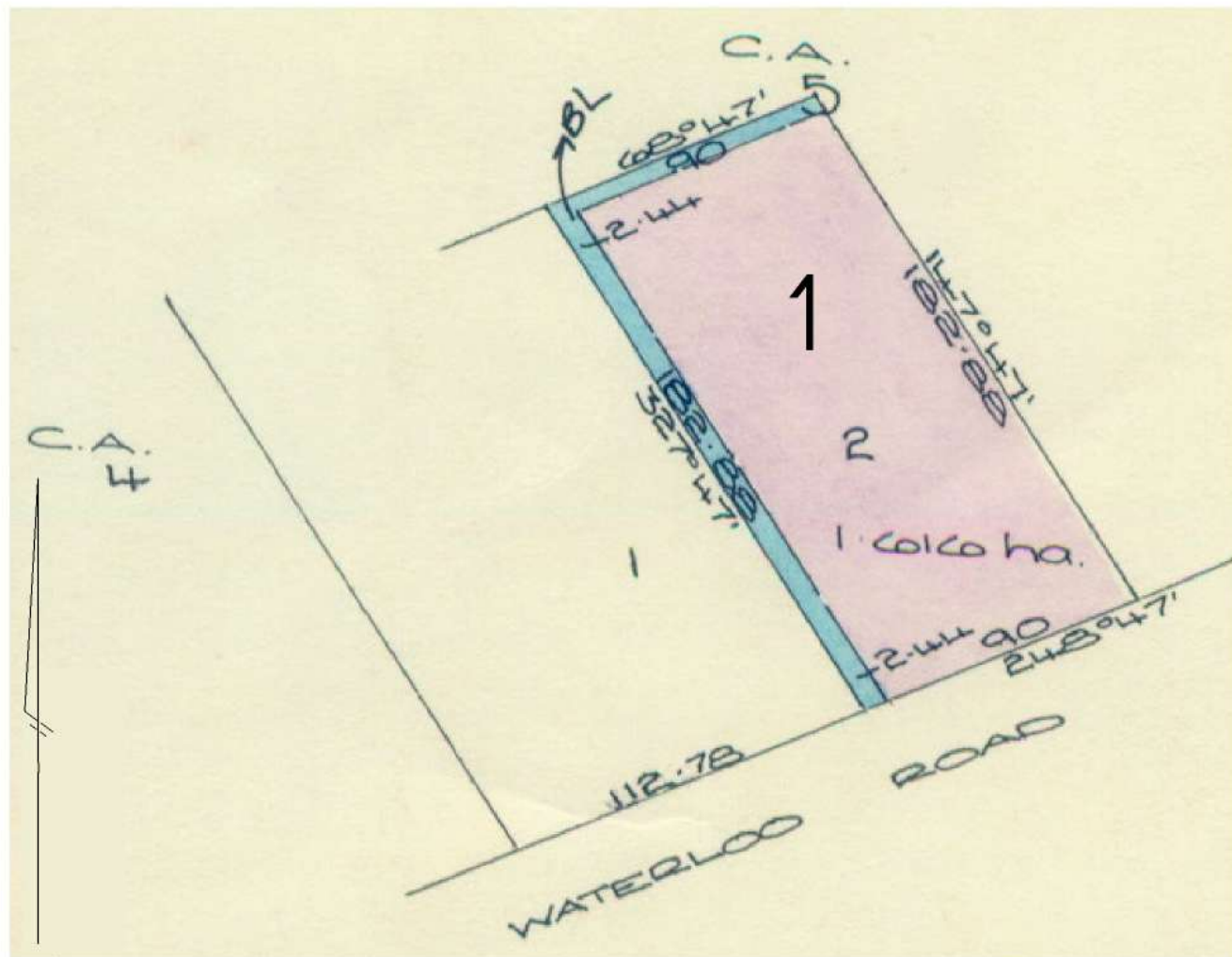


TABLE OF PARCEL IDENTIFIERS	
WARNING: Where multiple parcels are referred to or shown on this Title Plan this does not imply separately disposable parcels under Section 8A of the Sale of Land Act 1962	
PARCEL 1 = LOT 2 ON LP 47119	

VOLUME 08636 FOLIO 314

Security no : 124046962387F
Produced 15/08/2013 12:57 pm

LAND DESCRIPTION

Lot 1 on Title Plan 822397W.
PARENT TITLE Volume 03694 Folio 765
Created by instrument C011832 15/08/1964

REGISTERED PROPRIETOR

Estate Fee Simple
Sole Proprietor
JUNE THELMA TUPICOFF of 4 KIRKDALE ROAD CHAPEL HILL QLD 4069 Legal Personal
Representative(s) of HARRY HARRINGTON deceased
AJ593613D 11/04/2012

ENCUMBRANCES, CAVEATS AND NOTICES

Any encumbrances created by Section 98 Transfer of Land Act 1958 or Section 24 Subdivision Act 1988 and any other encumbrances shown or entered on the plan set out under DIAGRAM LOCATION below.

DIAGRAM LOCATION

SEE TP822397W FOR FURTHER DETAILS AND BOUNDARIES

ACTIVITY IN THE LAST 125 DAYS

NIL

-----END OF REGISTER SEARCH STATEMENT-----

Additional information: (not part of the Register Search Statement)

Street Address: DESMOND STREET MOE VIC 3825


DOCUMENT END

Application by Legal Personal Representative

Section 49 Transfer of Land Act 1958

AJ593613D

11/04/2012 \$89 49



indexes.

Lodged by

Name: VERHOEVEN & CURTAIN

Phone: 03 51277266

Address: SUITE 4, 46 HAIGH STREET, MOE

Reference: MTC:JS 159573

Customer Code: 0818T

The applicant applies as legal personal representative of the deceased registered proprietor to be registered as the proprietor of the estate and interest of the deceased in the land described.

Land: *(volume and folio and if applicable mortgage, charge or lease)*

Certificate of Title Volume 9354 Folio 066, Certificate of Title Volume 8288 Folio 357, Certificate of Title Volume 8636 Folio 314 and Certificate of Title Volume 8777 Folio 474.

Applicant: *(full name and address including postcode)*

JUNE THELMA TUPICOFF of 4 Kirkdale Road, Chapel Hill, Queensland, 4069.

Representative capacity:

As executor of the estate of HARRY HARRINGTON deceased.

Deceased Registered Proprietor: *(full name)*

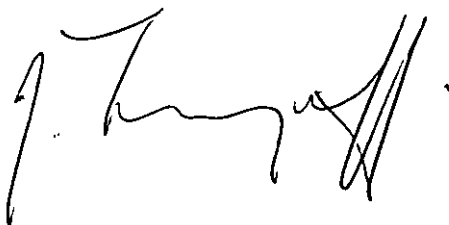
HARRY HARRINGTON

Date of death of Registered Proprietor:

20th day of May, 2011.

Dated: 25.3.2012

Signature of Applicant



30800812A

Order to Register

APR

Please register and issue the Certificate of Title to

Page 1 of 1

Signed

Customer Code

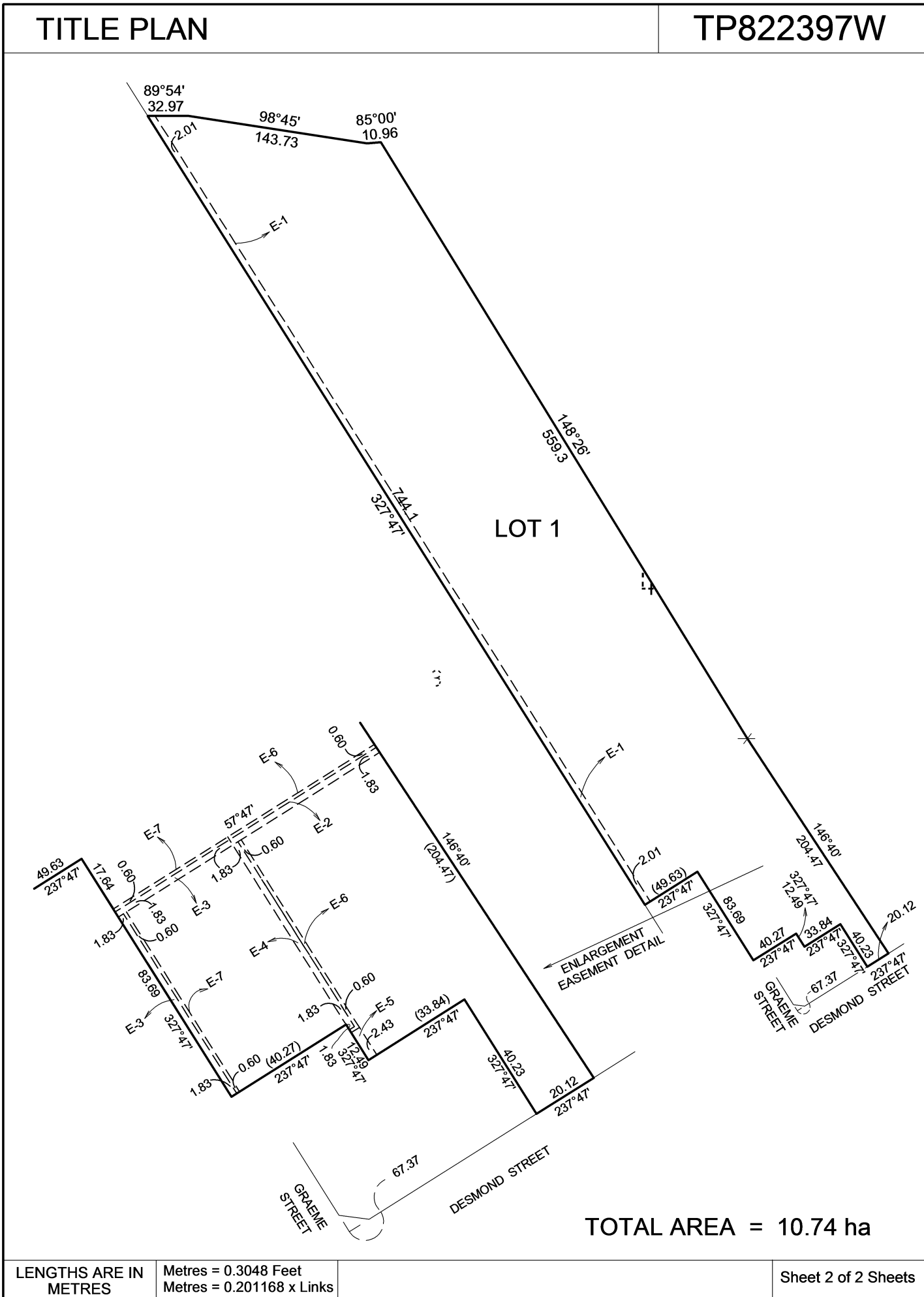
THE BACK OF THIS FORM MUST NOT BE USED

Land Victoria, 570 Bourke Street, Melbourne, 3000, Phone 8636-2010

TITLE PLAN	EDITION 1	TP822397W			
<p>LOCATION OF LAND</p> <p>Parish: YARRAGON Township: Section: F Crown Allotment: 4 (PT) Crown Portion:</p> <p>Last Plan Reference:- LP 45109 & 47057 Derived From: VOL. 8636 FOL. 314 Depth Limitation: 15.24 METRES BELOW THE SURFACE</p>	<p>Notations</p> <p>ANY REFERENCE TO MAP IN THE TEXT MEANS THE DIAGRAM SHOWN ON THIS TITLE PLAN</p>				
<p style="text-align: center;">Description of Land/Easement Information</p> <p>THE LAND MARKED E-2, E-3, & E-4 BEING LAND APPROPRIATED OR SET APART FOR EASEMENTS OF DRAINAGE ON LP 45109 THE LAND MARKED E-2, E-4, & E-5 BEING LAND APPROPRIATED OR SET APART FOR EASEMENTS OF DRAINAGE ON LP 47057 TOGETHER WITH A RIGHT OF CARRIAGE WAY OVER THE ROADS COLOURED BROWN ON LP 22160</p> <p>ENCUMBRANCES AS TO THE LAND MARKED E-1 THE DRAINAGE & SEWERAGE EASEMENT RESERVED BY TRANSFER C11832</p> <p>AS TO THE LAND MARKED E-2, E-3, E-4, E-5 & E-6 THE EASEMENTS (IF ANY) EXISTING OVER THE SAME BY VIRTUE OF SECTION 98 OF THE TRANSFER OF LAND ACT</p> <p>AS TO THE LAND MARKED E-2 & E-3 THE DRAINAGE EASEMENT CREATED BY TRANSFER A462886</p> <p>AS TO THE LAND MARKED E-7 & E-6 THE DRAINAGE EASEMENT RESERVED BY TRANSFER C11832</p>		<p>THIS PLAN HAS BEEN PREPARED BY LAND REGISTRY, LAND VICTORIA FOR TITLE DIAGRAM PURPOSES</p> <p>COMPILED: Date: 5 - 1 - 2007 VERIFIED: A. DALLAS <i>Assistant Registrar of Titles</i></p>			
FOR DIAGRAM SEE SHEET 2					
<table border="1" style="margin: auto; border-collapse: collapse;"> <tr> <td style="text-align: center; padding: 5px;">TABLE OF PARCEL IDENTIFIERS</td> </tr> <tr> <td style="text-align: center; padding: 5px; font-size: 0.8em;"> WARNING: Where multiple parcels are referred to or shown on this Title Plan this does not imply separately disposable parcels under Section 8A of the Sale of Land Act 1962 </td> </tr> <tr> <td style="text-align: center; padding: 5px; font-size: 1.2em;"> LOT 1 = CROWN ALLOTMENT 4 (PT) SECTION F </td> </tr> </table>			TABLE OF PARCEL IDENTIFIERS	WARNING: Where multiple parcels are referred to or shown on this Title Plan this does not imply separately disposable parcels under Section 8A of the Sale of Land Act 1962	LOT 1 = CROWN ALLOTMENT 4 (PT) SECTION F
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<p>LENGTHS ARE IN METRES</p>	<p>Metres = 0.3048 Feet Metres = 0.201168 x Links</p>	<p>Sheet 1 of 2 sheets</p>			

TITLE PLAN

TP822397W



LENGTHS ARE IN METRES

Metres = 0.3048 Feet
Metres = 0.201168 x Links

Sheet 2 of 2 Sheets

VOLUME 08777 FOLIO 474

Security no : 124046962416Y
Produced 15/08/2013 12:57 pm

LAND DESCRIPTION

Lot 1 on Plan of Subdivision 067416.
PARENT TITLE Volume 03694 Folio 765
Created by instrument D369492 22/04/1969

REGISTERED PROPRIETOR

Estate Fee Simple
Sole Proprietor

JUNE THELMA TUPICOFF of 4 KIRKDALE ROAD CHAPEL HILL QLD 4069 Legal Personal
Representative(s) of HARRY HARRINGTON deceased
AJ593613D 11/04/2012

ENCUMBRANCES, CAVEATS AND NOTICES

Any encumbrances created by Section 98 Transfer of Land Act 1958 or Section 24 Subdivision Act 1988 and any other encumbrances shown or entered on the plan or imaged folio set out under DIAGRAM LOCATION below.

DIAGRAM LOCATION

SEE LP067416 FOR FURTHER DETAILS AND BOUNDARIES

ACTIVITY IN THE LAST 125 DAYS

NIL

-----END OF REGISTER SEARCH STATEMENT-----

Additional information: (not part of the Register Search Statement)

Street Address: DESMOND STREET MOE VIC 3825

DOCUMENT END

Application by Legal Personal Representative

Section 49 Transfer of Land Act 1958

AJ593613D

11/04/2012 \$89 49



indexes.

Lodged by

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Phone: 03 51277266

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Applicant: *(full name and address including postcode)*

JUNE THELMA TUPICOFF of 4 Kirkdale Road, Chapel Hill, Queensland, 4069.

Representative capacity:

As executor of the estate of HARRY HARRINGTON deceased.

Deceased Registered Proprietor: *(full name)*

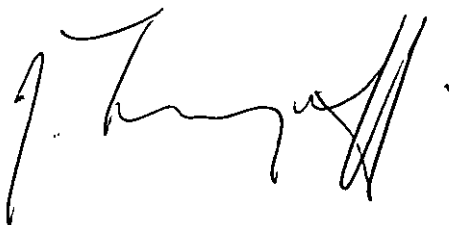
HARRY HARRINGTON

Date of death of Registered Proprietor:

20th day of May, 2011.

Dated: 25.3.2012

Signature of Applicant



30800812A

Order to Register

APR

Please register and issue the Certificate of Title to

Page 1 of 1

Signed

Customer Code

THE BACK OF THIS FORM MUST NOT BE USED

Land Victoria, 570 Bourke Street, Melbourne, 3000, Phone 8636-2010

LP67416
EDITION 1
APPROVED 16/3/65

PLAN OF SUBDIVISION OF
PART OF CROWN ALLOTMENT 4
SECTION F
PARISH OF YARRAGON
SCALE OF CHAINS



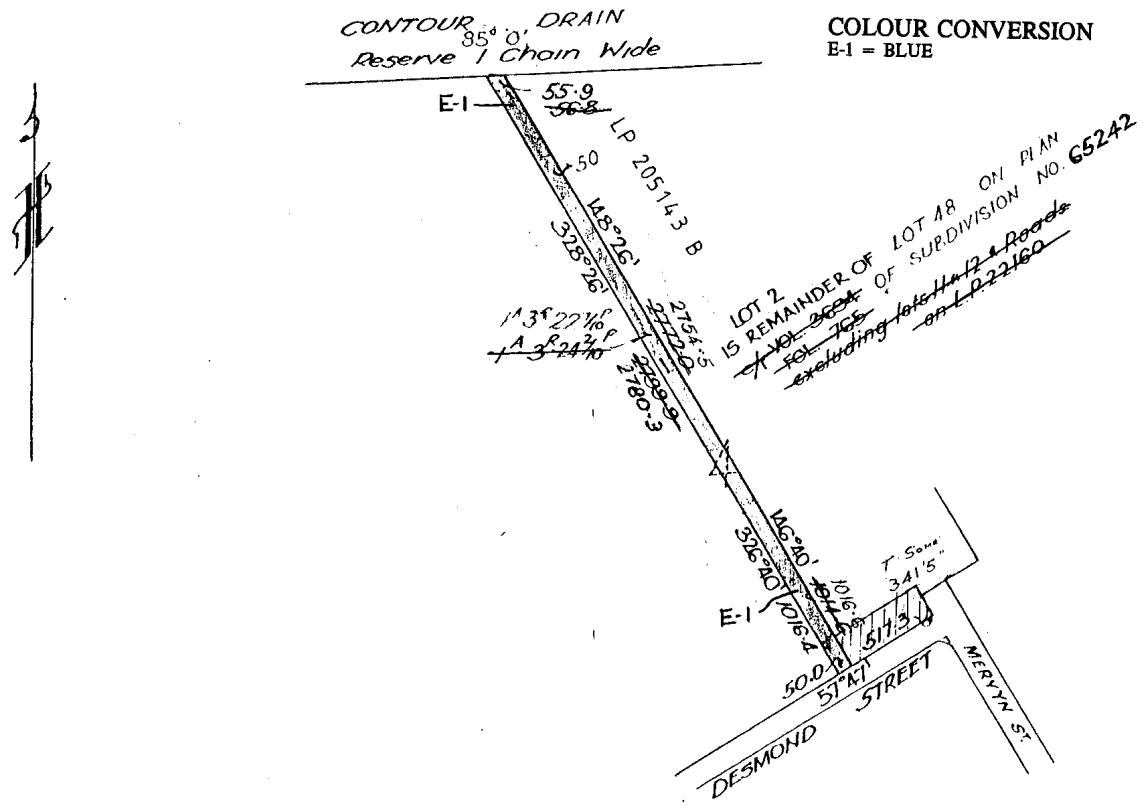
CHART No 6

APPROPRIATIONS

LAND COLOURED BLUE IS APPROPRIATED
AND SET APART AS A DRAINAGE
EASEMENT

REF. N° 1466

V. 3694 F. 765



Plan amended vide A.O. 47088
17.9.66
R Mc Cutchan

AGENT OF COUNCIL

SURVEYORS CERTIFICATE

[Handwritten signature]
J. B. Gregory
at 0/0 Sydney

I certify that this plan has been made
by me and accords with Title and is
mathematically correct

[Handwritten signature]
Licensed Sur
3-11-64

CERTIFICATE OF TITLE V. 3694 F. 765

LODGED BY M. DAVINE

DEALING No. _____ DATE 22. 12. 64.

DECLARED BY G. A. BROWNE 3. 11. 64.

CONSENT OF COUNCIL CITY OF

MOE

APPROVED 3. 12. 64.

~~PLAN MAY BE LODGED~~ DATE 16. 3. 65 TIME 1.30

THE LAND COLOURED BLUE
IS APPROPRIATED OR SET
APART FOR EASEMENTS OF
DRAINAGE.

LP 67, 416
BACK OF SHEET 1

VOLUME 09317 FOLIO 214

Security no : 124046962471P
Produced 15/08/2013 12:59 pm

LAND DESCRIPTION

Land in Plan of Consolidation 106601.

PARENT TITLES :

Volume 08257 Folio 835 to Volume 08257 Folio 836

Volume 08858 Folio 323

Volume 08924 Folio 824 to Volume 08924 Folio 825

Created by instrument CP106601 05/04/1979

REGISTERED PROPRIETOR

Estate Fee Simple

Sole Proprietor

VICTORIA SPINNING PTY LTD of 2060 HUME HIGHWAY CAMPBELLFIELD VIC 3061
AE082568Y 23/12/2005

ENCUMBRANCES, CAVEATS AND NOTICES

Any encumbrances created by Section 98 Transfer of Land Act 1958 or Section 24 Subdivision Act 1988 and any other encumbrances shown or entered on the plan or imaged folio set out under DIAGRAM LOCATION below.

DIAGRAM LOCATION

SEE TP139653P FOR FURTHER DETAILS AND BOUNDARIES

ACTIVITY IN THE LAST 125 DAYS

NIL

-----END OF REGISTER SEARCH STATEMENT-----

Additional information: (not part of the Register Search Statement)

Street Address: 98-108 WATERLOO ROAD MOE VIC 3825

DOCUMENT END

MW 23-12-05

TRANSFER OF LAND

Section 45 Transfer of Land Act 1958

Lodged by:



AE082568Y

23/12/2005 \$1323 45



Name: KLIGER PARTNERS
 Phone: (03) 8600 8888
 Address: Level 2, 280 Queen Street
 Melbourne
 Ref: GK:GK:40702
 Customer Code: 1075K

SLO

MADE AVAILABLE/CHANGE CONTROL
 Land Titles Office Use Only

The transferor at the direction of the directing party (if any) transfers to the transferee the estate and interest specified in the land described for the consideration expressed and subject to the encumbrances affecting the land including any created by dealings lodged for registration before the lodging of this transfer.

Land: (volume and folio reference)
 Volume 9317 Folio 214

Estate and Interest: (e.g. "all my estate in fee simple")
 All its estate and interest in fee simple

Consideration:
 \$675,000

over

Transferor: (full name)
 Rocklea Spinning Mills Pty Ltd ACN 000 070 824 (Receivers and Managers Appointed) (Administrators Appointed)

Transferee: (full name and address including postcode)
 Victoria Spinning Pty Ltd ACN 108 073 749 of 2060 Hume Highway, Campbellfield, 3061

Directing Party: (full name)
 Not applicable

Dated: 15 NOVEMBER 2004

Execution and attestation

See over page for execution by the parties

Approval No: 388039A

T1

ORDER TO REGISTER
 Please register and issue title to



Kliger Partners

MW

23 DEC 2005

Signed Cust. Code

Original Transfer of Land
 STAMP DUTY USE ONLY
 Stamped with: \$148,827.00
 Trn:1847434 15-NOV-2004
 SRD Victoria Duty, RXXO

THE BACK OF THIS FORM MUST NOT BE USED

ANNEXURE PAGE

Transfer of Land Act 1958

This is page 2 of *Approved Form T1* dated 2004 between ROCKLEA SPINNING MILLS PTY LTD, ACN 000 070 824 (Receivers and Managers Appointed) (Administrators Appointed) as Transferor/s and Victoria Spinning Pty Ltd, ACN 108 073 749 as Transferee

Signatures of the parties

Panel Heading

EXECUTED by VICTORIA SPINNING PTY)
LTD in accordance with section 127 of)
the *Corporations Act*:)

.....
Sole Director and Sole Company Secretary
(Signature)

PEI GUAN SONS.....

Full name (please print)

.....
43-45 TULLAMARINE PARK ROAD, TULLAMARINE
Usual Address (please print)

VIC - 3043

EXECUTED by ROCKLEA SPINNING)
MILLS PTY LTD (Receivers and)
Managers Appointed) (Administrators)
Appointed) by being signed sealed and)
delivered by its authorised representative)
in the presence of:)

.....
Signature of Witness
Name (Please Print)

.....
Signature of Martin Russell Brown
(Receiver and Manager)

#gk_40702_5

AE082568Y

23/12/2005 \$1323 45



Approval No: 388039A

A1



Kliger Partners

1. If there is insufficient space to accommodate the required information in a panel of the *Approved Form* insert the words "See Annexure Page 2" (or as the case may be) and enter all the information on the Annexure Page under the appropriate panel heading. **THE BACK OF THE ANNEXURE PAGE IS NOT TO BE USED**
2. If multiple copies of a mortgage are lodged, original Annexure Pages must be attached to each.
3. The Annexure Pages must be properly identified and signed by the parties to the *Approved Form* to which it is annexed.
4. All pages must be attached together by being stapled in the top left corner.

TITLE PLAN	EDITION 1	TP 139653P
-------------------	------------------	-------------------

Location of Land

Parish: YARRAGON
 Township:
 Section:
 Crown Allotment:
 Crown Portion:

Last Plan Reference: CP106601
 Derived From: VOL 9317 FOL 214
 Depth Limitation: 15.24 m

Notations

ANY REFERENCE TO MAP IN THE TEXT MEANS THE DIAGRAM SHOWN ON THIS TITLE PLAN

Description of Land / Easement Information

ENCUMBRANCES REFERRED TO:
 As to the land coloured blue - - - - -
THE DRAINAGE EASEMENTS (if any) existing over the same by virtue of Section 98 of the Transfer of Land Act see Plan of Subdivision No.87450 - - - - -
 As to the land coloured blue-hatched- - - - -
THE DRAINAGE EASEMENT to the City of Moe created by Instrument G377258 - - - - -
 As to the land coloured blue-cross-hatched - - - - -
THE DRAINAGE AND SEWERAGE EASEMENT to the City of Moe created by the said- - - - -
 Instrument - - - - -
 As to the land coloured green- - - - -
THE DRAINAGE AND SEWERAGE EASEMENTS (if any) existing over the same by virtue of Section 98 of the Transfer of Land Act see Plan of Subdivision No.51252 - - - - -
 As to the land coloured green-hatched - - - - -
THE DRAINAGE AND SEWERAGE EASEMENTS (if any) existing over the same by virtue of Section 98 of the Transfer of Land Act see Plan of Subdivision No.25534 - - - - -
THE DRAINAGE EASEMENT created by Instrument D201812 - - - - -
 As to the land coloured green-cross-hatched - - - - -
THE DRAINAGE AND SEWERAGE EASEMENTS (if any) existing over the same by virtue of Section 98 of the Transfer of Land Act see Plans of Subdivision Nos.25534 and 51252 - - - - -

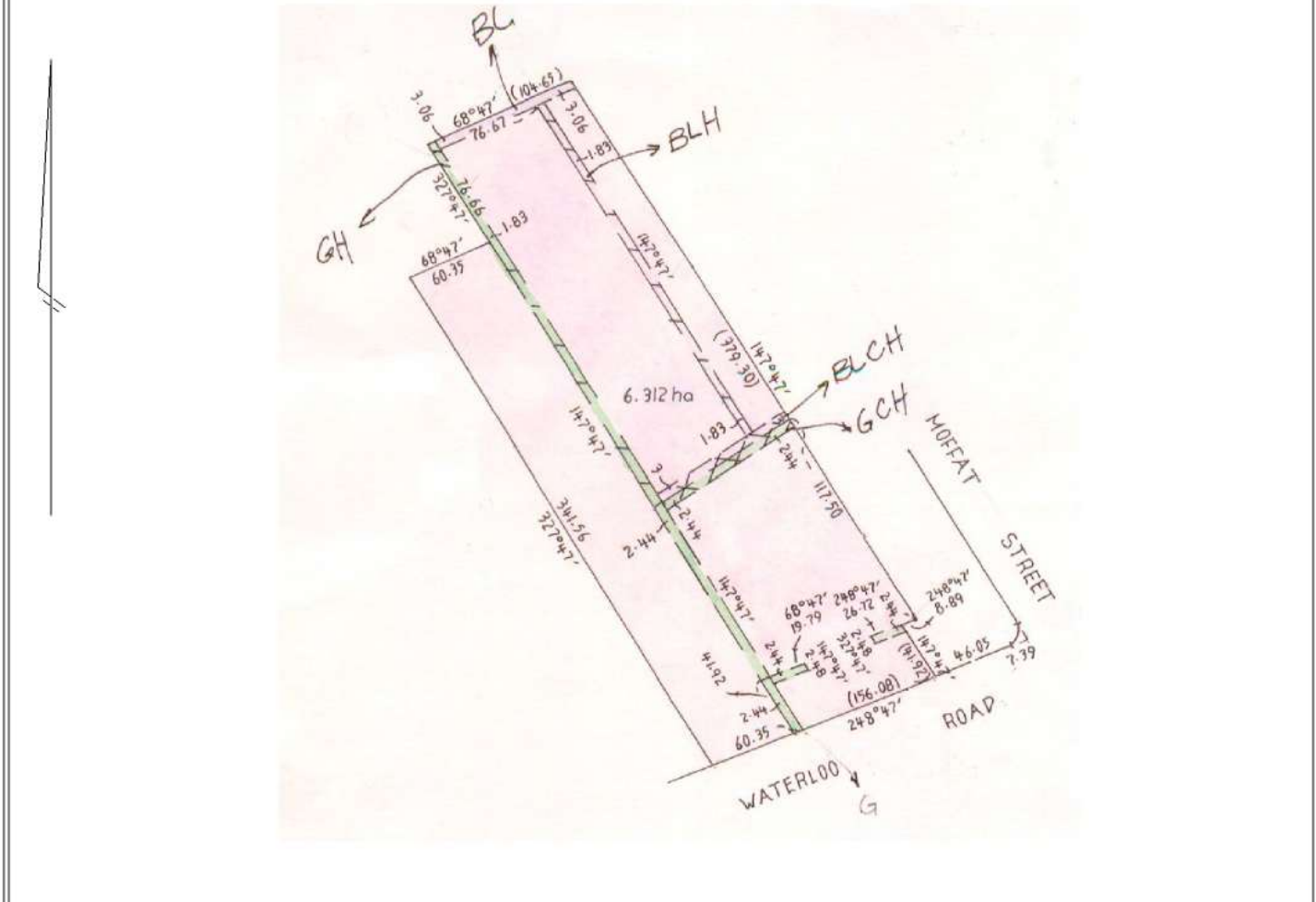
THIS PLAN HAS BEEN PREPARED FOR THE LAND REGISTRY, LAND VICTORIA, FOR TITLE DIAGRAM PURPOSES AS PART OF THE LAND TITLES AUTOMATION PROJECT

COMPILED: 07/06/2002
 VERIFIED: BC

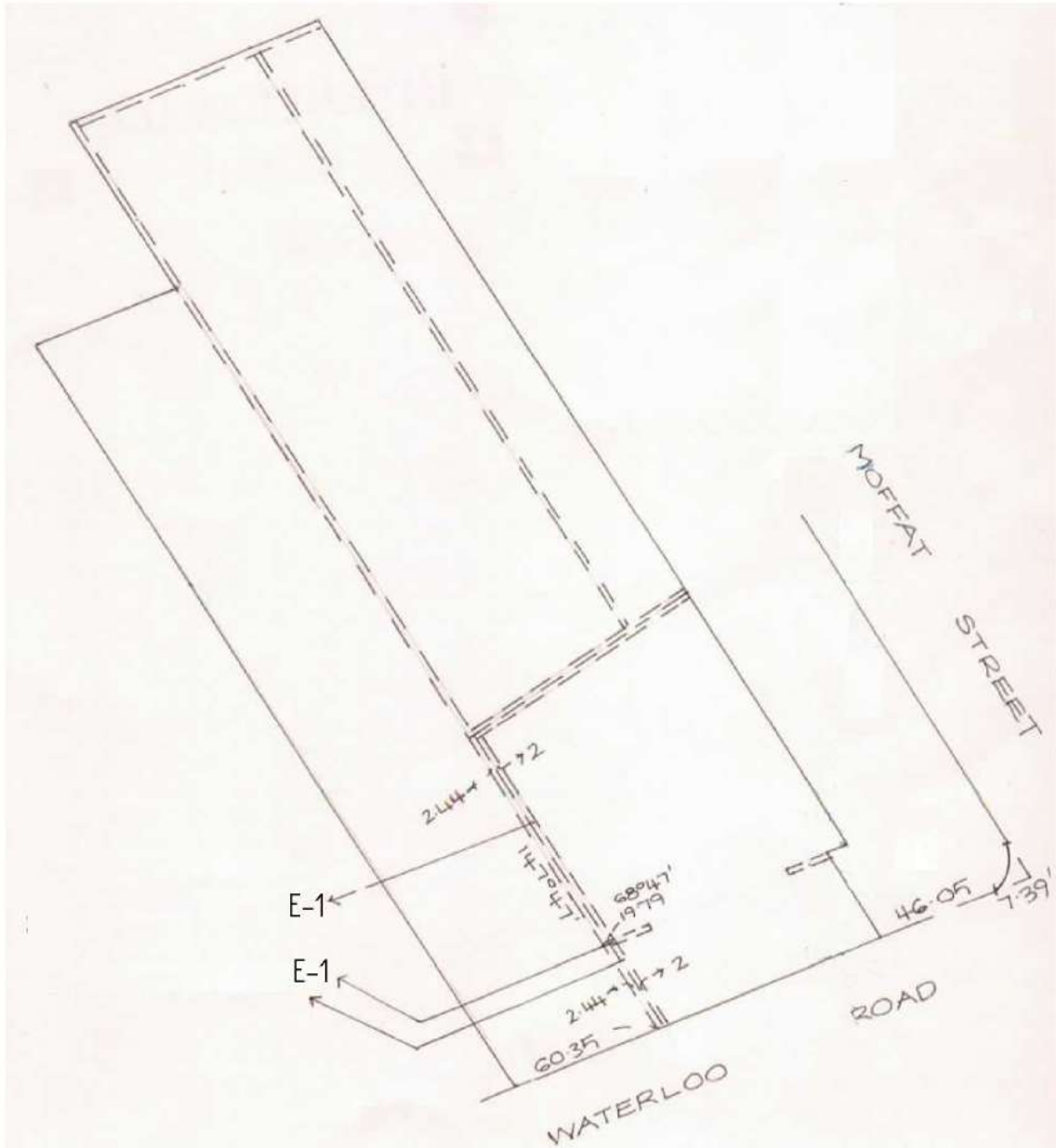
COLOUR CODE
 BL=BLUE
 G = GREEN
 H = HATCHED
 CH = CROSS HATCHED

E-1 = EASEMENT TO CITY OF MOE CREATED BY C/E N406597Y

SEE SHEET 2 FOR FURTHER EASEMENT DETAILS



LENGTHS ARE IN METRES	Metres = 0.3048 x Feet Metres = 0.201168 x Links	Sheet 1 of 2 sheets
-----------------------	---	---------------------



VOLUME 10903 FOLIO 191

Security no : 124046962446R
Produced 15/08/2013 12:58 pm

LAND DESCRIPTION

Lot A on Plan of Subdivision 208976J.
PARENT TITLE Volume 09779 Folio 910
Created by instrument AD909903R 30/09/2005

REGISTERED PROPRIETOR

Estate Fee Simple
Sole Proprietor
PLATANI PTY LTD of 305 CLAYTON ROAD CLAYTON VIC 3168
AD909905M 30/09/2005

ENCUMBRANCES, CAVEATS AND NOTICES

Any encumbrances created by Section 98 Transfer of Land Act 1958 or Section 24 Subdivision Act 1988 and any other encumbrances shown or entered on the plan or imaged folio set out under DIAGRAM LOCATION below.

DIAGRAM LOCATION

SEE LP208976J FOR FURTHER DETAILS AND BOUNDARIES

ACTIVITY IN THE LAST 125 DAYS

NIL

-----END OF REGISTER SEARCH STATEMENT-----

Additional information: (not part of the Register Search Statement)

Street Address: 19 MERVYN STREET MOE VIC 3825

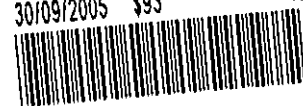
DOCUMENT END



AD909905M

30/09/2005 \$93

45



TRANSFER OF LAND

Section 45 Transfer of Land Act 1958

Lodged by:

Name: NAD

Phone:

Address:

Ref.:

Customer Code: 206Q

MADE AVAILABLE BY CHANGE CONTROL
Land Titles Office Use Only

The transferor at the direction of the directing party (if any) transfers to the transferee the estate and interest specified in the land described for the consideration expressed and subject to the encumbrances affecting the land including any created by dealings lodged for registration before the lodging of this transfer.

Land: (volume and folio reference)

Certificate of Title Volume: 9779 Folio: 910

Estate and Interest: (e.g. "all my estate in fee simple")

All our estate in fee simple

Consideration:

Entitlement in equity



DAD909905M-1-6

Transferor: (full name)

⁰⁶⁶
PLATANI PTY LTD (ACN 006 116 612) and DIMITRIOS BOUZIOTIS

Transferee: (full name and address including postcode)

⁰⁶⁶
PLATANI PTY LTD (ACN 006 116 612) whose registered office is 305 Clayton Road Clayton 3168

Directing Party: (full name)

Dated: 20 MAY 1997.

Execution and attestation:

Signed by Transferor in the presence of:

[Signature]

X [Signature]

The Common Seal of PLATANI PTY LTD was hereunto affixed in accordance with its Memorandum and Articles of Association in the presence of:

[Signature] Director

[Signature] Secretary



Approval No. 571027L

ORDER TO REGISTER

Please register and issue title to

T1

Signed

Cust. Code:

STAMP DUTY USE ONLY

Primary Instrument Land Transfer
Stamped with \$820.00
Doc ID 2013446, 11 Jul 1997
SRO Victoria Duty, PEVO



30-09-2005

THE BACK OF THIS FORM MUST NOT BE USED



PLAN OF SUBDIVISION	
COUNTY	BULN BULN
PARISH	YARRAGON (CHART NO.6)
PART OF CROWN ALLOTMENT 4	
SECTION F	
NUMBER OF SHEETS IN PLAN	: 2
NUMBER OF THIS SHEET	: 2
SCALE	ORIGINAL SCALE SHEET SIZE
1:500	1:500 A2
LENGTHS ARE IN METRES	
OFFICE USE ONLY	
LP 208976J	
VICTORIA	

APPROVED

APPROVED

OFFICE USE ONLY

SIGNATURE OF MUNICIPAL CLERK

SIGNATURE OF SURVEYOR

SURVEYOR REF.

294 (1)



Department of Environment and Primary Industries

23 August 2013

Henry Morrison
Property Manager
Latrobe City Council
PO Box 264
MORWELL VIC 3840

LATROBE CITY COUNCIL INFORMATION MANAGEMENT	
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71 Hotham Street
Traralgon Victoria 3844
Australia
Telephone: (03) 5172 2111
Facsimile: (03) 5172 2100
www.depi.vic.gov.au

DEPI Ref: 15L10.4907

Dear Henry

110 - 120 WATERLOO ROAD, MOE

The owner of Lot 2 on TP836437, Parish of Yarragon has recently contacted this office requesting to formalise their access over part of the contour drain as indicated on the attached plan. The contour drain is unreserved Crown land.

Lot 2 is presently accessed on ground via Lots 1 on TP674252 and 3 on TP836437. The owner is now proposing to subdivide Lots 1 and 3 and has requested access to Lot 2 via a new road reserve proposed within the subdivision and then across the contour drain (refer to the attached proposed subdivision plan for details).

Departmental investigations have revealed that Lot 2 already has legal road abuttal via the government road north of the property which is not constructed. The Crown is therefore not obliged to provide additional access.

It is noted that their legal road abuttal forms part of the Moe Drain. West Gippsland Catchment Management Authority has advised the owner of Lot 2 that they are not likely to approve the construction of a road in this area. If so, Lot 1 on TP116871 and Lot 1 on TP543506 may also be denied legal access.

As local municipal councils are principally responsible for providing access to freehold properties, we recommend Latrobe City Council, Baw Baw Shire Council and the West Gippsland Catchment Management Authority work in partnership to look at a strategic way for providing access to these properties under the provisions of the *Local Government Act 1989* and/or the *Subdivisions Act 1988*.

Should you have any questions, please contact me on 5172 2189.

Yours sincerely

Tamika Darragh

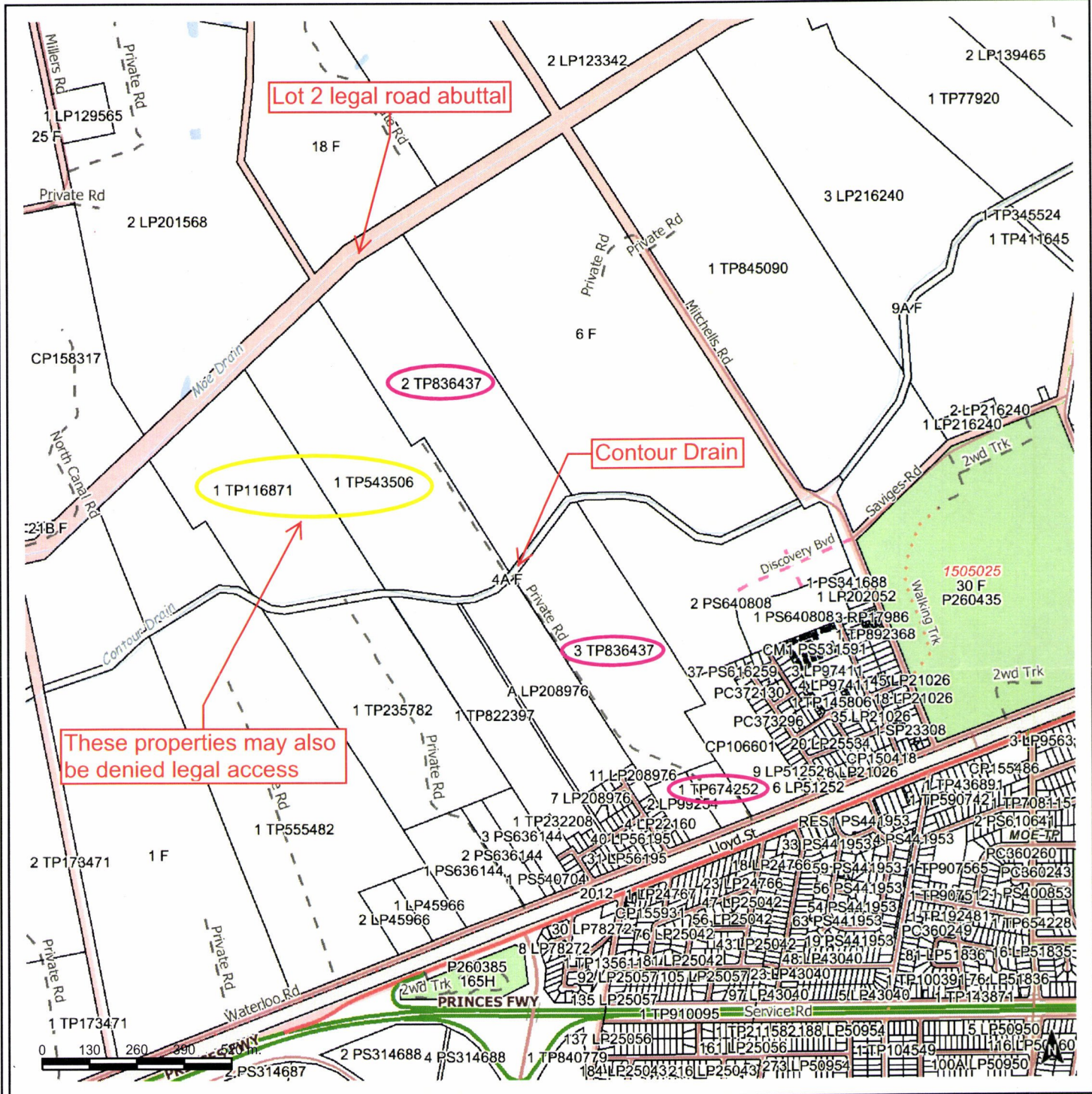
Tamika Darragh
Property Officer
Public Land Services

Cc: West Gippsland Catchment Management Authority

Privacy Statement

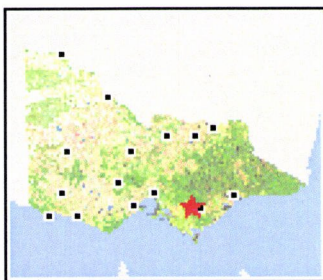
Any personal information about you or a third party in your correspondence will be protected under the provisions of the Information Privacy Act 2000. It will only be used or disclosed to appropriate Ministerial, Statutory Authority, or departmental staff in regard to the purpose for which it was provided, unless required or authorised by law. Enquiries about access to information about you held by the Department should be directed to the Manager Privacy, Department of Environment and Primary Industries, PO Box 500, East Melbourne, 8002





Legend

Map Scale 1:15,000



Locality Map

- PARISH BOUNDARY
- TOWNSHIP BOUNDARIES
- PARCEL
- CROWN PARCELS
- Crown land
- Wild land
- Government Road
- ROADS
- Freeway
- Highway
- Main Road
- Main Road (One-way)
- Collector
- Collector (One-way)
- Local
- Local (One-way)
- 2WD
- WATERCOURSES
- Government Roads
- Dual Status Government Road
- Government Road
- RESERVES_OIR
- RESERVES
- WATERBODIES
- Watercourse Area
- Perennial Waterbody
- Wetland Area

Disclaimer: This map is a snapshot generated from Victorian Government data. This material may be of assistance to you but the State of Victoria does not guarantee that the publication is without flaw of any kind or is wholly appropriate for your particular purposes and therefore disclaims all liability for error, loss or damage which may arise from reliance upon it. All persons accessing this information should make appropriate enquiries to assess the currency of the data.



Waterloo Road - Mail Merge area



22/8/2013

Victoria Spinning Pty Ltd

ABN 25 108 073 749

2040-2060 Hume Highway, Campbellfield, Victoria 3061

Tel: (03) 9308 0098 Fax: (03) 9308 6148

19 November 2013

Ms. Kiesha Jones
Urban Growth Project Officer
Latrobe City Council
PO Box 264
Morewell 3840
Victoria

Dear Ms.Jones

Sub: 98 Waterloo Road, Moe development plan

Thank you for the letter dated 13/11/13.

We refer to your draft waterloo road development plan indicating a concept layout for how the subject land will be developed for residential land use. We have noticed that you have considered only part of our land area for residential land use, leaving behind the balance area in a Industrial zone. Please note that area left behind will be surrounded on all three sides by residential zone.

We feel that our entire lot no. 98 Waterloo Road should be included in the residential zone.

Thanking you

Yours faithfully

For Victoria Spinning Pty Ltd



TC Chew
Company Secretary

LATROBE CITY COUNCIL INFORMATION MANAGEMENT			
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20 NOV 2013			
R/O:		Doc No:	
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PO Box 2431
Ascot QLD 4007

E office@marketmatch.com.au

T +617 3862 4308

F +617 3862 1915

W www.marketmatch.com.au

Market Match Property Pty Ltd ABN 551 2230 3057

10th December 2013

Ms Kiesha Jones,
Urban Growth Project Officer
Latrobe City Council
PO Box 264
Morwell, VIC, 3840

Dear Keisha,

Submission - Waterloo Rd Development Plan

We refer to our recent meeting in respect to **The draft Waterloo Road Development Plan** applying to land at Desmond Street, 19 Mervyn Street and 110-120 Waterloo Road, Moe lodged with Council on the 31st May 2013.

We act for the **Estate Harry Harrington (dec.)** owner of the land fronting Desmond Street affected by the Development Plan. Our client is in the most part supportive of the Development Plan but would like to submit a proposed change for the Council and proponents consideration. We believe the change being requested has little if any impact on the overall proposal. The Development Plan currently envisages no access off Desmond Street. Our client seeks to reserve the option of their land being developed in isolation and proposes the plan be amended so the land fronting Desmond Street (adjoining the proposed drainage Reserve) currently shown as a lot be changed to a road allowing access to the land at the rear off Desmond Street (see attached plan showing the area subject to the change highlighted).

We look forward to receiving your advices in due course as to whether our clients request can be accommodated.

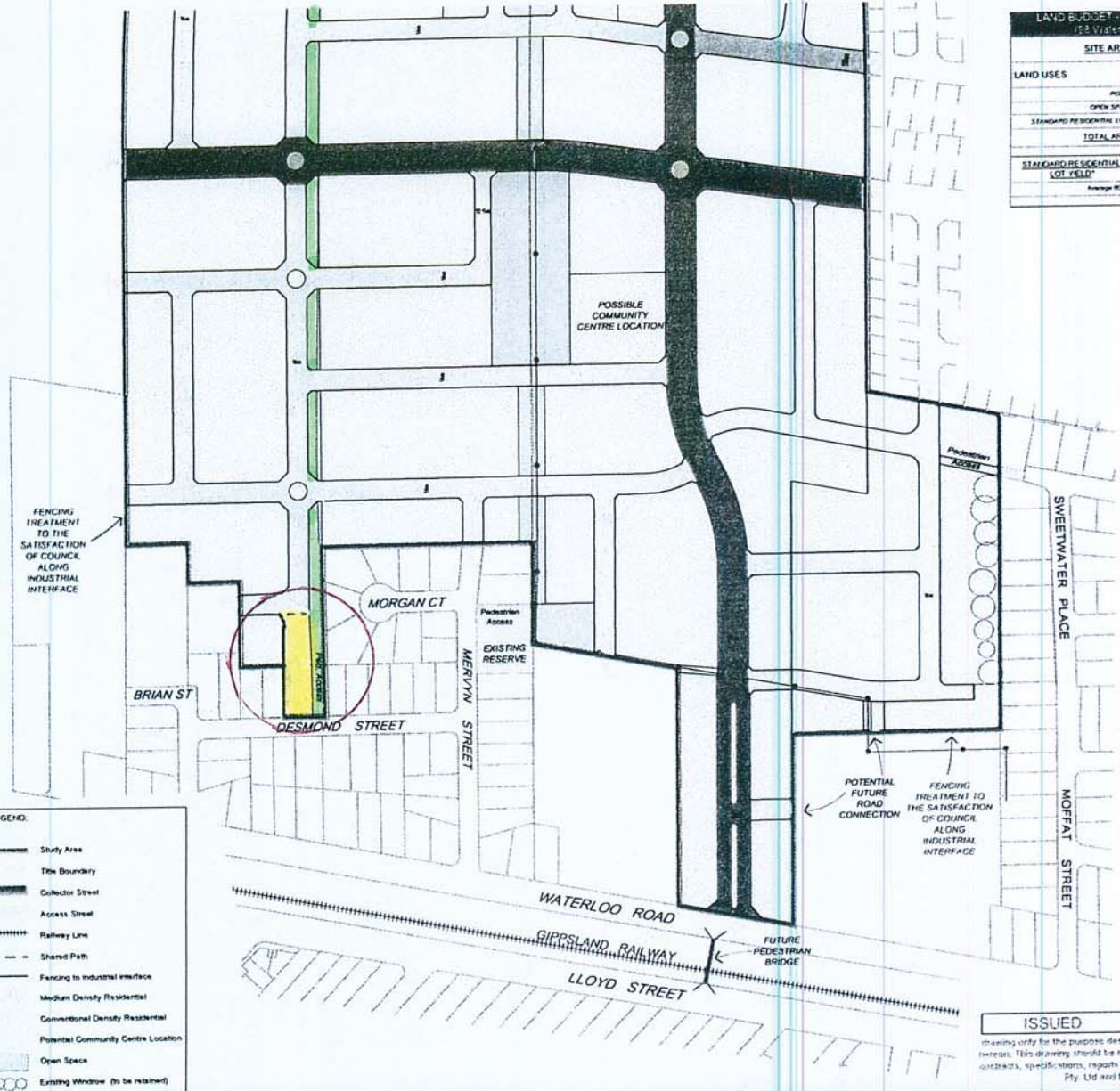
Yours Sincerely

A handwritten signature in blue ink, appearing to read 'Bernard Peel', written over the 'Yours Sincerely' text.

Bernard Peel

Attachment - sketch plan showing amendment

LAND BUDGET - 3 Eastern Parcel 108 Waterloo Road		
SITE AREA	3.70ha	
LAND USES		
ROADS	0.73ha	21.2%
OPEN SPACE	0.05ha	1.2%
STANDARD RESIDENTIAL LOTS	2.87ha	77.6%
TOTAL AREA	3.70ha	
STANDARD RESIDENTIAL LOT FIELD		
No. of Lots		
Average Size	48	



LEGEND:

- Study Area
- Title Boundary
- Collector Street
- Access Street
- Railway Line
- Shared Path
- Fencing to industrial interface
- Medium Density Residential
- Conventional Density Residential
- Potential Community Centre Location
- Open Space
- Existing Window (to be retained)



ISSUED

Miller & Merrigan & the NBA Group authorize the use of this drawing only for the purpose described by the status stamp of interest. This drawing should be read in conjunction with all relevant contracts, specifications, reports and drawings. © Miller & Merrigan Pty Ltd and the NBA Group

DEVELOPMENT PLAN



Moe Urban Growth Area
Waterloo Road, Moe
Latrobe City Council
16315DP2
Version 3

Miller & Merrigan Pty Ltd ACN 005 541 668
Metro 2/126 Merrindale Drive, Croydon 3136
Regional 156 Commercial, Morwell 3640
Mail PO Box 247 Croydon, Victoria 3136
T (03) 8720 9500 **F** (03) 8720 9501
Ausdoc DX 13608 Croydon
 armin@millarmerrigan.com.au
 millarmerrigan.com.au

NBA Group Pty Ltd ABN 194 748 327 43
Metro Level 1, 1 Queens Road, Melbourne, 3001
Regional 382 Raymond Street, Sale, 3850
Mail 156 Commercial Road, Morwell 3640
M 0418 402 240 **T** (03) 5143 0340
F (03) 5143 1244
 nick@nbagroup.com.au
 nbagroup.com.au

1 Moffat St,

Moe. 3825

7th Dec. '13.

To. Kieasha Jones,
Urban Growth Project Officer,

Dear Madam,

Re the draft Waterloo Rd. Development Plan; I have great concerns about GOOD farming land being turned into housing Estates. Below is a list of questions that should be seriously considered.

- ① Where's the future food supplies coming from? The thought of imported food with no quality controls horrifies me.
- ② Extra traffic along Waterloo Rd. will be a nightmare, the surface and poor drainage needs up-dating no matter what. The railway crossing is bad enough now with its delays - extra traffic would add to the problem.
- ③ Where's the extra water coming from? WHAT IF we experience another long, severe drought? It will happen again.
- ④ How will the extra sewerage, garbage and 'hard' rubbish be disposed of?
- ⑤ No provision for Medical needs (which are many) or will there be any extra hospital beds - Re-open part of the Moe hospital. People can't see a Dr now, always a waiting period.
- ⑥ Where will all the extra employment come from? Not enough jobs now. REMEMBER. in these times is POPULATE and PERISH!!! Quality of life and green pastures is better than small backyards and no public parks.

Yours faithfully,
Joyce Descombe.

Copy registered in DataMArk
 Index generated to records file

Comments/Queries Circulated to

R/O: _____ For No: _____

10 DEC 2011

RECEIVED

LATROBE CITY COUNCIL
INFORMATION MANAGEMENT



Our Ref: 10000-486555-493706
Telephone: 5149 1000
Fax: 5149 1082
Council Ref: WRDP

October 9th, 2013.

Kiesha Jones
Latrobe City Council
PO Box 264
MORWELL VIC 3840

Dear Kiesha

COMMENT ON PROPOSED DEVELOPMENT PLAN

Proposal: Waterloo Road Development Plan
Council: Latrobe City Council
Location: Waterloo Road, Moe

Thank you for providing CFA with an opportunity to comment on the proposed development plan prepared in response to Schedule 5 of Clause 43.04 of the Latrobe Planning Scheme.

CFA has assessed the proposed development plan and can provide the following advice:

- *The land is in the designated Bushfire Prone Area.*
- *All development should be at a level of construction of BAL12.5 according to AS3959-2009 and the design should be done to ensure that this is achievable for all lots. Ideally, the site assessment would assess the lots as BAL-LOW, but the Victorian prescription would require construction levels to be BAL12.5.*
- *There is no discussion on how the Development Plan responds to bushfire risk, or the likely form of bushfire attack. CFA asserts that the likely form of bushfire attack is direct attack from grassfire either to houses or to the elements around the housing.*
- *The vegetation reserve at the northern end of the subject area appears to create vegetation that is greater than 20 metres in depth. This will increase the classified vegetation from Grassland to different vegetation (with more onerous distances).*
- *Inclusions in the Development Plan would be:*
 - *Staging should be designed so that each stage is ending with a road between the developed land and the undeveloped land. This will ensure that development along the perimeter of each stage is able to meet a lower level of construction according to AS3959-2009.*
 - *Consideration of how the lots on the external sides of the subject land (east and west) where the subdivision abuts farming property will be able to construct with a level of construction of BAL12.5 according to AS3959-2009.*

District 9 HQ
24 Normanby Street
(PO Box 419) WARRAGUL, 3820
Tel. (03) 5623 1180
Fax (03) 5623 6061

Gippsland Region/District 10 HQ
Level 3, Port of Sale Business Centre
64-66 Foster Street
(PO Box 1212) SALE, 3850
Tel. (03) 5149 1000
Fax (03) 5149 1082

District 11 HQ
130 Macleod Street
BAIRNSDALE 3875
Tel. (03) 5152 3048
Fax (03) 5152 5007

- *Open space where vegetation is to be planted should meet a prescription that does not create classified vegetation for the purposes of AS3959-2009.*
- *Consideration that if a timber fence interfaces with the grassland, it will increase the radiant heat and potentially direct flame contact to the building, regardless of the level of construction.*

In conclusion CFA requests a change to the form of the proposed development plan to address the bushfire risk. A discussion of how the development plan responds to bushfire risk should be included.

If a panel hearing or advisory committee is held in relation to the proposed development plan, CFA requests that it be given the opportunity to be heard. However, CFA believes the applicant is able to resolve the above concerns without panel hearing.

If you wish to discuss this matter in more detail, please do not hesitate to contact the Fire Safety Team, on 5149 1000.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Deanne Smith', written in a cursive style.

Deanne Smith
Delegated Officer
CFA Gippsland Region



Department of Transport, Planning and Local Infrastructure

PO Box 158
Traralgon, Victoria 3844
Telephone: (03) 5172 2319
DX 219286

10 July 2013

Kiesha Jones
Urban Growth Project Officer
Latrobe City Council
PO Box 264
MORWELL 3840

File: Transport Planning
Latrobe City
Ref: DOC/13/140481

Dear Ms Jones

WATERLOO ROAD DEVELOPMENT PLAN

Thank you for your correspondence dated 17 June 2013 regarding the draft Waterloo Road Development Plan.

The Department provides the following comments with regard to transport matters:

- Cross sections for roads anticipated to accommodate buses should accord with the Department of Transport *Public Transport Guidelines for Land Use and Development 2008*.
- Pedestrian and cycle access to broader networks to be considered and accommodated.

I would be pleased to discuss these matters further as part of the additional detail required for the draft development plan. If you require further information please contact me on telephone 5172 2319.

Yours sincerely

HARVEY DINELLI
Transport Coordination Manager
Gippsland Region

10 17 2013

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11 JUL 2013	
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Department of Environment and Primary Industries

Our ref: SP447164
Your ref: WRDP-KJ

17 July 2013

Kiesha Jones
Urban Growth Project Officer
Latrobe City Council
PO Box 264
MORWELL VIC 3840

71 Hotham Street
Traralgon Victoria 3844
Telephone: (03) 5172 2111
Facsimile: (03) 5172 2100
ABN 90 719 052 204
DX 219284

Dear Keisha

**WATERLOO ROAD DEVELOPMENT PLAN
WATERLOO ROAD, MOE VIC 3825
LOT 1 TP822397, LOT 1 LP67416, LOT A LP208976, LOT 3 TP836437 AND LOT 1
TP674252**

Thank you for your correspondence dated 17 June 2013 in respect of the above-described application. The correspondence was received on 18 June 2013.

The Department of Environment and Primary Industries (DEPI) offers the following comments for consideration:

- The proposal is supported by *Ecological Features and Constraints Waterloo Road, Moe* (Paul Kelly & Associates Ecological Services, January 2013) (the ecological report), among other documents and reports.
- The ecological report identifies the presence of a patch of remnant native vegetation and degraded treeless vegetation. The consultant identified the Ecological Vegetation Class (EVC) of the patch as being EVC 83 Swampy Riparian Woodland, which is endangered within the Gippsland Plain bioregion. The report assigns a conservation significance of high to the native vegetation present on site.
- Any areas identified by the report as degraded treeless vegetation have not been mapped or adequately described, nor have they been confirmed by the DEPI. The responsible authority should determine the presence of any areas of native vegetation that do not meet the definition of a remnant patch or scattered trees (DSE 2007), as such information might inform whether there are any planning permit requirements for native vegetation removal associated with future development.
- Rare or threatened species records within a 5km radius of the subject land have been listed in the ecological report.
- The DEPI considers the proposal may have a significant impact on local populations of Dwarf Galaxias (*Galaxiella pusilla*) known from within the Moe Contour Drain. Dwarf Galaxias are listed as Vulnerable under the *Environment Protection and Biodiversity Conservation (EPBC) Act 1998*, and threatened under the *Victorian Flora and Fauna Guarantee (FFG) Act 1988*. They are also listed as endangered on the *Advisory List of Threatened Invertebrate Fauna in Victoria* (DSE 2013).

Privacy Statement

Any personal information about you or a third party in your correspondence will be protected under the provisions of the **Information Privacy Act 2000**. It will only be used or disclosed to appropriate Ministerial, Statutory Authority, or departmental staff in regard to the purpose for which it was provided, unless required or authorised by law. Enquiries about access to information about you held by the Department should be directed to the Manager Privacy, Department of Environment and Primary Industries, PO Box 500, East Melbourne, 3002.



- The proposal is not consistent with Clause 12 *Environmental and Landscape Values*. It identifies:
 - the removal of existing native vegetation, rather than to retain and enhance vegetation, particularly along waterways
 - the future creation of a vehicle access/public road through an offset site associated with development of an adjoining property (LCC ref: PP 2010/354)
 - works associated with the Moe Contour Drain that are highly likely to have adverse implications for existing populations of Dwarf Galaxias, and
 - recommended tree species in the Landscape Management Plan that may have adverse implications for nearby remnant native vegetation, and that do not complement existing ecological values in the general area.
- The proposal does not adequately address the three-step approach of avoid, minimise and offset in accordance with Victoria's *Native Vegetation Management – A Framework for Action* (DNRE 2002) (the Framework). The plan recommends to remove and replace high conservation significance remnant native vegetation within the riparian zone of an existing waterway. It does not describe how the existing biodiversity values of this patch can be retained and enhanced on site, or why removal of the vegetation cannot be avoided.
- The offsets described in the ecological report do not meet the requirements of the Framework. Clearing of high conservation significance native vegetation is generally not permitted, particularly where there are opportunities to avoid and minimise impacts in the planning stages of a proposed development. Where some clearing is permitted, the offsets must satisfy the like-for-like requirements specified in the Framework.
- The provision of offsets in an open space reserve needs to consider the long-term management implications for the landowner/manager. A suitable offset strategy must also discuss how offsets will be secured and managed for conservation into the future, and consider and mitigate potential adverse impacts to biodiversity assets around public risk management in designated open space reserves.

All written correspondence should be sent electronically to Gippsland.Planning@dse.vic.gov.au or mailed to:

Program Manager, Regional Planning
 Department of Environment and Primary Industries
 71 Hotham Street
 TRARALGON VIC 3844

If you have any queries regarding this matter, please contact Regional Planning - Gippsland at the Traralgon DEPI office on (03) 5172 2111.

Yours sincerely



John Brennan
 Program Manager, Regional Planning

Our Ref: 5003699
Your Ref: WRDP

20 August 2013

Ms Kiesha Jones
Urban Growth Project Officer
Latrobe City Council
PO Box 264
Morwell VIC 3840

Dear Ms Jones

DEVELOPMENT PLAN – WATERLOO ROAD, MOE

Thank you for your letter dated 17 June 2013 regarding the Development Plan for Lot 1 on TP822397, Lot 1 on LP67416, Lot A on LP208976, Lot 3 on TP836437 and Lot 1 on TP674252 Waterloo Road, Moe. I apologise for the delay in our formal response.

This Development Plan was undertaken in response to the provisions of the Development Plan Overlay - Residential Growth Areas Schedule 5. EPA understands that the area is located within a Residential Zone (R1Z) and current site uses are farming (including a dairy), dwellings and an area previously associated with industrial use.

Following discussions with Council (3 July 2013), EPA provides the following general comments on the Development Plan.

EPA notes that details of the site history, particularly in relation to the industrial uses within the eastern section of the site (referred to as the Eastern Section), has not been provided. In order for Council to determine the suitability of the site for residential purposes, EPA recommends that details of site history are provided to determine if the land is potentially contaminated, in accordance with the General Practice Note: Potentially Contaminated Land (Department of Sustainability and Environment, 2005).

EPA also notes that there are surrounding land uses and zones to the Development Plan area that may have potential to adversely impact on both the amenity of the residents of the proposed development and ongoing operations of these surrounding land uses. Based on the information provided within the Development Plan (Figure 2), these surrounding uses are understood to include: junk storage, a vacant former spinning mill, aluminium fabricator, joinery and trade supplies. EPA recommends that further information on the activities is sought for these locations to determine the industry activity type and definition. This information will assist Council in determining the relevant recommended separation distances in accordance with EPA Publication 'Recommended separation distances for industrial residual air emissions' (Publication 1518; 2013).

Council should consider the above information in assessing the Development Plan.



7 Church Street
Traralgon
Victoria 3844
PO Box 1332
Traralgon Victoria 3844
T: 1300 EPA VIC
F: 03 5174 7851
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www.epa.vic.gov.au

.../2.



Please contact our Planning Assessment Officer, Martin Juniper or myself on 1300 EPA VIC (1300 372 842) if you require further information or advice.

Yours Sincerely



GARRY KAY
EPA GIPPSLAND

1 July 2013

COR/13/36322

Kiesha Jones
Urban Growth Project Officer
Latrobe City Council
P.O. Box 264
MORWELL VIC 3840

Dear Kiesha,

RE: Waterloo Road Development Plan

Gippsland Water has reviewed the documentation and does not object to the development plan.

Gippsland Water is pleased to see the sensible use of open space to protect our major sewer assets.

Below are preliminary servicing comments for sewer and water;
Sewer

- The development will require two servicing strategies, being;
 - A Sewerage Pump Station (SPS) to service the lower half of the development, Stages S5 & S2 and adjoining development north of Discovery Boulevard.
 - Gravity sewer extensions for stages S1, S3 and S4 discharging into the existing gravity network traversing through the centre of the development.
 - All sewer assets will be at the cost of the developer

Water:

- Internal reticulation mains will be required at the cost of the developer.
- Extension of a 300 mm shared water distribution main will be required from the intersection of Mitchells Rd and Waterloo Rd, to the main entrance of the development on Waterloo Rd.

The water asset along Waterloo Road is classified as a shared asset and the funding arrangements for these works will need to be approved by Gippsland Water in line with the Essential Services Commission (ESC) guidelines for new customer contributions.

If there are any matters about this response that you would like to discuss, please contact myself via either email michael.johnstone@gippswater.com.au or phone 51 774 774.

Yours sincerely,

Michael Johnstone
Planning Engineer – Water and Wastewater

CMA Application No: **WG-F-2013-0295**
Your Ref: **Waterloo Road Development Plan**
Date: **12 July 2013**

Kiesha Jones
Latrobe City Council
Po Box 264
Morwell Vic 3840

kiesha.jones@latrobe.vic.gov.au

Dear Keisha

Application Number (CMA Ref): **WG-F-2013-0295**

Property: **Street:** **Waterloo Road, Moe, Victoria 3825**
Cadastral: **Lot 1 TP822397, Lot 1 on LP 67416, Lot A on LP 208976, Lot 3 on TP 836437, and Lot 1 on TP 674252, Parish of Yarragon**

Regarding: **Waterloo Road Development Plan**

Thank you for your enquiry, received at the West Gippsland Catchment Management Authority on 19 June 2013.

The Authority's assessment indicates that the property is covered by the following Zones and Overlays in the Latrobe Planning Scheme;

Zone(s): **Residential 1 Zone (R1Z)**
Overlay(s): **Development Plan Overlay - Schedule 5 (DPO5)**

Flooding

The Authority does not have any official record of flooding for the properties described above on which to base its assessment. There are no Flooding Overlays on the properties however the Authority is aware that there have been some instances of inundation in the area following significant rain events. Intense storm events in the upper catchment combined with stormwater runoff from Moe Township and some poorly maintained drains has led to flash flooding in the vicinity of Watsons Road and Mitchells Road.

Waterways

The Authority notes that the appropriate consideration, through the application of buffer zones and revegetation works, has been given to the waterways, designated and non-designated, found within the development area.

Where the designated waterway is to be piped (Waterloo Drain), special consideration in regards to its connection to the receiving waterway will be needed. Furthermore a Works on Waterways licence will need to be obtained from this Authority before any works that may impact directly, or non-directly, on any designated waterway can proceed.

Stormwater

The Authority notes the Development Plan embraces WSUD to a standard as required by Clause 56 of the Planning Scheme. The Development Plan includes an Integrated Stormwater Management Plan that takes into consideration the treatment of stormwater through a modeled wetland system which demonstrates considerable environmental benefits through the reduction of Total Suspended Solids, Total Nitrogen, Total Phosphorus and Gross Pollutants. The wetland system will also provide for vegetation offsets as a result of the removal of a small area of native vegetation. This will improve habit for threatened fauna (Growling Grass Frog and the Dwarf Galaxia).

The Authority further notes the Development Plan takes into consideration the need to provide sufficient retardation storage to prevent any increase in peak discharge as a result of urbanisation of the catchment.

The Authority is satisfied that the Draft Waterloo Road Development Plan meets its requirements in regards to maintaining waterway health and minimising flood risk.

Further detail will be required regarding the Waterway and Stormwater Management plans and this will most likely take the form of conditions on any subsequent planning permit referred to the Authority.

Should you have any queries, please do not hesitate to contact John Crosby on 1300 094 262. To assist the CMA in handling any enquiries please quote **WG-F-2013-0295** in your correspondence with us.

Yours sincerely,



Adam Dunn
Statutory Planning Manager

The information contained in this correspondence is subject to the disclaimers and definitions below.

Definitions and Disclaimers

1. The area referred to in this letter as the 'proposed development location' is the land parcel(s) that, according to the Authority's assessment, most closely represent(s) the location identified by the applicant. The identification of the 'proposed development location' on the Authority's GIS has been done in good faith and in accordance with the information given to the Authority by the applicant(s) and/or Latrobe Shire Council.
2. While every endeavour has been made by the Authority to identify the proposed development location on its GIS using VicMap Parcel and Address data, the Authority accepts no responsibility for or makes no warranty with regard to the accuracy or naming of this proposed development location according to its official land title description.
3. **AEP** as Annual Exceedance Probability – is the likelihood of occurrence of a flood of given size or larger occurring in any one year. AEP is expressed as a percentage (%) risk and may be expressed as the reciprocal of ARI (Average Recurrence Interval).

Please note that the 1% probability flood is not the probable maximum flood (PMF). There is always a possibility that a flood larger in height and extent than the 1% probability flood may occur in the future.

4. **AHD** as Australian Height Datum - is the adopted national height datum that generally relates to height above mean sea level. Elevation is in metres.
5. **ARI** as Average Recurrence Interval - is the likelihood of occurrence, expressed in terms of the long-term average number of years, between flood events as large as or larger than the design flood event. For example, floods with a discharge as large as or larger than the 100 year ARI flood will occur on average once every 100 years.
6. Nominal Flood Protection Level – is the minimum height required to protect a building or its contents, which includes a freeboard above the 1% AEP flood level.
7. No warranty is made as to the accuracy or liability of any studies, estimates, calculations, opinions, conclusions, recommendations (which may change without notice) or other information contained in this letter and, to the maximum extent permitted by law, the Authority disclaims all liability and responsibility for any direct or indirect loss or damage which may be suffered by any recipient or other person through relying on anything contained in or omitted from this letter.
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9. The flood information provided represents the best estimates based on currently available information. This information is subject to change as new information becomes available and as further studies are carried out.



Our Ref: 345/07/01
Ask For: Erin Marslen

17 July 2013

Ms Kiesha Jones
Urban Growth Project Officer
PO Box 264
Morwell 3840

Dear Ms Jones

Waterloo Road, Moe Development Plan

Thank you for forwarding us a copy of the Waterloo Road, Moe Development Plan for consideration.

Baw Baw Shire has no strategic planning or engineering concerns arising from the proposal.

Council's Infrastructure Services and Growth department have provided advice that it is unlikely there will be any adverse impacts on Baw Baw Shire assets as a result of this development plan. The Infrastructure Services and Growth department noted that:

- There is a proposed future road connection across the Moe Drain to connect to the farm land in Baw Baw Shire Council. This should not be an immediate issue as we do not expect any development in this area in the short to medium term.
- It is proposed to retard and treat stormwater on site and the outflow will discharge into the Moe Drain. This is all on the Latrobe City Council side of Moe River so will not be a Baw Baw Shire Council maintenance responsibility. The West Gippsland Catchment Management Authority has reviewed the proposal and provided comment. There is no issue here for Baw Baw Shire Council.

If you require any further information please contact Erin Marslen on 03 5624 2535 or by email at erin.marslen@bawbawshire.vic.gov.au.

Yours sincerely

A handwritten signature in cursive script that reads "jcluning".

Jayne Cluning
Strategic Planning Co-ordinator

16.2 PLANNING PERMIT APPLICATION 2013/182 - USE AND DEVELOPMENT OF LAND FOR A DWELLING AND ANCILLARY OUTBUILDING AND TWO LOT SUBDIVISION, SPEARGRASS ROAD, YINNAR SOUTH

General Manager

Planning and Governance

For Decision

PURPOSE

The purpose of this report is to determine Planning Permit Application 2013/182 for the use and development of the land for a dwelling and ancillary outbuilding and a two lot subdivision, at Speargrass Road, Yinnar South being Lot 1 on TP 847304 and Crown Allotment 18E Parish of Yinnar.

DECLARATION OF INTERESTS

No officer declared an interest under the Local Government Act 1989 in the preparation of this report.

STRATEGIC FRAMEWORK

This report is consistent with Latrobe 2026: The Community Vision for Latrobe Valley and the Latrobe City Council Plan 2013-2017.

Latrobe 2026: The Community Vision for Latrobe Valley

Strategic Objectives – Built Environment

In 2026, Latrobe Valley benefits from a well planned built environment that is complimentary to its surroundings and which provides for connected and inclusive community.

Latrobe City Council Plan 2013 - 2017

Strategic Direction – Built Environment

- *Promote and support high quality urban design within the built environment; and*
- *Ensure proposed developments enhance the liveability of Latrobe City, and provide for a more sustainable community.*

Legislation –

The discussions and recommendations of this report are consistent with the provisions of the Planning and Environment Act 1987 (the Act) and the Latrobe Planning Scheme (the Scheme), which apply to this application.

ORDINARY COUNCIL MEETING MINUTES 03 MARCH 2014 (CM431)

SUMMARY

Land:	Speargrass Road, Yinnar South being Lot 1 on TP 847304 and Crown Allotment 18E Parish of Yinnar.
Proponent:	Graeme O'Hara
Zoning:	Farming Zone
Overlay:	State Resources Overlay-Schedule 1 and Bushfire Management Overlay

A Planning Permit is required for the use of the land for a dwelling (as a Section 2 use) pursuant to Clause 35.07-1 of the Farming Zone.

A Planning Permit is also required for buildings and works associated with a use in Section 2 pursuant to Clause 35.07-4 of the Farming Zone.

A Planning Permit is required to construct or carry out works pursuant to Clause 42.01-2 of the Environmental Significance Overlay.

A Planning Permit is required for the subdivision of the land into two lots in accordance with Clause 35.07-3 and Clause 44.06-2 of the Latrobe Planning Scheme.

PROPOSAL

The application is for the use and development of a dwelling and associated outbuilding and a two lot subdivision.

The proposed single storey dwelling will be located in the north eastern corner of the site, set back 50 metres from the eastern boundary of the site and 334 metres from the northern boundary of the site. The dwelling comprises a total of three bedrooms, 1 bathroom, a study, living and dining area and a large under cover patio. The dwelling will be constructed of selected weatherboard panelling with colorbond cladding as the roofing material. Access will be provided from Speargrass Road. The detached double bay garage will be located 4 metres to the west of the dwelling.

The proposal is also for a two lots resubdivision between Crown Allotment 18E Parish of Yinnar and Lot 1 TP847304S.

The realignment transfers land from Crown Allotment 18E to Lot 1 TP847304S to create lots with the below configuration;

- Lot 1 : 40 Ha Access to be kept from Speargrass Road
- Lot 2 : 39.78 Ha (proposed to be used and developed for dwelling).

The applicant's submission details that the proposed lot layout will allow more efficient use of the land for agriculture while allowing the use and development of the land for a dwelling will assist in sustainable management of the land for agriculture.

ORDINARY COUNCIL MEETING MINUTES 03 MARCH 2014 (CM431)

Subject Land:

The subject land is irregular in shape, comprises an overall site area of 79.78 hectares split over two titles. Lot 1 on TP 847304 has an area of 19.08 Hectares and Crown Allotment 18E Parish of Yinnar has an area of 60.8 hectares. The second lot has currently has 'an as of right' for the use of the dwelling on the subject site. The property adjoins Speargrass Road along its northern site boundary for distance of 1.1km and Monash Way along for a distance of over 320 metres.

The subject land is located south of the Yinnar township and abuts farming zoned land to the south, east and north and a road zone category 1 (Monash Way) to the west

Surrounding land typically comprises of a mix of rural type allotments with areas from 1 hectare to 40 hectares. Many of these titles are managed and operated as part of larger land holdings.

The land is vacant aside from two small agricultural sheds. The land contains two patches of remnant bushland located on the southern third of the property.

Surrounding Land Use:

North: Speargrass Road Yinnar South and 125 Speargrass Road, Yinnar South

There are two properties to the north of the subject site abutting Speargrass Road. The property at Speargrass Road, Yinnar South is vacant and is used for grazing purposes a total area of 26.04 hectares. This property also has a frontage to Monash Way. 125 Speargrass Road, Yinnar South is directly to the north and comprises 71.6 hectares in one title. This site contains a single dwelling and numerous outbuildings. This site adjoins Speargrass Road along its southern boundary.

East: 120 Speargrass Road Yinnar South, Speargrass Road, Yinnar South and 190 Speargrass Road Yinnar South

These parcels range in size from 2.35 hectares and 29.6 hectares. The properties at 120 and 190 Speargrass Road have an existing dwelling and associated shedding. The other property is vacant.

South: 35 Whitelaws Track, Yinnar South

This property is directly south of the larger title of the subject site and has an area of 43.87 hectares and is vacant with the exception of some scattered shedding.

West: Monash Way, Yinnar South
The site is currently vacant and comprises two titles with an area of 51.24 hectares. Land further to the west and particular to the west of Monash Way are smaller land holdings which is more akin to Rural Living area.

HISTORY OF APPLICATION

The history of the assessment of planning permit application 2013/91 is set out in Attachment 3.

The provisions of the Scheme that are relevant to the subject application have been included at Attachment 4.

LATROBE PLANNING SCHEME

State Planning Policy Framework

There are a number of state and local planning policies that apply to the consideration of this application. In particular, State Planning Policy relates to the protection of the State's agricultural base, including protecting productive farmland which is of strategic significance in the local or regional context.

Clause 11.02-1 seeks to ensure that in planning for urban growth, opportunities for urban consolidation and infill development within existing urban areas is to be achieved.

The strategies to achieve the rural productivity objective as specified under Clause 11.05-3 of the State Planning Policy Framework are as follows:

- *'Prevent inappropriately dispersed urban activities in rural areas.*
- *Limit new housing development in rural areas, including:*
 - *Directing housing growth into existing settlements.*
 - *Discouraging development of isolated small lots in the rural zones from use for single dwellings, rural living or other incompatible uses.*
 - *Encouraging consolidation of existing isolated small lots in rural zones*
 - *Restructure old and inappropriate subdivisions.'*

Clause 13.05-1 *'Bushfire planning strategies and principles'* has an objective in assisting the improvement of community resilience to bushfire and prioritising the protection of human life over policy consideration within the Planning Scheme.

Clause 14.01-1 *'Protection of Agricultural Land'* acknowledges a strategy to *'take into consideration regional, state and local issues and characteristics in the assessment of agricultural quality and productivity.'*

It also details that *'Permanent removal of productive agricultural land from the State's agricultural base must not be undertaken without consideration of its economic importance for the agricultural production and processing sectors.*

In considering a proposal to subdivide or develop agricultural land, the following factors must be considered:

- *The desirability and impacts of removing the land from primary production, given its agricultural productivity;*
- *The impacts of the proposed subdivision or development on the continuation of primary production on adjacent land, with particular regard to land values and to the viability of infrastructure for such production.*
- *The compatibility between the proposed or likely development and the existing uses of the surrounding land.*
- *Assessment of the land capability'.*

Clause 14.03 *'Resource Exploration and Extraction'* provides the strategies to (inter alia):

- *'Protect the opportunity for exploration and extraction of natural resources where this is consistent with overall planning considerations and application of acceptable environmental practice.*
- *Provide for the long term protection of natural resources in Victoria.*
- *Protect the brown coal resource in Central Gippsland by ensuring that:*
 - *Changes in use and development of land overlying coal resources, as generally defined in Framework of the Future (Minister for Industry, Technology and Resources and Minister for Planning and Environment, 1987) and the Land Over Coal and Buffer Area Study (Minister for Planning and Environment, 1988), do not compromise the winning or processing of coal.*
 - *Ensure coal-related development is adequately separated from residential or other sensitive uses and main transport corridors by buffer areas to minimise adverse effects such as noise, dust, fire, earth subsidence, and visual intrusion.*
 - *Ensure uses and development within the buffer areas are compatible with uses and development adjacent to these areas.'*

These policies are designed to direct residential growth into designated rural living areas and existing townships and not fragment productive farmland or obstruct coal resource areas by encouraging inappropriately sited development.

Local Planning Policy Framework (LPPF)

The proposal has been considered against the relevant clauses under the Local Planning Policy Framework.

Clause 21.03-8 *Wildfire Overview* is relevant to the assessment of this application due to the subject site being partially covered by the Bushfire Management Overlay. It is detailed within this clause that it is important that all development and uses of the land have regard to fire safety measures.

Clause 21.07-3 of the Scheme acknowledges that in coal resource areas, the extraction and use of coal is the primary consideration. It is considered that the construction of a dwelling on the subject land will detract from the long term opportunity to utilise the site.

There are two strategies of particular relevance to the assessment of this application (inter alia);

- *‘Encourage extensive animal husbandry and other rural land uses in areas of potential coal production.*
- *Discourage ‘incompatible uses’ such as residential, rural living, commercial or non coal related industrial land use and development in areas of potential coal production.’*

The Municipal Strategic Statement (MSS) of the Scheme, under Clause 21.07-5 (Agriculture Overview), further states that *‘there remains a need to improve dairy industry efficiency, protect the agricultural land resource base and encourage new sustainable enterprises amid ongoing structural changes in rural industries.’*

Zoning

Farming Zone –Clause 35.07

The subject site is located within the Farming Zone.

The ‘Purpose’ and ‘Decision Guidelines’ of the zone have been taken into account as part of the assessment of this application. The recent changes to the Farming Zone ‘Purpose’ and ‘Decision Guidelines’ as a result of Planning Scheme Amendment VC 103 have also been taken into account. The proposal has been assessed as being inconsistent with the provisions of the Planning Scheme on the basis that the proposal would:

- provide for the use of land for dwelling is in an area identified as having very good dairying and grazing land;
- results in the loss of productive agricultural land;
- inconsistent with the objective of ensuring non-agricultural uses, including dwellings, do not adversely affect the use of land for agriculture;
- creates an ‘as of right’ for a dwelling for proposed Lot 1 and as well as allowing the use and development of a dwelling for proposed Lot 2; and
- does not support the increased primary production level of the land from its current rate and there is no proposed change.

These elements will be further discussed in the 'Issues' section of this report.

Overlay

Environmental Significance Overlay (Schedule 1) – Clause 42.01

The subject site is partially affected by the Environmental Significance Overlay-Schedule 1 (Urban Buffer). It is noted that one objectives of this schedule is to *“To provide for development which is compatible within a buffer area including reservations and for services ancillary to a Brown Coal Open Cut outside the buffer area”*.

Pursuant to Clause 42.01-2 a permit is required to construct or carry out works. In this case the proposed driveway to the dwelling on proposed lot 2 is marginally with the overlay affected area and as a result a planning permit is required. It is noted that the proposed dwelling is located in excess of 300 metres away from this overlay area.

Council provided notice of the application to the Department of State Development, Business and Innovation (DSBI) who did not object to the proposal subject to an appropriate condition being placed on any issue of a permit.

It is considered as a result that the proposal is consistent with this overlay.

Bushfire Management Overlay – Clause 44.06

The subject site is partially affected by the Bushfire Management Overlay. A planning permit is required pursuant to Clause 44.06-1 for both the subdivision of the land and the use and development of a dwelling proposed on Lot 2.

It is noted that the bushfire risk associated with the proposal is limited as the proposed dwelling site is in excess of 150 metres from the nearest patch of remnant vegetation, no native vegetation is required to be removed and suitable access and potable water can be provided. Both proposed lots are capable of addressing defendable space requirements for any future development if required.

Council also referred the application pursuant to Section 55 of the Act to the CFA who did not object to the granting of a planning permit.

It is considered as a result that the proposal is consistent with this overlay.

State Resources Overlay (Schedule 1) – Clause 44.07

The purpose of the State Resources Overlay is:

ORDINARY COUNCIL MEETING MINUTES 03 MARCH 2014 (CM431)

- *'To implement the State Planning Policy Framework and the Local Planning Policy Framework, including the Municipal Strategic Statement and local planning policies.*
- *'To protect areas of mineral, stone and other resources, which have been identified as being of State significance, from development that would prejudice the current or future productive use of the resource.'*

The proposed development is generally considered to be inconsistent with the State Resources Overlay. This will be discussed in greater detail in the Issues section report.

Decision Guidelines (Clause 65):

The relevant decision guidelines have been considered as part of the assessment of this planning application and where relevant have been discussed in this report.

ISSUES

Strategic direction of the State and Local Planning Policy Frameworks:

There are two key issues that require consideration under the Farming Zone which are applicable to this application. The first is whether a subdivision is appropriate having regard to the purpose and decision guidelines of the zone. The second issue is whether the dwelling is reasonably required to maintain or increase the agricultural production as part of the agricultural process occurring on the land.

State Planning Policy relates to the protection of the State's agricultural base, including protecting productive farmland which is of strategic significance in the local or regional context.

Clause 11.02-1 seeks to ensure that in planning for urban growth, opportunities for urban consolidation and infill development within existing urban areas is to be achieved.

The strategies to achieve the rural productivity objective as specified under Clause 11.05-3 of the State Planning Policy Framework.

One of the strategies under Clause 21.07-5 of the Municipal Strategic Statement is to *'limit subdivision, use or development of land that should be incompatible with the utilisation of the land for sustainable resource use'*. The Local Planning Policy Framework provides general directions regarding agriculture and farming activities. The framework acknowledges there is a pressure for rural living development but it states that high value rural land and natural resources need to be protected from the encroachment of rural residential development.

The proposed use and development of a dwelling on the site does not meet the objectives and/or strategies of the above State and Local Planning Policy Frameworks. The use and development of a dwelling may compromise the viability of the genuine agricultural pursuits in the area and restrict the possible future expansion of these operations. The subdivision of the land proposed will also create an opportunity for the

future proliferation of dwellings in the area as it will create an as of right for a dwelling on proposed lot 1.

That report in support of the proposal outlines *'that it is a more suitable outcome in the context of the land to realign the boundaries of these lots to ensure that any future dwelling on the land is located on an appropriately sized parcel that will, due to its size, inevitably be used for a farming purpose and therefore any dwelling will have a direct and dependent association with agriculture'*

The applicant has provided no detail about specific methods of protection and enhancement of the bio-diversity or value adding to agricultural products that currently exist on the land. As outlined Ryan v Warrnambool CC [2005] VCAT 1799, the application to subdivide as proposed *'is not required for the reasonable operation of rural activities currently conducted on the land, the productivity and sustainability of the land will not be improved, it will not contribute to the land being used for sustained rural use nor will it contribute to effective land management practices.'*

It is noted that the proponent envisages selling proposed lot two to his son who will then construct a dwelling on that title. However it is noted that subject site already has an existing 'as of right' for the use of the land for a dwelling on one of the existing titles that makes up the subject site as it is in excess of 40 hectares.

Therefore realigning the boundary to create a lot in excess of 40 hectares as well issuing a planning permit for the use and development of dwelling is considered to be inconsistent with State and Local Planning Policies.

'Purpose' and 'Decision Guidelines' of the 'Farming Zone':

One of the purposes of the Farming Zone is to ensure that non-agricultural uses, particularly dwellings, do not adversely affect the use of land for agriculture. The zone does not encourage dwellings not required for agricultural uses, hence the need to obtain a permit for a dwelling on a lot less than 40 hectares. An application must respond to the decision guidelines for dwellings in within the Farming Zone.

The construction of a dwelling is not an acceptable outcome when the various clear directions in the Latrobe Planning Scheme direct such activities to land that is zoned for low density residential or rural living.

There is no doubt that the permit applicant and his family are legitimate agricultural operators within the Yinnar area. The applicants son has detailed the following as a result of meeting with Council Officers in relation to the merits of the proposal *"For O'Hara Realty to stay in the diary and beef industry we have to expand. We are at the point that it is quite clear to us, more cows, more milk, more beef, more money (hopefully). We need to maximise the equity wherever it is feasible. This will hopefully result in O'Hara Realty borrowing in excess of \$800'000 to purchase a neighbouring property to the dairy farm and or Speargrass Rd and build a new dairy, therefore milking more cows and trying make our business more viable."*

This submission is included in attachment 5 of this report

**ORDINARY COUNCIL MEETING MINUTES
03 MARCH 2014 (CM431)**

The permit applicant has indicated that the proposal is part of the farm succession plan and the dwelling will be required to support the ongoing agricultural use on the land, being extensive animal husbandry. Within the Farming Zone, extensive animal husbandry is a Section 1 Use (permit not required), and as such, no planning permission is required for this use, only for the dwelling proposed to be associated with this use. In this case the proposal has been designed so as to increase the development potential of the land for dwellings thus increasing its commercial value.

The decision guidelines for applications of this type in the Farming Zone include consideration of:

- *How the use and development relates to sustainable land management;*
- *Whether the site is suitable for the use or development and whether the proposal is compatible with adjoining and nearby land uses*
- *Whether the use or development would support and enhance agricultural production;*
- *Whether the use or development will adversely affect soil quality or permanently remove land from agricultural production;*
- *The potential for the use or development to limit the operation and expansion of adjoining and nearby agricultural uses;*
- *The capacity of the site to sustain the agricultural use; and*
- *The potential for the proposal to lead to a concentration or proliferation of dwellings in the area and the impact of this on the use of the land for agriculture.*

It is acknowledged that conversion of agricultural land to a residential use is not necessarily an inappropriate outcome. However, the construction of a dwelling on the site is considered to diminish rather than enhance the agricultural potential of the overall subject site. This area is not zoned for rural living and is not identified as suitable for this purpose in any Council adopted policy or strategy.

As a result of the surrounding land use characteristics of the subject land, it is considered that the proposal cannot satisfy the relevant Farming Zone decision guidelines as follows:

- There is inadequate justification that the dwelling is required to support and enhance the existing agricultural operation on the land.
- The development of the dwelling will result in a residential use rather than an agricultural use.
- The subdivision pattern of the area is not highly fragmented, and is typically larger scale grazing operations. The subject land is amongst an area where rural living encroachment is limited and is not the primary land use pattern in the wider Farming Zoned area.
- The subject site may adversely impact the nearby agricultural activities and restrict the possible further expansion of adjoining agricultural uses.
- The proposal will increase the potential for dwelling development on the subject site as opposed to what exists based on the current title configuration.

As outlined above, it is reasonable to consider that the proposed subdivision and use and development application does not meet the relevant agriculture objectives and strategies set out currently within the Scheme.

'Purpose' and 'Decision Guidelines' of the 'State Resources Overlay-Schedule 1':

The overlay schedule clearly sets out a decision guideline for considering an application within the overlay as *'the need to exclude urban development, including low density residential development, and rural living development, from this overlay area.'* It is considered that the construction of a dwelling on the subject land is inconsistent with the general strategy to ensure land use does not inhibit the eventual development of coal resources. Development of land within coal resource areas should ensure that the resource is protected for future generations and reducing land use conflicts will play a key role in economic growth for the region.

Council provided notice of the application to the Department of State Development, Business and Innovation (DSDBI). DSDBI did not object to the granting of a planning permit subject to inclusion of a condition restricting further subdivision of the land through a Section 173 Agreement.

In summary the proposed development is not considered to address the requirements of the State Resources Overlay-Schedule 1 based on the following factors:

- The development of a dwelling on this site will hinder the eventual extraction of coal from the area.
- The development of the dwelling is contrary to the land management objectives for land within the State Resources Overlay-Schedule 1.
- It creates the potential for the further proliferation of the dwellings in the area as it creates an 'as of right' for a dwelling under the Farming Zone based on the proposed subdivision alignment.

FINANCIAL, RISK AND RESOURCES IMPLICATIONS

Additional resources or financial cost will only be incurred should the planning permit application require determination at the Victorian Civil and Administrative Tribunal (VCAT).

Risk has been considered as part of this report and it is considered to be consistent with the Risk Management Plan 2011-2014.

INTERNAL / EXTERNAL CONSULTATION

Engagement Method Used:

Notification:

**ORDINARY COUNCIL MEETING MINUTES
03 MARCH 2014 (CM431)**

The application was advertised pursuant to Section 52(1)(a) and Section 52(1)(d) of the Act. Notices were sent to all adjoining and adjacent landowners and occupiers and an A3 notice was displayed on the site frontage for 14 days.

Details of Community Consultation following Notification:

Following the advertising and referral of the application, no submissions were received.

External:

The application required referral to the Country Fire Authority (CFA) pursuant to Section 55 of the Act. The CFA did not object to the issuing of a planning permit.

Pursuant to Section 52(1)(d) the DSDBI were also notified of the application. They also had no objection to the application.

Internal:

Internal officer comments were sought from Council's Infrastructure Planning Team who had no objection to the granting of a planning permit subject to appropriate conditions and notes.

Comments were also sought from Council's Environmental Health Team who raised no objections to the grant of a planning permit subject to appropriate conditions.

OPTIONS

Council has the following options in regard to this application:

1. Refuse to Grant a Permit; or
2. Grant a Planning Permit.

Council's decision must be based on planning grounds, having regard to the provisions of the Latrobe Planning Scheme.

CONCLUSION

The proposal is considered to be:

- Inconsistent with the strategic direction of the State and Local Planning Policy Frameworks;
- Inconsistent with the 'Purpose' and 'Decision Guidelines' of the Farming Zone;
- Inconsistent with the strategic direction of the State Resource Overlay Schedule 1; and
- Inconsistent with the Clause 65 'Decision Guidelines'.

**ORDINARY COUNCIL MEETING MINUTES
03 MARCH 2014 (CM431)****Attachments**

1. Development plans
2. Subject site
3. History of application
4. Latrobe Planning Scheme
5. Submission from applicants son

RECOMMENDATION

That Council issues a notice of refusal to grant a planning permit for the use and development of a dwelling and ancillary outbuilding and 2 lot subdivision at Crown Allotment 18E Parish of Yinnar and Lot 1 on TP847304 more commonly known as Speargrass Road, Yinnar South, on the following grounds:

1. The proposal is inconsistent with Clause 35.07 of the Latrobe Planning Scheme, more particularly the purpose of the Farming Zone.
2. The proposal is inconsistent with Clause 35.07-6 of the Latrobe Planning Scheme, more particularly the decision guidelines of the Farming Zone.
3. The proposal is inconsistent with the purpose and decision guidelines of Clause 44.07 (State Resource Overlay).
4. The proposal is inconsistent with the strategic direction of the State Planning Policy Framework, at Clause 11.05-3 (Rural Productivity), Clause 14.01 (Agriculture), Clause 14.03 (Resource Exploration and Extraction) and Clause 16.02 (Housing Form).
5. The proposal is inconsistent with the strategic direction of the Local Planning Policy Framework, at Clause 21.04-3 (Rural Living Overview), Clause 21.07- 3 (Coal Resources Overview), Clause 21.07-4 (Coal Buffers Overview) and Clause 21.07-5 (Agriculture Overview).
6. The proposal is inconsistent with the decision guidelines of Clause 65 of the Latrobe Planning Scheme.

ALTERNATE MOTION

That Council issues a Decision to Grant a Planning Permit for the use and development of a dwelling and ancillary outbuilding and 2 lot subdivision at Crown Allotment 18E Parish of Yinnar and Lot 1 on TP847304 more commonly known as Speargrass Road, Yinnar South with the following conditions

1. The layout of the subdivision as shown on the endorsed plan must not be altered without the permission of the Responsible Authority.
2. The use and development as shown on the endorsed plans must not be altered without the written consent of the Responsible Authority.
3. Upon completion of the works, the site must be cleared of all excess and unused building materials and debris to the satisfaction of the Responsible Authority.
4. The exterior colour and cladding of the building(s) must be of a non-reflective nature to the satisfaction of the Responsible Authority.
5. Once building works have commenced they must be completed to the satisfaction of the Responsible Authority.
6. The owner must ensure that all waste waters emanating from the dwelling are contained and treated within the boundaries of the lot in accordance with the State Environment Protection Act 1970 and to the satisfaction of the Responsible Authority.
7. All buildings and works must be maintained in good order and appearance to the satisfaction of the Responsible Authority.
8. The outbuilding must not be used for human habitation at any time.
9. The owner of the land must enter into agreements with the relevant authorities for the provision of water supply, drainage, sewerage facilities, electricity, gas and telecommunication services to each lot shown on the endorsed plan in accordance with the authority's requirements and relevant legislation at the time.
10. All existing and proposed easements and sites for existing or required utility services and roads on the land must be set aside in the plan of subdivision submitted for certification in favour of the relevant authority for which the easement or site is to be created.

11. The plan of subdivision submitted for certification under the Subdivision Act 1988 must be referred to the relevant authority in accordance with section 8 of that Act.
12. Before an Occupancy Permit is issued for the dwelling hereby permitted or prior to the issue of a Statement of Compliance for this subdivision under the Subdivision Act 1988 (whichever is earlier), the operator of this permit must complete the following works to the satisfaction of the Responsible Authority including all necessary permits being obtained and inspections undertaken:
 - a) The existing vehicle crossing providing access to lot 1 from Speargrass Road must be upgraded between the edge of the existing road pavement and the property boundary to comply with the vehicle crossing standards as set out in Latrobe City Council's Standard Drawing LCC 306 and LCC 212 including provision of an all-weather sealed surface from the edge of the existing road pavement for a distance of six (6) metres toward the property boundary.
A vehicle crossing must be constructed to provide access to lot 2 from Speargrass Road in a location approved by the Responsible Authority. The vehicle crossing must be constructed at right angles to the road and must comply with the standards as set out in Latrobe City Council's Standard Drawings LCC 306 and LCC 212 including provision of an all-weather sealed surface from the edge of the existing road pavement for a distance of six (6) metres toward the property boundary.
13. Appropriate measures must be implemented throughout the construction stage of the development to rectify and/or minimise mud, crushed rock or other debris being carried onto public roads or footpaths from the subject land, to the satisfaction of the Responsible Authority.
14. Before an Occupancy Permit is issued for the dwelling hereby permitted, or by such later date as is approved by the Responsible Authority in writing, the following works must be completed in accordance with the endorsed plans and to the satisfaction of the Responsible Authority including all necessary permits being obtained and inspections undertaken:
 - a) All stormwater discharging from the site, buildings, vehicle access ways and works must be discharged to a water tank, soakwell or otherwise discharged so as not to cause erosion, flooding or nuisance to the subject or surrounding land to the satisfaction of the Responsible Authority.
 - b) The areas provided within the property for vehicle access to the permitted dwelling and associated buildings and works,

must be constructed and surfaced with concrete, reinforced concrete, brick paving, gravel, crushed rock or hot mix asphalt so as to prevent mud, crushed rock or other debris from being carried onto the road.

15. The operator of this permit must comply with the following requirements from the Country Fire Authority (CFA):
- A) Construction

A site assessment for the purpose of determining the bushfire attack level for the dwelling on proposed Lot 2 has been considered as part of the application for the planning permit. The construction of the dwelling must be to a minimum bushfire attack level of BAL-12.5 in accordance with the relevant sections of AS3959-2009.

- B) Defendable Space

Vegetation on the proposed Lot 2 must at all times be maintained to at least the following standard for Grassland as the vegetation classification maintained for the site:

Inner Zone extending 22 metres from the building

- a) Within 10 metres of a building, flammable objects such as plants, mulches and fences must not be located close to vulnerable parts of the building such as windows, decks and eaves.
- b) Trees must not overhang the roofline of the building, touch walls or other elements of a building.
- c) Grass must be no more than 5 centimetres in height and all leaves and vegetation debris are to be removed at regular intervals.
- d) Shrubs must not be planted under trees and separated by at least 1.5 times their mature height.
- e) Plants greater than 10 centimetres in height at maturity must not be placed directly in front of a window or other glass feature.
- f) Tree canopy separation of 2 metres and the overall canopy cover of no more than 15 per cent at maturity.
- g) Tree branches below 2 metres from ground level must be removed.

C) Static Water Supply

Prior to the initial occupation of a dwelling a static water supply must be provided on the land and must meet all of the following requirements:

- a) The water supply must have a minimum capacity of 10,000 litres that is maintained solely for fire fighting purposes.
- b) The water supply must be stored in an above ground water tank constructed of concrete, steel or corrugated iron.
- c) The water supply must be located within 60 metres of the outer edge of the dwelling (including any obstructions).
- d) The water supply outlet/s must be attached to the water tank and must face away from the building if located less than 20 metres from the building to enable access during emergencies.
- e) All pipework between the water supply and the outlet/s must be a minimum of 64 mm nominal bore.
- f) All fixed above-ground water pipelines and fittings must be of non-corrodible and non-combustible materials.
- g) The water supply must:
 - i) Be located so that fire brigade vehicles are able to get to within 4 metres of the water supply outlet.
 - ii) Incorporate an additional 64 mm (minimum) gate or ball valve and 64 mm (fixed size), 3 threads per inch, male fitting to suit a CFA coupling.
 - iii) Incorporate a vortex inhibitor or additional water must be provided to ensure that the volume of water available is not restricted by a vortex. Refer to Section 5 of AS.2419 for requirements for vortex inhibitors.
- h) The water supply outlet must incorporate a ball or gate valve to provide access to the water by the resident of the dwelling.
- i) All below-ground water pipelines must be installed to at least the following depths:
 - i) Subject to vehicle traffic: 300 mm
 - ii) Under dwellings or concrete slabs: 75 mm
 - iii) All other locations: 225 mm
- j) The water supply must be readily identifiable from the building or appropriate signage must be provided which:

- i) Has an arrow pointing to the location of the water supply.
- ii) Has dimensions of not less than 310 mm high and 400 mm long.
- iii) red in colour, with a blue reflective marker attached.
- iv) labelled with a 'W' that is not less than 15 cm high and 3 cm thick.

D) Access

Prior to the initial occupation of a dwelling, access to the dwelling must be provided and must be designed to allow emergency vehicle access. The minimum design requirements (including gates, bridges and culverts) that must be complied with are:

- a) Curves in driveway must have a minimum inner radius of 10 metres.
- b) The average grade must be no more than 1 in 7 (14.4%) (8.1°) with a maximum of no more than 1 in 5 (20%) (11.3°) for no more than 50 metres.
- c) Dips must have no more than a 1 in 8 (12.5%) (7.1°) entry and exit angle.
- d) Designed, constructed and maintained for a load limit of at least 15 tonnes and be of all-weather construction.
- e) Have a minimum trafficable width of 3.5 metres and be substantially clear of encroachments for at least 0.5 metres on each side.
- f) Be clear of encroachments at least 4 metres vertically.
- g) Incorporate a turning area for fire fighting vehicles close to the building must be provided, by either:
 - i) a turning circle with a minimum radius of eight metres; or
 - ii) the driveway encircling the dwelling; or
 - iii) a T head or Y head with a minimum formed surface of each leg being eight metres in length measured from the centre point of the head, and four metres trafficable width.
- h) 4.8 Incorporate passing bays at least every 200 metres which must be at least 20 metres long and have a minimum trafficable width of six metres.

E) Mandatory Condition – Maintenance of Bushfire Mitigation Measures

The bushfire mitigation measures forming part of this permit or shown on the endorsed plans, including those relating to construction standards, defendable space, water supply, and access, must be maintained to the satisfaction of the responsible authority and the relevant fire authority on a continuing basis. This condition continues to have force and effect after the development authorised by this permit has been completed.

16. The operator of this permit must comply with the following requirements from the Department of State Development, Business & Innovation (DSDBI):
 - a) An agreement under Section 173 of the Act must be entered into with the owner of each lot created which ensures that the land may not be further subdivided so to increase the number of lots. The agreement must be registered on title. The requirement to enter into an agreement only applies to a lot which could be further subdivided in accordance with the Latrobe Scheme.
17. This permit will expire if one of the following circumstances applies:
 - a) The development is not started within two years of the date of this permit;
 - b) The plan of subdivision is not certified within 2 years of the date of this permit;
 - c) The registration of the subdivision is not completed within 5 years of certification; or
 - d) The development is not completed and the use has not commenced within four years of the date of this permit;
 - e) The use is not started within two years of the date of this permit; or
 - f) The use ceases for a period of two years or greater.

Note 1. Unless exempted by Latrobe City Council, an Asset Protection Permit must be obtained prior to the commencement of any proposed building works, as defined by Latrobe City Council's Local Law No. 3. Latrobe City Council's Asset Protection Officer must be notified in writing at least 7 days prior to the building works commencing or prior to the delivery of materials/equipment to the site.

Note 2. A Latrobe City Vehicle Crossing Permit must be obtained prior to the commencement of the construction of all new vehicle crossings and for the upgrading, alteration or removal of existing vehicle crossings. The relevant fees, charges and conditions of the Vehicle Crossing Permit will apply to all vehicle crossing works. It is a requirement that all vehicle crossing works be inspected by Latrobe City Council's Asset Protection Officer.

**ORDINARY COUNCIL MEETING MINUTES
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Note 3. The land to which this permit applies is identified in the Latrobe Planning Scheme as containing a coal resource of State significance. The Mineral Resources (Sustainable Development) Act 1990 allows the Minister administering the Act to grant a mining licence over the coal resource which, subject to obtaining all relevant consents, may result in mining. Should you require any additional information please contact DSDBI on 136186.

Moved: Cr White
Seconded: Cr Middlemiss

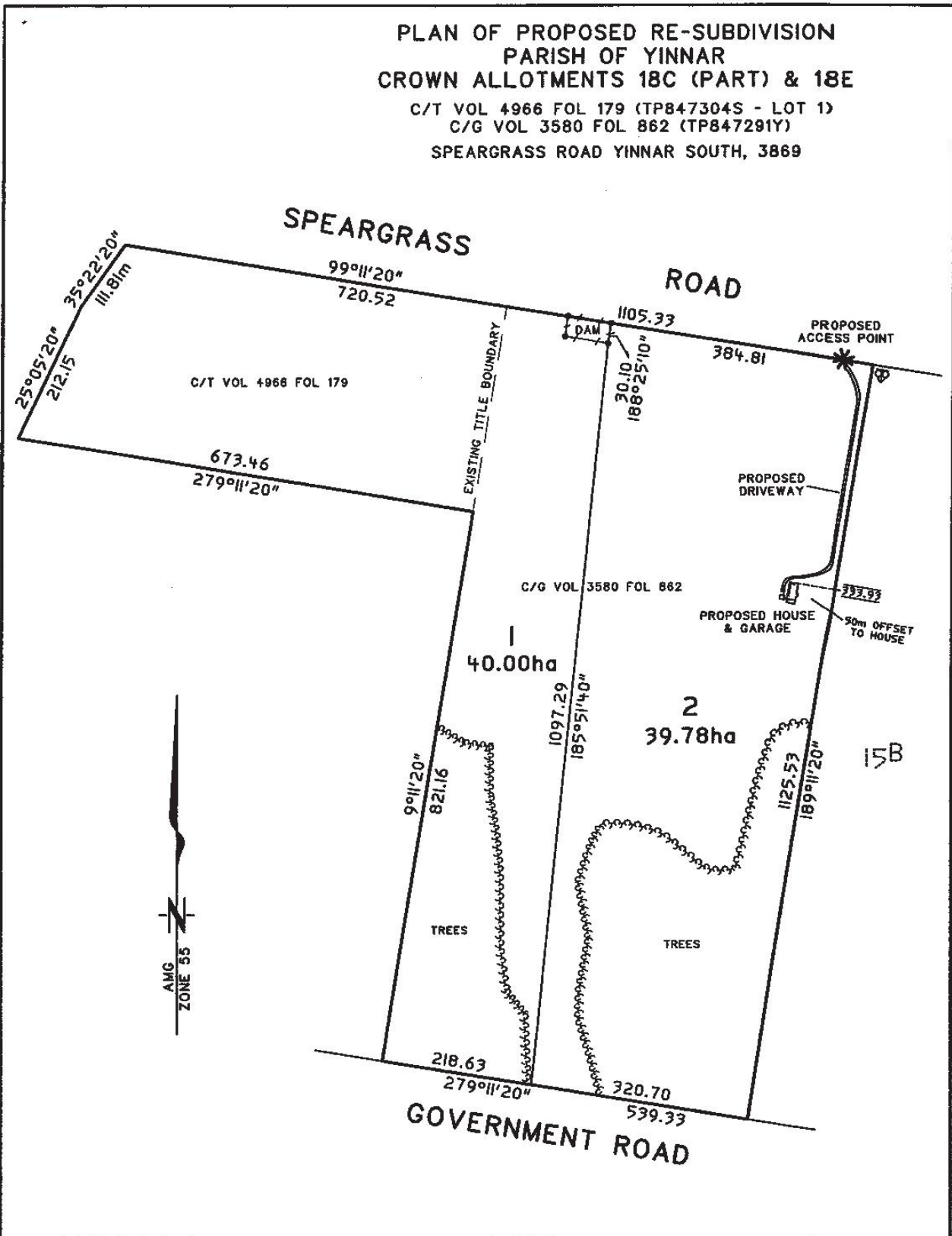
That the Motion be adopted.

CARRIED UNANIMOUSLY

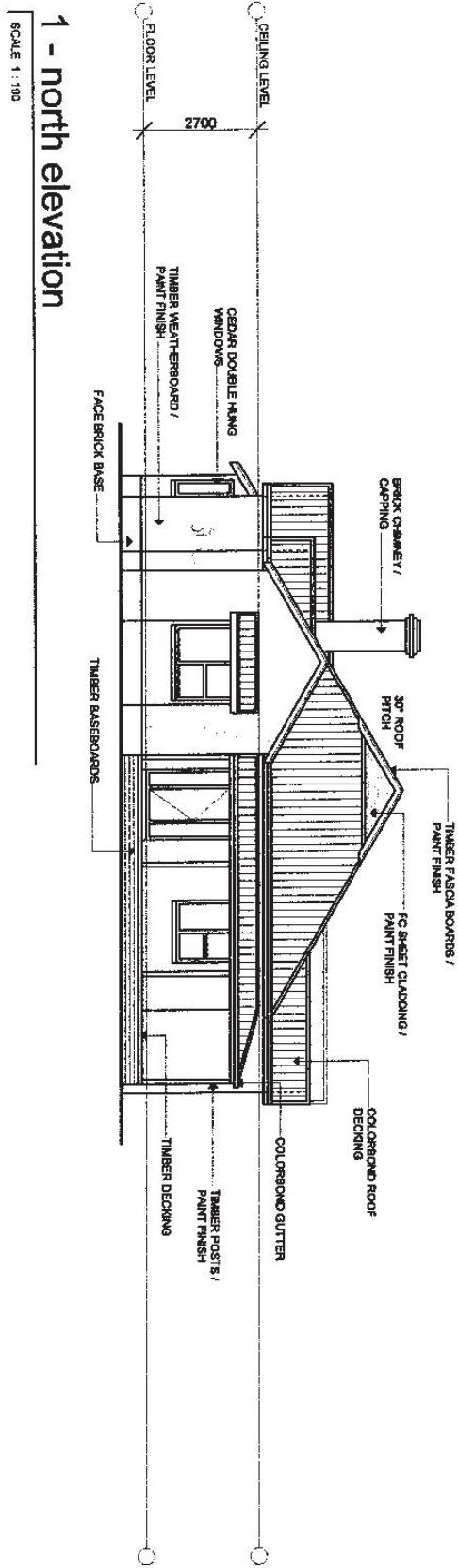
16.2

PLANNING PERMIT APPLICATION 2013/182 - USE AND DEVELOPMENT OF LAND FOR A DWELLING AND ANCILLARY OUTBUILDING AND TWO LOT SUBDIVISION, SPEARGRASS ROAD, YINNAR SOUTH

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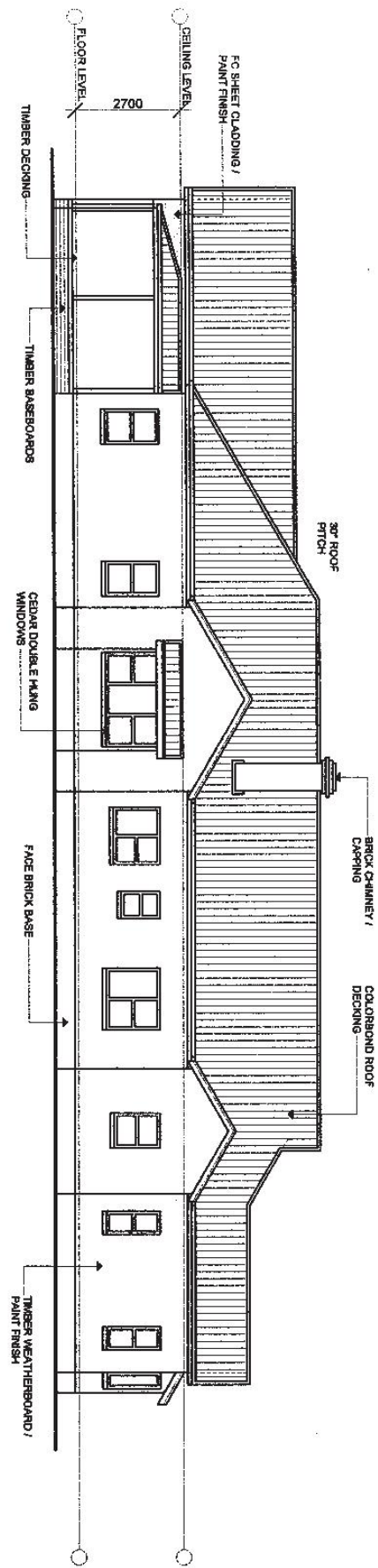


ROSS & WORTH PTY. LTD. LAND & ENGINEERING SURVEYORS 5/61 SMITH STREET WARRAGUL 56232257 #26 CONTINGENT ST. TRAFALGAR 58331577 213B PRINCES HIGHWAY MORWELL 51341368	SCALE 50 0 50 100 150 200 LENGTHS ARE IN METRES		ORIGINAL SHEET SIZE A3	SCALE 1:5000	SHEET 1 OF 1 SHEET REF 5480 DRG No. 5480ppa.lcd VERSION 01
	AREAS, DIMENSIONS & FEATURES ARE APPROXIMATE ONLY & ARE SUBJECT TO SURVEY				



1 - north elevation

SCALE 1:100



2 - east elevation

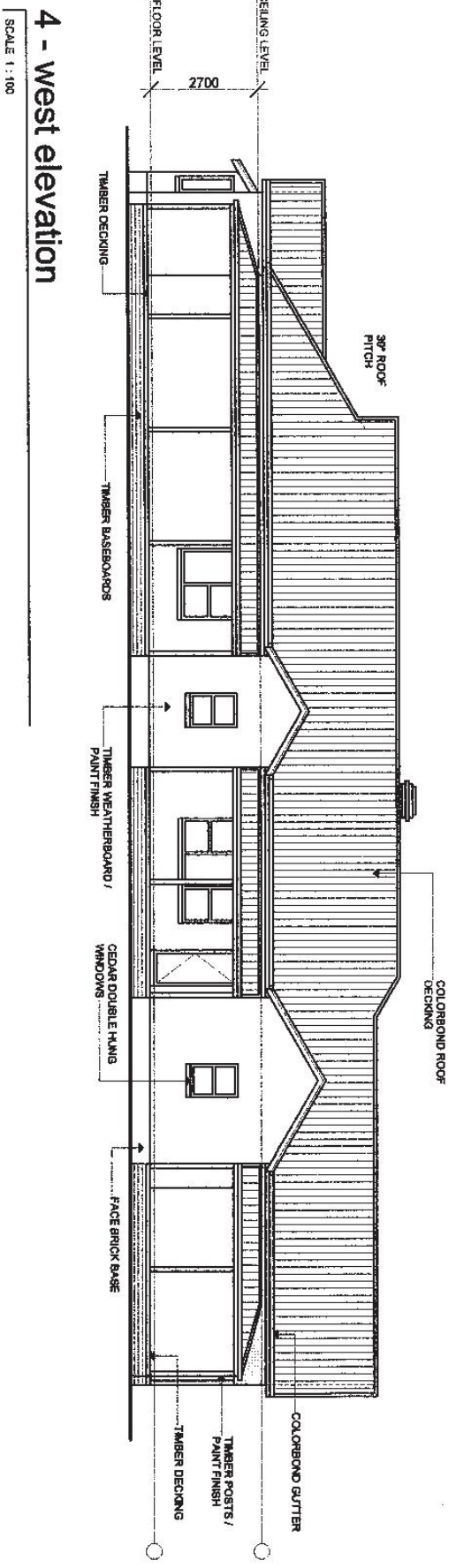
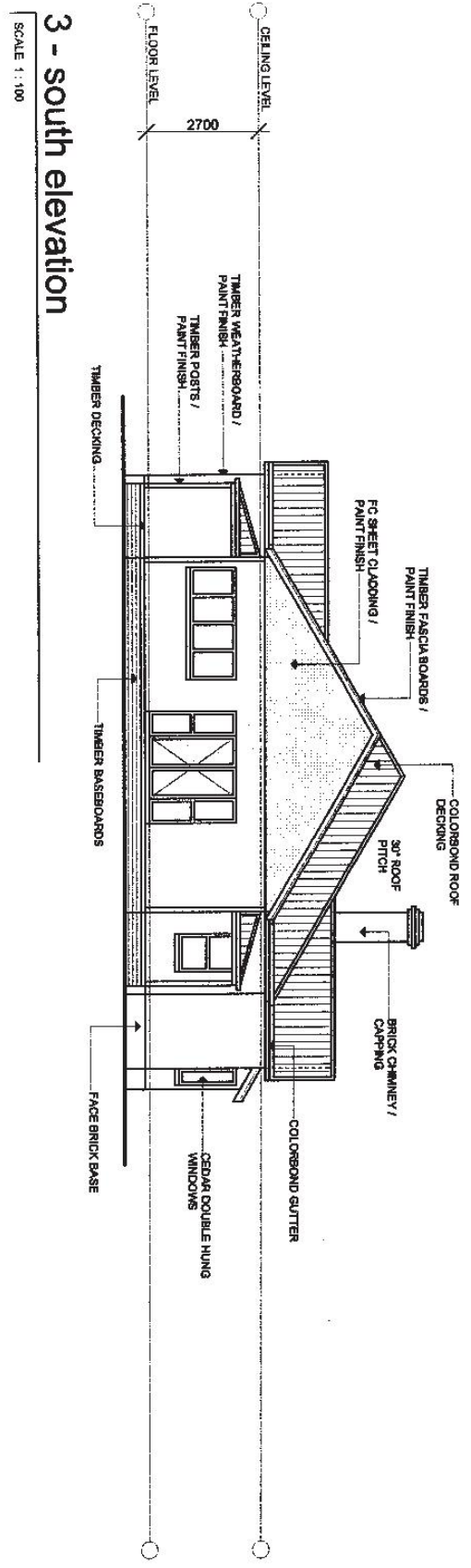
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DRWG NO. 230413 - A 02



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DRWG NO. 230413 - A 03

ground floor plan

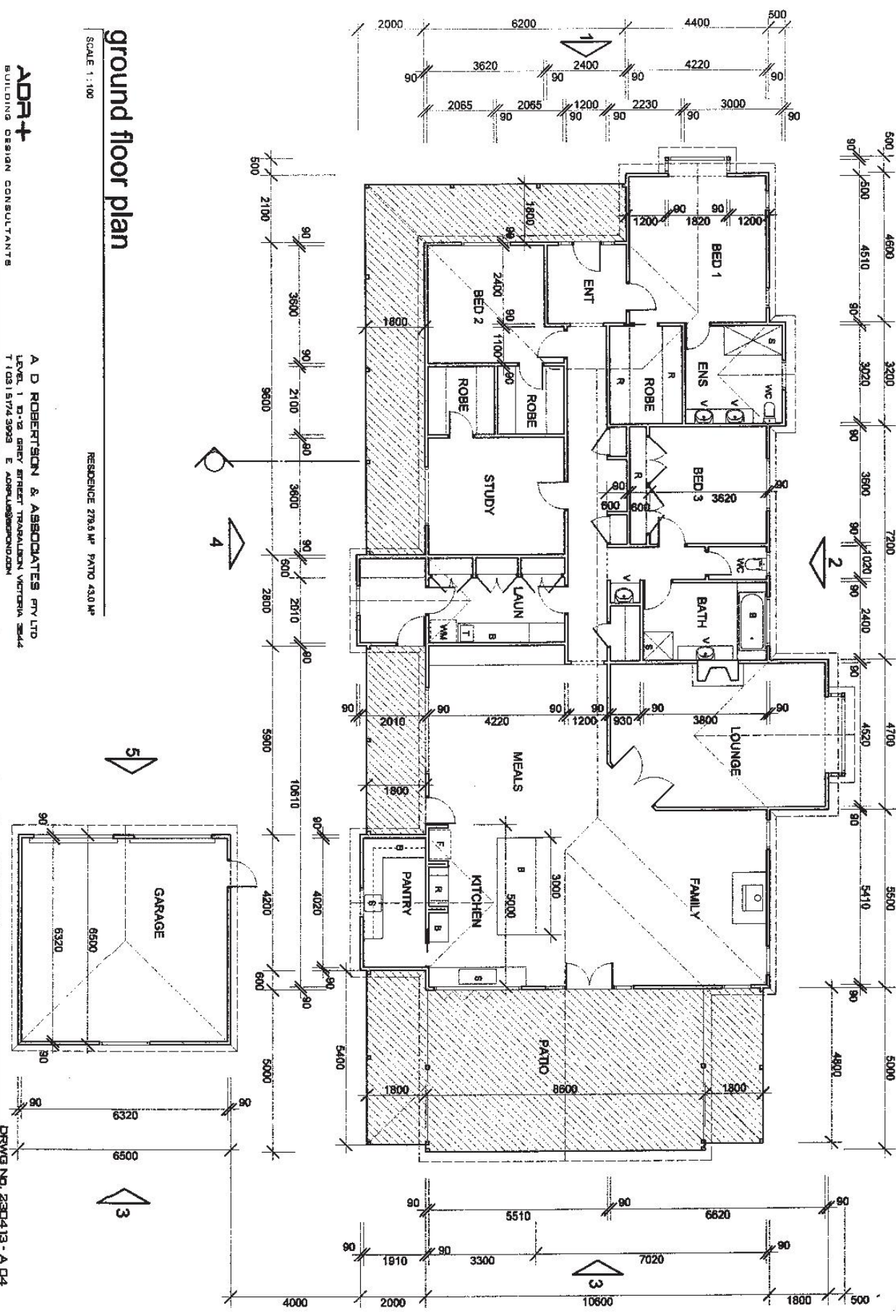
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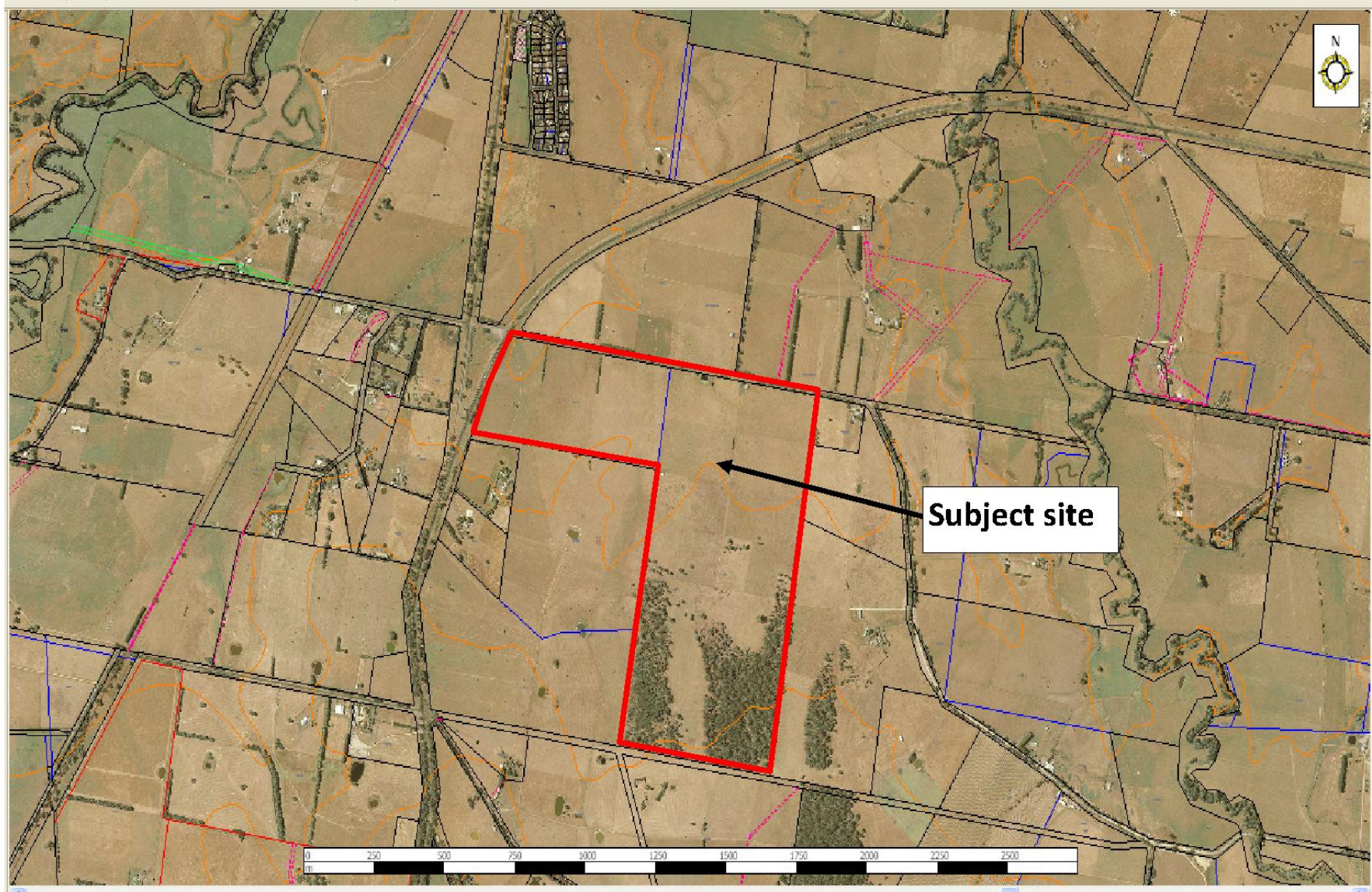
RESIDENCE 278.6 M² PATIO 43.0 M²

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DRWG NO. 230413 - A 04





History of Application

25 July 2013	Planning Permit application received by Council
18 August 2013	Further information requested from applicant
17 September 2013	Extension of time granted to provide the further information
27 September 2013	Further information received
2 October 2013	Email to consultant detailing that council still have concerns regarding the merits of the proposal but that the application will be notified
7 October 2013	Applicant advised to give notification of the application. Application referred internally to Infrastructure Planning and Health. Application referred under Section 52 to DSBI. Application referred under Section 55 to CFA.
20 December 2013	Council Officer met with the applicant and his son to detail the process involved and it was outlined at that meeting that the planning officer will be recommending for refusal of the application.
23 December 2013	Email received from the applicants son detailing the justification for the proposal
2 January 2014	All external and internal referral responses were received.

●
LATROBE PLANNING SCHEME

State Planning Policy Framework

Clause 11.02 'Urban Growth'
Clause 11.05 'Regional Development'
Clause 14.01 'Agriculture'
Clause 13.05 'Bushfire'
Clause 14.03 'Resource Exploration and Extraction'
Clause 16.02 'Housing Form'

Local Planning Policy Framework

Clause 21.01 'Municipal Profile'
Clause 21.02 'Municipal Vision'
Clause 21.03 'Natural Environment Sustainability'
Clause 21.04 'Built Environment Sustainability'
Clause 21.07 'Economic Sustainability'
Clause 21.08 'Liveability'

Zoning – Farming Zone

The subject land is located within a Farming Zone.

**Overlay – State Resource Overlay Schedule 1, Environmental
Significance Overlay –Schedule 1 and Bushfire Management Overlay**

The subject land is partially located within the State Resource Overlay
Schedule 1, Environmental Significance Overlay –Schedule 1 and Bushfire
Management Overlay.

Particular Provisions

There are no particular provisions relevant to the consideration of this
application.

General Provisions

Clause 65 'Decision Guidelines'

Incorporated Documents

There are no incorporated documents that relate to the consideration of this
application.

Jody Riordan

From: Jason O'Hara <oakhara@hotmail.com>
Sent: Monday, 23 December 2013 8:48 PM
To: Jody Riordan
Subject: O'Hara 2013/182

Good evening Jody,

Thank-you for your time on Friday morning, we appreciated the opportunity to speak with you upon our planning application at Speargrass Rd, Yinnar South. As we're sure you are aware this is a matter that is very close to our hearts and means a great deal to our business, O'Hara Realty and our family.

In 1983 our family had to move over to our Nan's house which could accommodate the expanding family that we were. At the time Nan was more than happy to move to Melbourne, and we moved into her home. In 2013, I too have an expanding family, yet the opportunity to move onto a larger home on the property does not exist. We currently live in the 2 bedroom workers cottage, built in the 1940's. Though we have made this a cosy home, it is no longer big enough for us and our plans for more children, with a new baby due in February 2014, which will become a little baby brother or sister to our two and half year old son.

It is no secret that the agricultural industry has been going through difficult years. O'Hara Realty has not had the opportunities to expand that it did in the past. We have to make the best and the most out of what we have. We have, like many farmers throughout Gippsland and across Victoria, experienced financial hardship throughout the past 10 years. For example the milk price dropped 25% three years ago, the Global Financial Crisis led Asian buyers else where, and then the hike of the Australian dollar, which all resulted in O'Hara Realty running at a loss.

For O'Hara Realty to stay in the diary and beef industry we have to expand. We are at the point that it is quite clear to us, more cows, more milk, more beef, more money (hopefully). We need to maximise the equity wherever it is feasible. This will hopefully result in O'Hara Realty borrowing in excess of \$800'000 to purchase a neighbouring property to the diary farm and or Speargrass Rd and build a new diary, therefore milking more cows and trying make our business more viable.

Purchasing the land from my father, Graeme O'Hara at Speargrass Rd is one stage of the O'Hara Realty succession plan. It is a critical point in the sustainability of the farm, the business and our family.

Jody we appreciate you assessing the application for the planning permit at Speargrass Rd, and hope that you take into consideration all that you have been provided.

Yours sincerely,

Jason O'Hara

O'Hara's Rd Yinnar
Victoria 3869
m| 0421 477 964
e| oakhara@hotmail.com

ORDINARY COUNCIL MEETING MINUTES 03 MARCH 2014 (CM431)

16.3 DOCUMENTS PRESENTED FOR SIGNING AND SEALING

General Manager

Planning and Governance

For Decision

DECLARATION OF INTEREST

No officer declared an interest under the Local Government Act 1989 in the preparation of this report.

DOCUMENTS

PP 2011/47	<p>Section 173 Agreement under <i>Planning and Environment Act 1987</i> between Latrobe City Council and Sally Beth Kirstine as the owner of the land more particularly described in Certificate of Title Volume 9101 Folio 308 being Lot 1 on PS 711193W situated at 14 Pollock Avenue, Traralgon pursuant to Condition 7 on PP 2011/47 issued 19 October 2011, providing that the owner with the intent that this covenant shall run with the land hereby covenants and agrees:</p> <ol style="list-style-type: none"> 1. To provide a property drainage connection for both lots to the legal point of discharge in accordance with the site drainage plan approved by the Responsible Authority. 2. To construct all on-site stormwater detention works as shown on the approved site drainage plan.
PP 2013/136	<p>Section 173 Agreement under <i>Planning and Environment Act 1987</i> between Latrobe City Council and Pinegro Products Pty Ltd as the owner of the land more particularly described in Certificate of Title Volume 10499 Folio 827 being Crown Allotment 3B on TP 7749N Section A situated at 2-6 Rail Road, Morwell pursuant to Condition 2a) on PP 2013/136 issued 13 December 2013 that;</p> <p>Dismantle all or part of the wall located over the drainage easement at the owners cost within three (3) months of the date of being requested to do so, in writing, by Latrobe City Council.</p>

**ORDINARY COUNCIL MEETING MINUTES
03 MARCH 2014 (CM431)**Attachments
Nil**RECOMMENDATION**

1. That Council authorises the Chief Executive Officer to sign and seal the Section 173 Agreement under *Planning and Environment Act 1987* between Latrobe City Council and Sally Beth Kirstine as the owner of the land more particularly described in Certificate of Title Volume 9101 Folio 308 being Lot 1 on PS 711193W situated at 14 Pollock Avenue, Traralgon pursuant to Condition 7 on PP 2011/47 issued 19 October 2011.
2. That Council authorises the Chief Executive Officer to sign and seal the Section 173 Agreement under *Planning and Environment Act 1987* between Latrobe City Council and Pinegro Products Pty Ltd as the owner of the land more particularly described in Certificate of Title Volume 10499 Folio 827 being Crown Allotment 3B on TP 7749N Section A situated at 2-6 Rail Road, Morwell pursuant to Condition 2a) on PP 2013/136 issued 13 December 2013.

Moved: Cr Rossiter
Seconded: Cr Gibbons

That the Recommendation be adopted.

CARRIED UNANIMOUSLY

**16.4 PLANNING PERMIT APPLICATION 2013/172 - 10 LOT STAGED
SUBDIVISION AT 24 COOPERS ROAD TRARALGON****General Manager****Planning and Governance****For Decision****PURPOSE**

The purpose of this report is to determine Planning Permit Application 2013/172 for a 10 lot staged lot subdivision at 24 Coopers Road, Traralgon.

DECLARATION OF INTERESTS

No officer declared an interest under the *Local Government Act 1989* in the preparation of this report.

STRATEGIC FRAMEWORK

This report is consistent with Latrobe 2026: The Community Vision for Latrobe Valley and the Latrobe City Council Plan 2013-2017.

Latrobe 2026: The Community Vision for Latrobe Valley***Strategic Objective – Built Environment***

- In 2026, Latrobe Valley benefits from a well planned built environment that is complementary to its surroundings and which provides for a connected and inclusive community.

Latrobe City Council Plan 2013 - 2017***Planning for the future******Strategic Direction***

Provide efficient and effective planning services and decision making to encourage development and new investment opportunities.

Legislation

The discussions and recommendations of this report are consistent with the provisions of the *Planning and Environment Act 1987* (the Act) and the Latrobe Planning Scheme (the Scheme), which apply to this application.

BACKGROUND

SUMMARY

Land:	24 Coopers Road, Traralgon, known as Lot 3 on Lot 3 on LP 141401.
Proponent:	R N & F K Brownlee C/- Beveridge Williams
Zoning:	Low Density Residential Zone (LDRZ)
Overlay:	N/A

A Planning Permit is required for subdivision of land in a Low Density Residential Zone in accordance with Clause 32.03-3 of the Scheme. Each lot must be at least 0.4 hectares (4,000 square metres) where reticulated sewerage is not available.

A site context plan is included as Attachment 1 of this report.

PROPOSAL

It is proposed to subdivide the land into 10 lots. A copy of the proposed plan of subdivision is included as Attachment 2 of this report.

The lots can be described as the following:

- Proposed Lot 1 will contain the existing dwelling, one of the ancillary sheds, driveway, landscaped garden, wastewater disposal area and ancillary land. The allotment will be irregular in shape, with a frontage to Coopers Road measuring approximately 37.4 metres and a total area of approximately 4,047 square metres. Vehicular access will be provided from Coopers Road via the existing driveway crossover.
- Proposed Lots 2, 3, 4 and 5 will be located on the east side of the existing watercourse and the proposed extension to Alamere Drive. Two existing sheds which will be retained within proposed Lot 2, each of these lots will be vacant, predominantly cleared and covered in pasture grass. The allotments will all be irregular in shape and range in area between approximately 4,150 square metres and 4,440 square metres. Each allotment will be accessed from the from the proposed extension to Alamere Drive. Similar to Lot 1, no vehicular access will be provided from Old Melbourne Road to either Lot 4 or Lot 5. Frontages of the lots to the proposed extension to Alamere Drive range from 38.5 metres for Lot 2 to 41.1 metres for Lot 5.
- Proposed Lots 6 to 10 will be located on the west side of the existing watercourse. Each of these allotments will be vacant, cleared and covered in pasture grass. The allotments will all be irregular in shape and range in area between approximately 4,020 square metres and 4,380 square metres
- Each allotment will be accessed from the abovementioned new internal road. Access is not provided onto Coopers Road from Lot 10 and Lot 6 is not provided access onto Old Melbourne Road.

**ORDINARY COUNCIL MEETING MINUTES
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It is noted that one dwelling would be permitted to be constructed on the lot under the current zoning of the land without further planning approval.

The proposed subdivision is to be conducted over two stages with lots 1 to 4 initially and a balance super lot and then proposed lots 5 to 10 in stage 2.

As the subject land is located well outside Gippsland Water's sewer reticulation district, the proposal seeks to treat and retain wastewater on site.

The provisions of the Low Density Residential Zone details that in the absence of reticulated sewerage an application must be accompanied by a land capability assessment which demonstrates that each lot is capable of treating and retaining wastewater. A Land Capability Assessment has been submitted with the application and is included in Attachment 3 of this report.

A building and waste disposal envelope plan is contained in Attachment 4 of this report, showing indicative building and waste water disposal areas for each of the proposed lots.

Subject Land:

The subject site is located at 24 Coopers Road, Traralgon, or more particularly described as Lot 3 on Lodged Plan 141401.

The site is irregular in shape, with an area of 5.96 hectares and has an abuttal to Copper Roads along its south-eastern. The majority of Coppers Road abutting the subject site is unmade with the exception of a small area abutting the south east corner of the subject site that provides to the existing dwelling onsite. The entire length of the site's north-western boundary abuts the Old Melbourne Road. The dimensions of the site are as follows along the full length of its western boundary. The dimensions of the site are as follows:

- A south-east facing frontage to Coopers Road measuring approximately 365 metres;
- A north-east facing side boundary with a length of 98.85 metres;
- A south-west facing side boundary measuring 273 metres; and
- A rear (north-west facing) boundary to Old Melbourne Road with a length of 306 metres.

The eastern portion of the land is used for low density residential purposes and is developed with a single storey brick four bedroom dwelling with associated sheds and infrastructure. The buildings are situated in close proximity to each other in eastern portion of the site and are accessed from the end of the constructed section of Coopers Road via a gravel crossover and driveway. A landscaped garden comprising a combination of planted native and exotic trees, shrubs and lawn cover surrounds these buildings. The dwelling is connected to reticulated electricity, water, gas and telecommunication services. Wastewater is treated and retained on-site. A wetland area extends in a north-westerly direction between the

site's south-eastern and north-western boundaries between Coopers Road and Old Melbourne Road. This area ranges in width from 30 metres to 50 metres in width and comprises a series of dams established on a declared watercourse. The land surrounding each dam comprises a mixture of pasture grass, scattered trees, shrubs and grasses.

The remainder of the land of the subject clear is generally cleared of vegetation with a cover of pasture grass. The land has a gently undulating topography, generally sloping down from each corner of the site towards the wetland and there is some post and wire fencing that has been used along the property boundaries and delineate individual paddocks from the house and shedding area.

Surrounding Land Use:

The site is located within an established low density residential precinct on the western periphery of Traralgon's urban area.

Surrounding the site to the north, east and south are low density residential allotments generally ranging between approximately 0.4 hectare and 5.6 hectares in area.

The land abutting the subject site in all directions is within the Low Density Residential Zone – Schedule 3 and is primarily comprised of single storey detached dwellings with associated shedding.

150 metres north of the subject site (north of Old Melbourne Road) is an established Residential 1 Zone and 350 metres due south of the subject site in the Traralgon Golf Course which is located within the Rural Living Zone-Schedule 3.

It is noted that the subject site is located within the Draft Traralgon West Structure Plan study area (part of the Traralgon Growth Areas Review project).

HISTORY OF APPLICATION

A history of assessment of this application is set out in Attachment 5.

The provisions of the Scheme that are relevant to the subject application are included in Attachment 6.

LATROBE PLANNING SCHEME

State Planning Policy Framework

The proposal has been considered against the relevant clauses under the State Planning Policy Framework.

The objective of Clause 11.02-1 is to ensure a sufficient supply of land is available for, among other things, residential uses.

Strategies to achieve this include

- *Ensure that sufficient land is available to meet forecast demand.*
- *Plan to accommodate projected population growth over at least a 15 year period and provide clear direction on locations where growth should occur.*
- *Restrict low-density rural residential development that would compromise future development at higher densities.*

The objective of Clause 11.05-1 Regional settlement networks is “to promote the sustainable growth and development of regional Victoria through a network of settlements identified in the Regional Victoria Settlement Framework plan”.

The Moe, Morwell and Traralgon cluster has been identified in the Regional Victoria Settlement Framework plan as one of the regional areas where urban growth should be directed.

Networks of high-quality settlements should be delivered by:

- *Building on strengths and capabilities of each region across Victoria to respond sustainably to population growth and changing environments.*
- *Balancing strategic objectives to achieve improved land-use and development outcomes at a regional, catchment and local level.*
- *Preserving and protecting features of rural land and natural resources and features to enhance their contribution to settlements and landscapes.*
- *Providing for appropriately located supplies of residential, commercial, and industrial land across a region, sufficient to meet community needs.*

Clause 11.05-4 Regional planning strategies and principles states that Victoria’s regional areas should be developed with a strong identity, be prosperous and environmentally sustainable. The growth and development of distinctive and diverse regional settlements should be encouraged. This can be achieved by, among other things, ensuring that the potential of land that may be required for future urban expansion is not compromised.

Clause 19.03-2 refers to the provision of water supply, sewerage and drainage. The objective of this clause is ‘to plan for the provision of water supply, sewerage and drainage services that efficiently and effectively meet State and community needs and protect the environment’.

Clause 19.03-3 Stormwater aims to reduce the impact of stormwater on bays and catchments.

To achieve this, water-sensitive urban design techniques should be incorporated into developments to:

- *Protect and enhance natural water systems.*
- *Integrate stormwater treatment into the landscape.*
- *Protect quality of water.*

- *Reduce run-off and peak flows.*
- *Minimise drainage and infrastructure costs.*

Local Planning Policy Framework

The subject site is in a Low Density Residential Zone located to the west of the main urban area of Traralgon. The objective of Clause 21.04 Rural Living is to identify appropriate locations for rural residential living. A strategy associated with this objective is to *'discourage further rural living or low density residential development on the fringes of the major towns where land is designated as a long-term urban growth corridor'*.

Clause 21.07-4 refers to the protection of urban settlements from the impact of the coal industry. An objective of this clause is *'to ensure that adequate spatial separation is provided between existing and proposed urban and industrial uses and existing or proposed coal development so as to reduce the likely effects of earth subsidence, the emission of noise, dust, fire hazard and visual intrusion'*.

Traralgon West Interim Infrastructure Development Policy (TW Interim Policy) 11 POL-2

Pursuant to Section 60(1A)(g) of the Act, before deciding on an application, the responsible authority, if the circumstances appear to so require, may consider any other strategic plan, policy statement, code or guideline which has been adopted by a Minister, government department, public authority or municipal council.

In this case, the Traralgon West Interim Infrastructure Development Policy (TW Interim Policy) 11 POL-2 is applicable.

The TW Interim Policy applies to approximately 180 hectares of Low Density Residential zoned land to the west of Traralgon (or known as Traralgon West Low Density Residential Precinct). The subject site falls within this precinct.

This policy, adopted by Council on 7 February 2011, outlines the process by which Latrobe City Council will consider further subdivision of land within the Traralgon Low Density Residential Precinct, pending:

- Resolution and construction of agreed road and stormwater infrastructure services to be provided for the precinct;
- Mitigation of potential detriment to downstream landholders resulting from increased stormwater volumes;
- Establishment of an appropriate framework to assure the equitable distribution and sequencing of landowner financial contributions to agreed road and stormwater infrastructure services;
- Resolution of opportunities for the immediate and long term provision of medium density residential development within the LDRZ precinct.

Before deciding on an application to subdivide land, the responsible authority must also consider:

- *The directions of this policy [TW Interim Policy];*
- *The State Planning Policy Framework and the Local Planning Policy Framework, including the Municipal Strategic Statement and local planning policies;*
- *The Decision Guidelines provided by the Latrobe Planning Scheme at Clause 32.03-3 and Clause 65;*
- *The need to prevent the subdivision of land which may compromise future opportunities for future residential development within the precinct;*
- *Whether the proposal will result in increased stormwater volumes being generated and whether this is likely to have an adverse impact on other property’;*
- *Whether a stormwater management plan has been submitted and that the plan is to the satisfaction of the responsible authority;*
- *Whether each proposed lot has a legal point of vehicle access via a government road;*
- *Consideration of any management plan or infrastructure contribution scheme being prepared for the precinct; and*
- *The need to include a condition requiring specified works or services to be provided or paid for in accordance with an agreement under Section 173 of the Planning and Environment Act 1987. The 173 Agreement is to be prepared to ensure:*
 - (a) *present and future landowner awareness of the possible higher density residential development occurring within the Traralgon LDRZ precinct; and*
 - (b) *Financial contributions are provided for the provision of future stormwater and road infrastructure within the Traralgon LDRZ precinct.*

Traralgon Growth Area Review (TGAR) and Draft Traralgon West Structure Plan

TGAR is intended to provide a growth strategy that identifies areas for future urban development around Traralgon, Traralgon-Morwell Corridor, Glengarry and Tyers up to the year 2051. The subject site is within the study area of TGAR.

The Traralgon Framework Plan and the Traralgon West Structure Plan form part of the draft TGAR documents.

Draft Traralgon Framework Plan

The Draft Traralgon Framework Plan places the subject land in Area 5 where land is identified as suitable for being progressively rezoned and redeveloped in the future to provide further conventional residential land for Traralgon. The Framework Plan states that, as a priority, increased residential densities should be sought for the land in Area 5.

Draft Traralgon West Structure Plan

The draft Traralgon West Structure Plan shows the site within Area 5. Information regarding Area 5 in the Plan is as follows:

“Existing Low Density Residential and Rural Living zoned land in the south of the precinct...should intensify through development at conventional residential densities. A Development Plan should be prepared for the identified areas in collaboration with the existing landowners to ensure that appropriate connections and infrastructure is established as densities increases.”

Australian Paper Mill Amenity Buffer

The Australian Paper Maryvale Mill requires an odour buffer up to 5km as set out in Clause 52.10 of the Latrobe Planning Scheme. However, this buffer distance has been adjusted per agreement by Council, Australian Paper and the Environmental Protection Agency (EPA). The adjusted buffer has been taken into consideration and has informed the TGAR reports as part of the Latrobe City Council’s long term land-use planning of the area. It is important to note that the subject land is within the 5 km from the Australian Paper Mill however, it is located outside of the agreed buffer as indicated in the TGAR reports.

Zoning

The subject site is located within the Low Density Residential Zone. The primary purpose of the zone is *‘to provide for low-density residential development on lots which, in the absence of reticulated sewerage, can treat and retain all wastewater’*. In accordance with the LDRZ provisions, a permit is required to subdivide land and each of the proposed lots must be at least 0.4 hectare. The proposed subdivision satisfies this requirement with all lots proposed to be 0.4 hectares or greater in size.

In accordance with Clause 32.03-3 of the Scheme, Council must consider the relevant decision guidelines of the LDRZ. A discussion of the decision guidelines is in the Issues section of this report.

Particular Provisions*Clause 52.01 Public Open Space Contribution and Subdivision:*

Council’s Public Open Space Strategy requires a contribution from the developer of 10% of the value of the net developable area of the land to be provided in either cash or land or a combination of both for public open space. This strategy has been adopted by Council but is not incorporated into the Latrobe Planning Scheme.

The existing watercourse and associated land will be contained within a reserve and transferred to Latrobe City Council under Stage 1 of the subdivision. However, this land forms a natural drainage corridor and will not provide a public open space function. Therefore, in this instance, a cash contribution of 5% would be required in accordance with the Section 18 of the *Subdivision Act 1988*.

Clause 52.10 Uses with adverse amenity potential:

The intent of this provision is *'to define those types of industries and warehouses which if not appropriately designed and located may cause offence or unacceptable risk to the neighbourhood'*. In accordance with the Table to Clause 52.10 the minimum threshold distance identified is 5 km between *'paper or paper pulp production'* and sensitive land uses.

Decision Guidelines (Clause 65):

Clause 65.02 provides decision guidelines to consider when assessing applications to subdivide land. These guidelines are discussed in the Issues section of this report.

ISSUES

Strategic direction of the State and Local Planning Policy Frameworks:

The State and Local Planning Policy Frameworks acknowledge the need to protect land on the outskirts of established urban areas in the event that it may be required for future growth of a town. In particular, Clause 11.02-1 of the Scheme aims to restrict low density rural residential development that would compromise future development at higher densities. Clause 21.04-3 of the Scheme generally discourages further rural living or low density residential development on the fringes of the major towns where land is designated as a long-term urban growth corridor.

In addition, Council's draft Traralgon Growth Area Review report and draft Traralgon West Structure Plan have identified that there are some significant constraints associated with future residential development of Traralgon. In particular, the floodplain associated with Latrobe River located to the north of the town, and the proposed Traralgon bypass to the south of the town restricts the ability for growth in these directions. Areas to the east and directly to the west of Traralgon (including the subject land) therefore represent opportunities for future growth for the town, and ad-hoc subdivisions should be avoided to provide maximum opportunity for future residential development.

The subject land has been identified as being located within a 'proposed conventional residential' area, in accordance with Council's draft Traralgon West Structure Plan. The 'Proposed Zoning' plan shows the land as 'proposed Residential 1 Zone'.

Whilst the proposed 10 lot staged subdivision may assist with the short term provision of low density residential lots, it affects the future ability of the land to be further subdivided and restricts the potential for a higher density lot yield in the future. It does so at a general level, because, as is recognized in the strategic planning documents for Traralgon, the more fragmented land is, and the more land owners that are involved, the more difficult it is to achieve the coordinated redevelopment of an area to a

higher residential density. The further fragmentation of the site will also set a precedent which may influence other similar applications currently before Council, potentially also leading to those other sites being fragmented.

TW Interim Policy

The proposal has been assessed against the TW Interim Policy and found to not comply on the following grounds:

1. The proposal would result in the subdivision of land which would compromise future opportunities for residential development within the precinct.

On the above basis, it is considered that the proposal to create nine additional lots will result in a long term detrimental impact on potential future residential growth of Traralgon, given the existing development constraints around the town boundaries. The proposal would restrict the orderly planning of Traralgon and hinder the potential for well planned, sustainable growth of the town.

'Purpose' and 'Decision Guidelines' of the Low Density Residential Zone:

The subject land is contained within the Low Density Residential Zone of the Scheme. The primary purpose of the zone is *'to provide for low-density residential development on lots which, in the absence of reticulated sewerage, can treat and retain all wastewater'*. In accordance with the LDRZ provisions, a permit is required to subdivide land and each of the proposed lots must be at least 0.4 hectare. Given the site comprises 5.96 hectares in overall area, this allows Council to consider the subject application to subdivide the site into 10 lots as well as providing a reserve area either side the designated waterway totalling 7920 square metres in area.

However, it should be noted that Clause 65 of the Scheme states that because a planning permit can be granted does not imply that a permit should or will be granted. Council must decide whether the proposal will produce acceptable outcomes in terms of the relevant provisions of the Scheme.

Stormwater Management

Council's Traralgon West Interim Infrastructure Development Policy outlines the process by which Council will consider further subdivision of land within the Traralgon Low Density Residential Zone

In relation to an application to subdivide land, the policy requires an assessment against the criteria set out in the policy including *"whether the proposal will result in increased stormwater volumes being generated and whether this is likely to have an adverse impact on other property"* and *"whether a stormwater management plan has been submitted and that the plan is to the satisfaction of the responsible authority"*.

Increased drainage flows downstream of the site would not be permitted without the construction of supporting infrastructure to mitigate potential flooding and degraded water quality impacts. As there is currently no overall development plan for the area, each subdivision should make adequate individual provision for the treatment and discharge of all stormwater from the land and from areas upstream to ensure that water quality is maintained or improved and stormwater flow rates are restricted to pre-development flow rates.

The proposed stormwater management arrangement has been reviewed by Council's Infrastructure Planning Team and is generally deemed satisfactory, subject to inclusion of appropriate permit conditions to ensure that stormwater flows from the subdivision site be restricted to predevelopment levels should one be issued.

It should be noted whilst the West Gippsland Catchment Management Authority (WGCMA) has identified that a designated waterway runs through the property, they do not have any objections to the proposed ten lot staged subdivision or the proposed stormwater management arrangement as outlined by the applicant. The WGCMA only requested that appropriate permit conditions be included, should a planning permit for the proposal be granted, requiring the development of a Water Management Plan to revegetate and rehabilitate the relevant waterway and that a stormwater management plan must be developed to their satisfaction.

On the above basis, it is reasonable to consider that subject to appropriate conditions, the proposed stormwater drainage system would be able to operate efficiently to limit stormwater discharge from the site to pre-developed levels. The proposal is unlikely to have any adverse amenity impact on adjoining properties or on the environmental qualities of waterways, from excessive stormwater runoff.

Wastewater Management

In terms of wastewater management, it should be noted that the purpose and decision guidelines of the LDRZ emphasise the need to ensure that waste water can be treated and retained on site in accordance with the State Environment Protection Policy (Waters of Victoria) under the *Environment Protection Act 1970*.

The LCA states that the site has a number of environmental constraints impacting upon the sustainable application of wastewater to land including a watercourse, topography and areas of frequently saturated soil and groundwater springs.

The report submitted with the application raises numerous factors which may impact on the site being able to sustainably treat and contain wastewater on within the boundary of the property.

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The Land Capability Assessment has been assessed by Latrobe City Councils Health Team who has identified a number of issues that need to be addressed in greater detail as part of any planning permit issued.

For the reasons outlined above, it is considered that the proposal is generally inconsistent with the purpose of LDRZ, as the current documentation has failed to satisfactorily demonstrate that wastewater would be capable of effectively being treated and wholly contained within the boundary of the site generally in accordance with the relevant EPA guidelines and Code of Practice.

Clause 65 (Decision Guidelines):

Before deciding on an application to subdivide land, the responsible authority must also consider the decision guidelines of Clause 65. In response to the guidelines, the following comments are made:

- The land is located in a designated long-term urban growth corridor for Traralgon. Subdivision of the lots into further low density residential lots would restrict the potential for a higher density lot yield from this site in the future.

It should be noted that in *Cuddy v Latrobe* [2011] VCAT 1169, the Tribunal in considering the application for a 5 lot subdivision at 55 Regan Road in Traralgon, and the general issue of the future residential development of this area, concluded that there was no longer a shortage of land supply. However, since that decision, a significant amount of further strategic work has been undertaken by Council and it has become evident from the relevant strategic work, such as Council's Traralgon Growth Area Review Project, that there is still a strong need for the area containing the subject land to be available for higher density residential development in the future.

In a more recent case, *Vogt v Latrobe* [2012] VCAT 3197, the Tribunal in considering the application for a 4 lot subdivision at Lot 3 Bradford Drive Traralgon, accepted that *'there is strong policy support against the proposal [low density subdivision] in the Planning Scheme and the associated strategic work of the Latrobe City Council for the expansion of Traralgon'*, and directed to refuse the 4 lot subdivision proposal in Traralgon West area based on grounds of compromising potential for increased urban densities.

On the above basis, it is reasonable to consider that the subject proposal to create nine additional lots will result in a long term detrimental impact on potential future residential growth of Traralgon, given the existing development constraints around the town boundaries. The proposal will restrict the orderly planning of future growth for the town and may hinder the capabilities for well planned, sustainable growth of the town. The proposal is considered to be contrary to Council's strategic direction for the area.

FINANCIAL, RISK AND RESOURCES IMPLICATIONS

Additional resources or financial cost will only be incurred should the planning permit application require determination at the Victorian Civil and Administrative Tribunal (VCAT).

INTERNAL / EXTERNAL CONSULTATION

Engagement Method Used:

Notification:

The application was advertised pursuant to Section 52(1)(a) and Section 52(1)(d) of the Act. Notices were sent to all adjoining and adjacent landowners and occupiers and an A3 notice was displayed on the site frontage for 14 days.

Details of Community Consultation following Notification:

Following the advertising and referral of the application, no submissions were received.

External:

In accordance with the referral requirements of Section 55 of the Act, the application was referred to SP AusNet Pty Ltd, Gippsland Water and APA Group for consideration.

The application was also referred to the WGCMA with Section 52 of the Act.

WGCMA does not object to the granting of a planning permit for a ten lot staged subdivision subject to appropriate conditions being placed on any issue of a permit.

Internal:

The application was referred internally to Council's Infrastructure Planning, Strategic Planning, Recreation and Open Space and Health Services teams for consideration.

Council's internal teams had no objection to the granting of a permit subject to the inclusion of conditions.

OPTIONS

Council has the following options in regard to this application:

1. Refuse to Grant a Permit; or
2. Grant a Planning Permit.

Council's decision must be based on planning grounds, having regard to the provisions of the Latrobe Planning Scheme.

CONCLUSION

Having evaluated the proposal against the relevant provisions of the Scheme, it is considered that the application is inconsistent with the relevant objectives and decision guidelines of the Scheme. It is therefore recommended that a refusal to grant a Planning Permit be issued for the reasons set out in this report. More specifically, it is considered that:

- The proposal is inconsistent with Clauses 11.02-1 (Supply of Urban Land) and 21.04-3 (Rural Living Overview) of the Scheme by facilitating an inappropriate low density residential subdivision on land that is designated as a long-term urban growth corridor. The proposal would compromise future development at higher densities and restrict the orderly planning of future growth for Traralgon.
- The proposal is inconsistent with the purpose and decision guidelines of Clause 32.03 (Low Density Residential Zone), in terms of failing to clearly demonstrate the capability of the lots to treat and retain all wastewater on site in accordance with the State Environment Protection Policy (Waters of Victoria) under the *Environment Protection Act 1970*.
- The proposal is inconsistent with Clause 65.02 (Decision Guidelines).
- The proposal is inconsistent with Council's Traralgon West Interim Infrastructure Development Policy 11 POL-2.

Attachments

1. Site context plan
2. Plan of subdivision
3. Land capability assessment
4. Building and waste disposal envelope plan
5. History of application
6. Provisions of the Scheme

RECOMMENDATION

That Council issues a Notice of Refusal to grant a planning permit, for the 10 lot staged subdivision at 24 Coopers Road, Traralgon (or more particularly described as Lot 3 on LP 141401, on the following grounds:

1. The proposal is inconsistent with Clause 11.02-1 (Supply of Urban Land) and Clause 21.04-3 (Rural Living Overview) of the Scheme by facilitating an inappropriate low density residential subdivision on land that is designated as a long-term urban growth corridor. The proposal would compromise future development at higher densities and restrict the orderly planning of future growth for Traralgon.
2. The proposal is considered to be inconsistent with Clause 65.02 (Decision Guidelines).
3. The proposal is inconsistent with Council's Traralgon West Interim Infrastructure Development Policy 11 POL-2.

ALTERNATE MOTION

Those Council issues a Decision to Grant a Planning Permit for a 10 lot staged subdivision at Lot 3 on LP 141401 more commonly known as 24 Coopers Road, Traralgon with the following conditions

1. Prior to the certification of the subdivision hereby permitted, an amended Land Capability Assessment (LCA) must be submitted to and approved by the Responsible Authority. The LCA must be prepared by a suitably qualified and experienced engineer / person to the satisfaction of the Responsible Authority and must be generally consistent with the LCA submitted with the original application but to include:
 - a) The effluent dispersal area for each lot should be increased in size to allow for a minimum of 900 litres of effluent per day as required by the EPA Code of Practice, Onsite Wastewater Management, Publication No. 891.3 February 2013.
 - b) Waste water envelopes of 1200m² to include primary and reserve effluent fields for subsurface irrigation lines (under pressure) installed in accordance with Australian Standard AS/NZS 1547:2012, Table M1.
 - c) All setback distances detailed in Table 5 Page 39 of the EPA Code of Practice, Onsite Wastewater Management, Publication No. 891.3 February 2013, must be adhered to.
2. Prior to the certification of the subdivision hereby permitted, amended plans must be submitted to and approved by the Responsible Authority. When approved, the plans will be endorsed and will then form part of the permit. The plans must be drawn to scale with dimensions and three copies must be provided. The plans must be generally in accordance with the plans submitted with the original application but modified to show:
 - a) Revised building and waste water / effluent disposal envelopes for each of the proposed lots, in accordance with the endorsed LCA as required under condition 1 of this permit, to the satisfaction of the Responsible Authority. The building envelope must be of an appropriate size, to the satisfaction of the Responsible Authority, so that a dwelling can reasonably be accommodated within the envelope without the need to remove native vegetation.
3. Prior to the certification of the plan of subdivision under the Subdivision Act 1988, amended plans to the satisfaction of the Responsible Authority must be submitted to and approved by the Responsible Authority. When approved, the plans will be endorsed and will then form part of the permit. The plans must

be drawn to scale with dimensions and three copies must be provided. The plans must be generally in accordance with the plans submitted but modified to show:

- a) The notation on the plan of subdivision proposing a “temporary gravel vehicle turning circle” adjacent to lot 10, must be amended. The turn-around area must be 20 metres in diameter and surfaced with hot-mixed bituminous concrete.
4. The layout of the subdivision as shown on the endorsed plan must not be altered without the permission of the Responsible Authority.
5. Section 173 – On site Waste Management System:

Before the plan of subdivision is Certified under the Subdivision Act 1988, the owner must enter into an agreement with the Responsible Authority made pursuant to section 173 of the Planning and Environment Act 1987 and must make application to the Registrar of Titles to have the agreement registered on the title to the land under section 181 of the Act, which provides the following:

- a) That all future buildings and works must be contained within the building envelope endorsed under this permit unless with the written consent of the Responsible Authority.
- a) That the number of habitable rooms for each of the future dwellings must not exceed the number recommended in the LCA endorsed under this permit, unless with the written consent of the Responsible Authority.
- b) That all effluent shall be discharged within the effluent disposal envelope endorsed under this permit unless with the written consent of the Responsible Authority.
- c) That the proposed effluent treatment and disposal system for each lot must be designed and constructed in accordance with the Land Capability Assessment endorsed under this permit, unless with the written consent of the Responsible Authority.
- d) That within two months of installation of the approved wastewater treatment plant and effluent distribution system, a commissioning report must be provided to the satisfaction of the Responsible Authority to ensure construction has been completed to the satisfaction of the Responsible Authority.
- e) Maintenance reports of each wastewater system must be prepared by a person or firm approved by the responsible authority and must be submitted to the Responsible Authority every twelve months or another period of time determined by the Responsible Authority. The maintenance report must be prepared after an inspection of the system and must document

the condition and operation of the system and any repair works which are necessary. The carrying out of all maintenance and repair work documented in the latest maintenance report must occur within two months of the report to the satisfaction of the Responsible Authority.

The owner must pay the reasonable costs of preparation, review, execution and registration of the agreement.

Prior to Statement of Compliance issued the Applicant/Owner must provide Council with a copy of the dealing number issued by the Titles Office. Once titles are issued Council requires the Applicant or its legal representative to provide either:

- i) a current title search; or
- i) a photocopy of the duplicate certificate of Title

as evidence of registration of the section 173 agreement on title.

6. Prior to the issue of a Statement of compliance the existing onsite treatment system located on proposed Lot 1 shall be upgraded to treat wastewater to at least 20ppm bod and 30ppm suspended solids in accordance with the EPA Code of Practice, Onsite Wastewater Management, Publication No. 891.3 February 2013. The existing septic tank located on proposed Lot 1 is to be desludged, base broken and filled with inert material.

7. Public Open Space:

Prior to the issue of Statement of Compliance under the Subdivision Act 1988, the applicant or owner must pay to the Responsible Authority:

- a) a sum equivalent to 5% per cent of the site value of all the land in the subdivision; and
- b) any costs associated with valuation of the land including valuers fees.

8. Prior to the Issue of a Statement of Compliance, a Waterway Management Plan must be developed, to the satisfaction of the West Gippsland Catchment Management Authority. The Waterway Management Plan must provide for a significant improvement in the ecological health of the waterway, and must include a landscape plan for revegetation of the reserve and a maintenance plan detailing the short, medium and long term actions and agencies/developers responsible for each stage.

9. Prior to the Issue of a Statement of Compliance, a Stormwater Management Plan must be developed, to the satisfaction of the West Gippsland Catchment Management Authority. The

Stormwater Management Plan must demonstrate that all stormwater discharge from the subdivision will meet the 'Urban Stormwater Best Practice Environmental Management Guidelines, CSIRO 1999'

10. All works within 30 metres of a designated waterway require a Works on Waterways licence from the West Gippsland Catchment Management Authority, issued under the Water Act 1989. This includes (but is not limited to) construction of any recreational paths and crossings, construction of any vehicle access over a designated waterway, and installation of any water or sewer main within 30 metres of the designated waterway. A Works on Waterways licence application must be accompanied by a satisfactory Waterway Management Plan, and detailed construction drawings of the proposed works.
11. The operator of this permit must meet the requirements of SPI Electricity Pty Ltd in that, prior to the issues of Certification/Statement of Compliance, they:

The plan of subdivision submitted for certification must be referred to SPI Electricity Pty Ltd in accordance with Section 8 of the subdivision Act 1988.

The applicant must -

- a) Enter into an agreement with SPI Electricity Pty Ltd for supply of electricity to each lot on the endorsed plan.
- b) Enter into an agreement with SPI Electricity Pty Ltd for the rearrangement of the existing electricity supply system.
- c) Enter into an agreement with SPI Electricity Pty Ltd for rearrangement of the points of supply to any existing installations affected by any private electric power line which would cross a boundary created by the subdivision, or by such means as may be agreed by SPI Electricity Pty Ltd.
- d) Provide easements satisfactory to SPI Electricity Pty Ltd for the purpose of "Power Line" in the favour of "Electricity Corporation" pursuant to Section 88 of the Electricity Industry Act 2000, where easements have not been otherwise provided, for all existing SPI Electricity Pty Ltd electric power lines and for any new power lines required to service the lots on the endorsed plan and/or abutting land.
- e) Obtain for the use of SPI Electricity Pty Ltd any other easement required to service the lots.
- f) Adjust the position of any existing SPI Electricity Pty Ltd easement to accord with the position of the electricity line(s) as determined by survey.

- g) Set aside on the plan of subdivision Reserves for the use of SPI Electricity Pty Ltd for electric substations.**
 - h) Provide survey plans for any electric substations required by SPI Electricity Pty Ltd and for associated power lines and cables and executes leases for a period of 30 years, at a nominal rental with a right to extend the lease for a further 30 years. SPI Electricity Pty Ltd requires that such leases are to be noted on the title by way of a caveat or a notification under Section 88 (2) of the Transfer of Land Act prior to the registration of the plan of subdivision.**
 - i) Provide to SPI Electricity Pty Ltd a copy of the plan of subdivision submitted for certification that shows any amendments that have been required.**
 - j) Agree to provide alternative electricity supply to lot owners and/or each lot until such time as permanent supply is available to the development by SPI Electricity Pty Ltd.**
 - k) Ensure that all necessary auditing is completed to the satisfaction of SPI Electricity Pty Ltd to allow the new network assets to be safely connected to the distribution network.**
- 12. The operator of this permit must comply with the following requirements from the Gippsland Water prior to the issues of Certification/Statement of Compliance, they:**
- a) Pay New Customer Contributions to Gippsland Water for water service(s) provided to each lot created by this development. These charges are based on Gippsland Water's rates at the time of payment and are associated with additional infrastructure that Gippsland Water will be required to operate and maintain to ensure ongoing servicing of this development.**
 - b) WATER EXTENSION ONLY - Ensure that the owner of the land enters into a formal agreement with the Central Gippsland Region Water Corporation, under the Corporation's Land Development system, for the complete construction of works necessary for the provision of water supply services to all lots of the subdivision. Pay to Gippsland Water any fees and contributions and satisfy all conditions pertaining to the aforementioned agreement.**
 - c) Install separate water services to all lots 1 to 10 inclusively to the satisfaction of Gippsland Water. As Constructed details showing the location of the installed services are required to be submitted to Gippsland Water.**
 - d) Upon Practical Completion (PC) being issued on the new water main extension, the existing water service meter No#**

04AF015731 located in Old Melbourne Rd and servicing the existing dwelling located in proposed Lot 1 Coopers Rd, must be transferred to the new water service to be installed for Lot 1 as part of the extension to the water main in Coopers Rd. These works are to be carried by Gippsland Water.

- e) The internal water service for the existing dwelling will need to be realigned to the new meter location in Lot 1. These works must be carried out by the owner's plumber.
 - f) Provide water and wastewater services to Gippsland Water's minimum supply standards, unless otherwise agreed with by Gippsland Water.
 - g) If the land is developed in stages, the above conditions will apply to any subsequent stage of the subdivision.
 - h) Any plan of subdivision of the subject land lodged for certification shall be referred to Gippsland Water under Section 8(1) of the Subdivision Act 1988.
13. Prior to the certification of the plan of subdivision under the Subdivision Act 1988, amended plans to the satisfaction of the Responsible Authority must be submitted to and approved by the Responsible Authority. When approved, the plans will be endorsed and will then form part of the permit. The plans must be drawn to scale with dimensions and three copies must be provided. The plans must be generally in accordance with the plans submitted but modified to show:
- a) The notation on the plan of subdivision proposing a "temporary gravel vehicle turning circle" adjacent to lot 10, must be amended. The turn-around area must be 20 metres in diameter and surfaced with hot-mixed bituminous concrete.
14. Before the plan of subdivision is certified under the Subdivision Act 1988, a Stormwater Management Plan to the satisfaction of the Responsible Authority must be submitted to and approved by the Responsible Authority. Once approved, the report will then form part of the permit. Issues the plan must address include:
- a) how stormwater is to be conveyed to the legal point of discharge for all storm events up to and including the 1 in 100 year ARI storm event including providing over-land stormwater surcharge routes and cut-off drains for the safe and effective passage of stormwater flows arising from areas upstream of the subject land;
 - b) how stormwater is to be conveyed from the legal point of discharge into a receiving designated waterway;

- c) mitigation of potential detriment to downstream landholders resulting from increased stormwater volumes or concentrated stormwater discharges;
 - d) details (including on-site detention) to ensure all stormwater discharge from each of the lots on the land is limited to pre-development flows for all storm events up to and including the 1 in 100 year ARI storm event and to ensure there are no adverse affects on flooding either upstream or downstream of any development on the land;
 - e) details regarding treatment of stormwater discharge from the development to achieve the following objectives for environmental quality as set out in the Urban Stormwater Best Practice Environmental Guidelines (CSIRO) 1999 and designed in accordance with:
 - (i) 80% retention of the typical annual load of suspended solids;
 - (i) 45% retention of the typical annual load of total phosphorous;
 - (ii) 45% retention of the typical annual load of nitrogen; and
 - (iii) 70% retention of the typical annual load of gross pollutants.
15. The plan of subdivision submitted for certification under the Subdivision Act 1988 must show to the satisfaction of the Responsible Authority:
- a) Easements set aside for drainage purposes.
16. The plan of subdivision submitted for certification under the Subdivision Act 1988 for stage 1 of the development, must show to the satisfaction of the Responsible Authority:
- a) A carriageway easement over any temporary vehicle turn-around area constructed as part of this development where the turn-around area is not wholly contained within a road reserve. The carriageway easement boundary must allow at least five metres of clearance from the outer edge of the turn-around area.
17. All roads to be continued in future stages within the development and required for use by waste collection vehicles, must be provided with a temporary 20 metre diameter vehicle turning area. This shall be provided within the land the subject of this permit. If not wholly located within a road reserve, prior to the issue of a Statement of Compliance for the relevant stage of the development, an appropriate carriageway easement must be created protecting Latrobe City Council's and the public's future rights to the use of the land.

18. Prior to the commencement of any works associated with each stage of the subdivision, a landscape plan for all public open space areas including streets, parklands, entry features, drainage reserves, and community use areas must be prepared by a person suitably qualified or experienced in landscape design and submitted to the Responsible Authority for its approval. When approved the plan will be endorsed and will then form part of the permit. The landscape plan must be drawn to scale with dimensions and three copies and an electronic copy (PDF) must be provided. The landscape plan must be consistent with any landscape master plan already endorsed in respect of the land and must show:
- a) New plantings including their layout to be provided in any road reserves and municipal reserves.
 - b) A detailed planting schedule of all proposed trees, shrubs and groundcovers, including botanical names, common names, pot sizes, sizes at maturity and quantities of each plant.
 - c) The supply and spread of sufficient topsoil, and sub soil if required, on the proposed areas of open space to provide a stable, free draining surface and hydro-seeding of proposed grass areas (including within drainage reserves).
 - d) Detailed planting and construction drawings including site contours and any proposed changes to existing levels including any structural elements such as retaining walls.
 - e) Additional supporting information, such as certified structural designs or building forms.
 - f) Vehicle access points for maintenance purposes.
 - g) Mechanisms/structures for the exclusion of vehicles from landscaped areas where required.
 - h) The removal of existing disused structures, foundations, pipelines or stockpiles and the eradication of weeds.
 - i) Design and construction layouts for equipment in playground areas.
 - j) All proposed street-tree planting using semi-advanced trees, with minimum container size of 45 litres.
19. Prior to the commencement of any road and/or drainage works, and for each subsequent stage, detailed engineering plans and specifications must be submitted to the satisfaction of and approved by the Responsible Authority. When approved the plans will be endorsed and will then form part of the permit. The

plans must be drawn to scale with dimensions and electronic copies in both PDF and DWG formats must be provided. The plans must include:

- a) **Construction of the proposed road extension of Alamere Drive in accordance with Latrobe City Council's Design Guidelines. The proposed road shall be designed and constructed as a Rural Access Road including a sealed width of 5.5 metres and a pavement width of 6.5 metres and all required provisions for the drainage of the road reserve. A vehicle turn around area with a 20 metre diameter hot-mixed bituminous concrete surface must be constructed at the end of the proposed road.**
- b) **All temporary vehicle turnaround areas referred to in Condition 13 must be constructed with a low maintenance sealed surface and drained.**
- c) **Underground piped drainage to each lot and provision of over-land surcharge routes and cut-off drains. The stormwater drainage system must be designed to take the 1 in 5 year ARI storm event, to meet the current best practice performance objectives for stormwater quality as contained in the Urban Stormwater Best Practice Environmental Management Guidelines, CSIRO 1999 as amended and to ensure that flows downstream of the subdivision site are restricted to predevelopment levels unless increased flows are approved by the relevant drainage authority and there are no detrimental downstream impacts. The stormwater drainage system may include water sensitive urban design features. Where such features are provided, an application must describe maintenance responsibilities, requirements and costs. Drainage plans must include hydraulic computations for all new drainage works.**
- d) **Construction of wetland/stormwater detention areas and grassed swales where proposed in the approved stormwater management plan for the development. The wetlands and grassed swales shall be designed to achieve the following objectives for environmental quality as set out in the Urban Stormwater Best Practice Environmental Management Guidelines, CSIRO 1999:**
 - **80% retention of the typical annual load of suspended solids;**
 - **45% retention of the typical annual load of total phosphorus;**
 - **45% retention of the typical annual load of total nitrogen; and**
 - **70% retention of the typical annual load of gross pollutants.**

Proposed wetlands/stormwater detention areas must be constructed to ensure that the bed of the internal edges of any water body are

graded to achieve a maximum water depth of 0.2m for a minimum distance of 3 metres in from the water's normal edge before becoming steeper or achieve the alternatives specified in "WSUD Engineering Procedures: Stormwater (Melbourne Water 2005), Clause 10.3.2.3 Cross sections" or equivalent standards applicable at the time to the satisfaction of the Responsible Authority.

- e) Proposed wetlands/stormwater detention areas, reserves and surrounds shall be cleared of all noxious weeds, graded, filled and compacted with approved material free of rock, stone and other contamination, shaped and formed as necessary, to ensure the land is free draining to the satisfaction of the Responsible Authority.
 - f) Construction of a vehicle crossing for each of the proposed lots. These crossings shall be constructed to Latrobe City Council standards for a rural culvert crossing including provision of an all-weather sealed surface from the edge of the road pavement to the property boundary.
 - g) Earthworks shall be undertaken within the development to ensure that vehicle access can be obtained to each proposed allotment.
 - h) Street lighting at all intersections and bends along the new road and in the court bowl at the end of the new road.
 - i) All traffic signage, street name signage and road pavement line marking.
 - j) High stability permanent survey marks at locations in accordance with Latrobe City Council's Design Guidelines, levelled to the Australian Height Datum and coordinated to the Map Grid of Australia (MGA94).
 - k) Details of any cut and fill.
20. A detailed maintenance plan for all proposed water sensitive urban design features must be submitted to the satisfaction of and approved by the Responsible Authority with the engineering plans. The maintenance plan must include a schedule and requirements of inspections to be undertaken, how and when remediation and routine maintenance works are to be undertaken and estimated maintenance costs.
21. Prior to the commencement of any road, drainage or landscaping works associated with each stage of the subdivision, a Site Management Plan shall be submitted to and approved by the Responsible Authority. When approved, the Site Management Plan will be endorsed and will then form part of the permit. The Site Management Plan must include:

- a) **Traffic management measures - the plan must detail measures proposed to protect and maintain vehicle use of the existing road system and pedestrians using existing footpaths adjacent to the development, how site access will be obtained, how construction vehicles will access and egress the site and the management of public access to the site. The plan must include details of all signage on adjacent roads.**
 - b) **Construction management measures - the plan must outline how issues such as deliveries, noise, mud on roads, and dust generation will be managed onsite during the construction phase. Details of a contact person/site manager must also be provided, so that this person can be easily contacted should any issues arise.**
 - c) **An environmental management plan for the works detailing techniques for erosion prevention, temporary drainage and sediment control measures and vegetation protection during the construction of the works and post construction. Reference should be made to the Environment Protection Authority's publication 960 'Doing it right on subdivisions'.**
 - d) **Cultural protection issues – the plan must demonstrate how the recommendations of any Cultural Heritage Management Plan applying to the land are to be carried out.**
22. **Control measures in accordance with the approved Site Management Plan shall be employed throughout the construction of the works to the satisfaction of the Responsible Authority. The Responsible Authority must be kept informed in writing of any departures from the Site Management Plan. If in the opinion of the Responsible Authority the departure from the approved plan is significant then an amended plan must be submitted to and approved by the Responsible Authority. The approved measures must be carried out continually and completed to the satisfaction of the Responsible Authority.**
 23. **Polluted drainage must be treated and/or absorbed on the lot from which it emanates to the satisfaction of the Responsible Authority. Polluted drainage must not be discharged beyond the boundaries of the lot from which it emanates or into a watercourse or easement drain.**
 24. **Before a Statement of Compliance is issued for each relevant stage of this subdivision under the Subdivision Act 1988, the operator of this permit must construct road works, drainage and other civil works to the satisfaction of the Responsible Authority, in accordance with the engineering plans and specifications approved by the Responsible Authority and must include:**

- a) All proposed new roads in accordance with Latrobe City Council's Design Guidelines.
 - b) Vehicle crossings must be constructed to provide access to each of the proposed lots.
 - c) Underground piped drainage to convey stormwater from the legal point of discharge of each lot for the 1 in 5 year ARI storm event.
 - d) Works to ensure that flows downstream of the subdivision site are restricted to pre-development levels.
 - e) Works to ensure the stormwater management system meets current best practice performance objectives for stormwater quality.
 - f) Provisions for stormwater from all storm events greater than the 1 in 5 year event and up to and including the 1 in 100 year ARI storm event including:
 - i. Provision of over-land stormwater surcharge routes and cut-off drains for the safe and effective passage of stormwater flows.
 - ii. Arrangements for the capture of overland stormwater flows from adjacent upstream areas not previously developed.
 - iii. All new and existing lots should be free from inundation.
 - iv. All streets, footpaths and cycle paths that are subject to flooding must meet the safety criteria $d_{avave} < 0.35 \text{ m}^2/\text{s}$ (where d_a = average depth in metres and v_{ave} = average velocity in metres per second).
 - g) Earthworks within the development to ensure that vehicle access can be obtained to each proposed allotment.
 - h) Street lighting along all new roads.
 - i) All traffic signage, street name signage and road pavement line marking.
 - j) The installation and registration of high stability permanent survey marks.
 - k) Provision of all temporary vehicle turnarounds referred to in Condition 13, constructed with a low maintenance sealed surface.
25. Before a Statement of Compliance is issued for each relevant stage of this subdivision under the Subdivision Act 1988 or by

such later date as is approved by the Responsible Authority in writing, the landscape works shown on the endorsed plans must be carried out and completed to the satisfaction of the Responsible Authority. All areas to be landscaped, including open space, must:

- a) Have bulk earthworks completed (where required) to ensure reserves are fit for intended purpose;
 - b) Be cleared of all rubbish and environmental weeds, top soiled and grassed;
 - c) All landscape planting works completed including drought resistant trees and other planting;
 - d) Have shared paths and footpaths as shown on endorsed plans;
 - e) Public lighting provided along paths, signage, fencing and street furniture installed;
 - f) Maintenance vehicle access points provided.
26. Before a Statement of Compliance is issued for each relevant stage of this subdivision under the Subdivision Act 1988, the operator of this permit must construct timber paling fences no higher than 1.2 metres or approved 75 percent permeable fencing, along all allotment boundaries abutting reserves.
27. Before a Statement of Compliance is issued for each relevant stage of this subdivision under the Subdivision Act 1988, the operator of this permit must provide to the satisfaction of the Responsible Authority:
- a) A certified plan showing the extent and depth of fill in excess of 300 mm placed on all land within or abutting the subdivision.
 - b) Final as-built plans for all works to become the responsibility of Latrobe City Council at the expiry of the maintenance period, in an electronic format complying with A-Spec requirements.
 - c) A copy of the registered permanent survey mark sketch plans displaying the registration numbers of the permanent marks.
 - d) Written records of all inspections undertaken during the maintenance period for the works, in accordance with the requirements of Latrobe City Council's Road Management Plan, any defects identified during those inspections and the date and time of rectification of the defects.
28. Before a Statement of Compliance is issued for each relevant stage of this subdivision under the Subdivision Act 1988, the operator of this permit must pay to Latrobe City Council:

- a) For all works to become the responsibility of Latrobe City Council at the expiry of the maintenance period, an engineering plan checking fee of an amount equivalent to 0.75% of the estimated cost of constructing the works proposed on the engineering plans.
 - a) For all works to become the responsibility of Latrobe City Council at the expiry of the maintenance period, an amount equivalent to 2.5% of the estimated cost of constructing the works which are subject to supervision.
29. Unless otherwise required in this permit, all works to become the responsibility of Latrobe City Council at the expiry of the maintenance period, shall be maintained by the operator of this permit for a period of three months from the date of practical completion of the works. Maintenance of the works shall include all inspections required in accordance with Latrobe City Council's Road Management Plan. At the end of this maintenance period, a Defects Liability Period of nine months shall then apply to the works at the end of which time Final Completion of the works will be issued.
30. The operator of this permit must maintain to the satisfaction of the responsible authority, all water sensitive urban design (WSUD) devices constructed under this permit for a period of two (2) years. The maintenance period shall commence on the date the construction of the WSUD devices is certified by the Responsible Authority as practically complete. The maintenance of water sensitive urban design (WSUD) devices constructed under this permit must include full routine maintenance works including monthly, quarterly and annual inspections, weed removal, sediment clean out, litter management and remedial works as prescribed in the approved WSUD maintenance plan. The operator of this permit must provide copies to the Responsible Authority within one (1) calendar month of each inspection, of all maintenance inspection forms completed for each inspection, any defects identified and the date and time rectification works were completed. Any defects occurring during the maintenance period shall be rectified by the operator of this permit to the satisfaction of the Responsible Authority.
31. Prior to the commencement of any works, a landscape plan must be submitted to and approved by the Responsible Authority. The plan must show:
- a) a survey (including botanical names) of all existing vegetation to be retained and/or removed;
 - b) buildings and trees (including botanical names) on neighbouring properties within three metres of the boundary;

- c) details of surface finishes of pathways and driveways;
- d) a planting schedule of all proposed trees, shrubs and ground covers, including botanical names, common names, pot sizes, sizes at maturity, and quantities of each plant;

All species must be selected to the satisfaction of the Responsible Authority.

When approved, the plan will be endorsed and will then form part of the permit. The plan must be drawn to scale with dimensions and three copies must be provided.

- 32. The operator of this permit must maintain to the satisfaction of the responsible authority for a period of two (2) years, all landscaping constructed under this permit except for grass areas along street nature strips. The maintenance period shall commence on the date the landscaping is certified by the Responsible Authority as practically complete. Any defects occurring during the maintenance period shall be repaired by the operator of this permit to the satisfaction of the responsible authority. During this period, any dead, diseased or damaged plants are to be replaced during the period of maintenance and must not be deferred until the completion of the maintenance period.
- 33. Before a Statement of Compliance is issued for this subdivision under the Subdivision Act 1988, the maintenance period (including any defects liability period) for all works to become the responsibility of Latrobe City Council, must be completed to the satisfaction of the Responsible Authority unless an arrangement to secure compliance with this condition has been agreed to in writing by the Responsible Authority under Section 21(1)(b)(ii) of the Subdivision Act 1988.
- 34. The owner of the land must enter into an agreement with:
 - a) a telecommunications network or service provider for the provision of telecommunication services to each lot shown on the endorsed plan in accordance with the provider's requirements and relevant legislation at the time; and
 - b) a suitably qualified person for the provision of fibre ready telecommunication facilities to each lot shown on the endorsed plan in accordance with any industry specifications or any standards set by the Australian Communications and Media Authority, unless the applicant can demonstrate that the land is in an area where the National Broadband Network will not be provided by optical fibre.

Before the issue of a Statement of Compliance for any stage of the subdivision under the Subdivision Act 1988, the owner of the land must provide written confirmation from:

- c) a telecommunications network or service provider that all lots are connected to or are ready for connection to telecommunications services in accordance with the provider's requirements and relevant legislation at the time; and
 - d) a suitably qualified person that fibre ready telecommunication facilities have been provided in accordance with any industry specifications or any standards set by the Australian Communications and Media Authority, unless the applicant can demonstrate that the land is in an area where the National Broadband Network will not be provided by optical fibre.
35. The subdivision may be completed in stages. Each stage must be to the satisfaction of the Responsible Authority. The stages may include or require drainage or other works outside the physical bounds of any lots in any stage.
36. The subdivision of the land must proceed in the order of stages shown on the endorsed plans except with the prior written consent of the Responsible Authority.
37. This permit will expire if:
- a) The plan of subdivision for the first stage is not certified within two years of the date of this permit, or
 - b) The plan of subdivision for the last stage of the subdivision is not certified within five years of the date of this permit, or
 - c) The registration of the last stage of the subdivision is not completed within five years of the certification of that plan of subdivision.

The Responsible Authority may extend the periods referred to if a request is made in writing before the permit expires or within three months afterwards.

Moved: Cr Harriman
Seconded: Cr Rossiter

That the Motion be adopted.

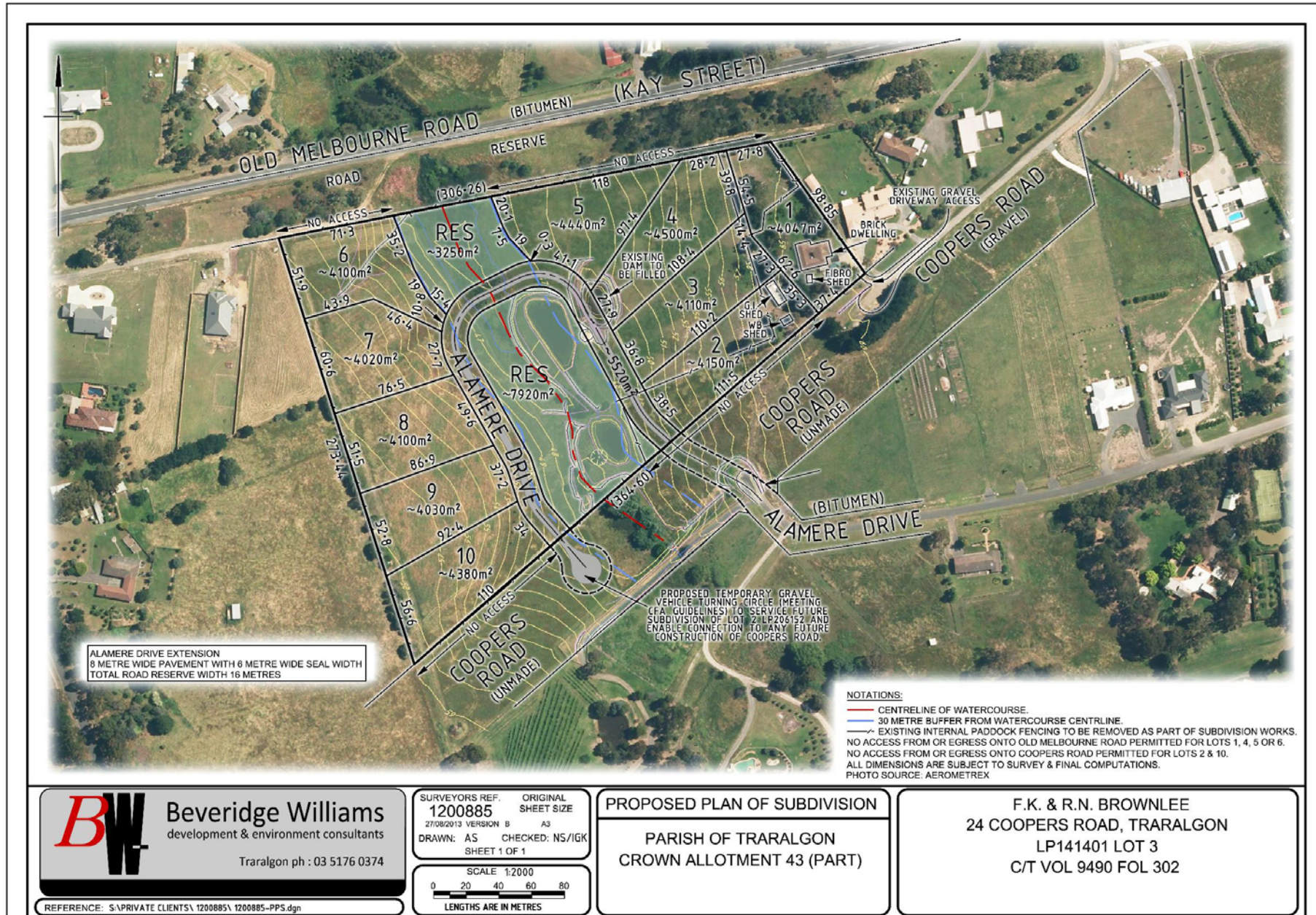
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16.4

PLANNING PERMIT APPLICATION 2013/172 - 10 LOT STAGED SUBDIVISION AT 24 COOPERS ROAD TRARALGON

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**LAND CAPABILITY ASSESSMENT
FOR ON-SITE DOMESTIC WASTEWATER MANAGEMENT
OF A
PROPOSED TEN LOT SUB-DIVISION AT
KAY ST & ALAMERE DR, TRARAGLON**

for

F & R Brownlee
&
Beveridge Williams & Co. Pty Ltd

By
G.D Marriott, *B Ag Sc*
& B. Dimond



Land Safe is a Division of Ag-Challenge Consulting Pty Ltd

PO Box 571
Warragul, Victoria, 3820

(23 January 2013)

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LCA – Kay St & Alamere Dr – Traralgon – Brownlee

Executive Summary of Land Capability Assessment

Site Address Lot Number	Kay St and Alamere Dr, Traralgon Lot 3 LP141401
Owner	F & R Brownlee
Council Area	La Trobe City Council
Proposed Allotment size & Present Land Use	Total Property: 5.9075 ha Proposed subdivision = 10 allotments varying in size from ~4000 m ² to 4770 m ² . Lot 1 to retain the existing residence; the remaining proposed allotments are vacant.
Anticipated Wastewater Load	Maximum anticipated - based on a four bedroom home with standard fixtures and town water: (4 bedroom + 1) Therefore 5 x 150 L = 750 L/day
Rainfall	Estimated to be 845 mm - The mean annual rainfall for Traralgon has been estimated from Met Stations at Morwell (La Trobe Valley Airport), Yallourn and Yallourn SEC.
Evaporation	Estimated to be 1182 mm - The mean annual Class A pan evaporation level is estimated from Yallourn SEC Met Station.
Surface Water	A primary tributary of Boyd's Creek flows through the middle of proposed subdivision. There is also a dam located on the eastern side of this tributary, but it is assumed that this dam will be filled in as part of the development of the proposed subdivision. Setbacks of 30 m apply to wastewater LAAs with secondary treated wastewater with subsurface irrigation upslope of surface waters. All setbacks are shown in Figure 1. Setbacks of 60 m apply to non-potable watercourses apply to wastewater LAAs with primary treated wastewater with absorption trenches upslope of surface waters.
Stormwater run-on and upslope seepage	Given the sandy loam soil type and relatively high anticipated infiltration rates, there is a relatively low risk of stormwater run-on from upslope. However as a result of the moderate slope and low subsoil permeability, upslope seepage entering wastewater LAAs presents a significant risk. Diversion drains as shown in Figure 2 must be installed above each LAA. Intercepted stormwater must be diverted away from the LAAs.
Site drainage and subsurface drainage	A bleached A2 soil horizon and evidence of root oxidation in the surface soil is likely to have been caused by low subsoil permeability. Subsurface drainage is likely to be an issue during prolonged periods of wet weather and intermittent waterlogging is likely to occur. The use of stormwater diversion drains (Figure 2) upslope of wastewater LAAs in conjunction with the available slope will improve site drainage. Sizing the LAA based upon nutrients and water balance will ensure the LAA is sized according to the local climate and nutrient load.
Soil Permeability (K _{sat})	Measured onsite at 0.07 m/day.
Design Irrigation Rate (DIR) for subsurface irrigation & required LAA	The DIR for a category 5 soil is 21 mm/week or 3.0 mm/day, however this has been reduced to 17.5 mm/week or 2.5 mm/day for additional conservatism in the design based on the constraints which impact on the property. Land Application Area (LAA) of 552 m ² – 4 bedroom home

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Design Loading Rate (DLR) for absorption trenches & required LAA	The DLR for a category 5 soil is 28 mm/week or 4 mm/day, Land Application Area (LAA) of 501 m ²
Exchangeable Sodium Percentage (ESP)	9 % (50 – 90 cm); Soil is sodic and gypsum must be applied to the LAA at 2 kg/m ²
Most Significant factors impacting upon sustainable on-site wastewater management	<p>Low subsoil permeability and lateral seepage into each LAA present the most significant risk to sustainable on-site wastewater management within this proposed subdivision. These limitations can be overcome by:</p> <ul style="list-style-type: none"> - Sizing the LAA based upon a water balance with a low wastewater application rate will ensure the LAA is sized according to the local climate and loaded at a sustainable rate. - The installation of subsoil diversion drains upslope of each LAA will intercept laterally moving soil water and prevent it from negatively impacting upon the LAAs. <p>All wastewater LAA must also be suitably positioned such that the appropriate EPA setback from the watercourse is achieved.</p>

1. Introduction

Land Safe¹ has been engaged by Beveridge Williams & Co Pty Ltd on behalf of their client F & R Brownlee to complete a Land Capability Assessment (LCA) for a proposed 10 Lot subdivision of the existing 5.9075 ha property at Kay St and Alamere Dr, Traralgon (Lot 3 LP141401). The existing dwelling in proposed Lot 1 is to be retained, while the remaining allotments will be vacant. Town water is available but there is no town sewer.

This LCA has been commissioned to determine whether each of the allotments are capable of treating and dispersing domestic wastewater to land in an environmentally sustainable manner in accordance with both EPA Victoria and Latrobe City Council requirements.

Should the land be deemed suitable, the size of the designated wastewater Land Application Area (LAA) on each allotment will be calculated according to the measured soil permeability, in conjunction with Municipal Association of Victoria (MAV) water and nutrient balances.

The size of the LAAs will be determined on the basis of the wastewater being treated to a primary standard and absorption trenches used as the land application method along with treatment of the wastewater to a secondary standard (20/30) and subsurface irrigation used as the land application method. The options of a Sand filter or Reed bed have been included as low maintenance alternatives to Aerated Wastewater Treatment Systems (AWTS) for treatment of domestic wastewater up to a secondary standard for use in subsurface irrigation systems.

The field investigation for this LCA was conducted by Glenn Marriott and Ben Dimond of Land Safe on 20 December 2012. Glenn is a Level 2 Certified Professional Soil Scientist (CPSS-2) and specialises in soil and wastewater management.

2. The Development and Key Features of the Property

A description of the property and each allotment has been presented in Table 1. The spatial arrangement of the proposed ten Lot subdivision is overlaid on an aerial photo in Figure 1. The entire unsubdivided 5.9075 ha retained land shall hereby be referred to as the property.

The wastewater management system currently servicing the existing dwelling in proposed Lot 1 will need to be upgraded in accordance with the recommendations in this report. The existing wastewater management system appears to consist of a split system, with black water entering a septic tank and a single absorption trench, while grey water discharges

¹ Land Safe is a division of Ag- Challenge Consulting Pty Ltd.

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directly to proposed Lot 3. This wastewater management system will need to be upgraded to ensure all wastewater is treated and retained within proposed Lot 1.

Table 1. Property description

Site Address Lot Number	Kay St and Alamere Dr, Traralgon Lot 3 LP141401
Owner/Developer	F & R Brownlee
Council	Latrobe Shire Council
Property Zoning	Low Density Residential Zone
Land and Proposed Allotment size & Present Land Use Total Property: 5.9075 ha	Proposed subdivision = 10 allotments varying in size from ~4000 m ² to 4770 m ² , Lot 1 is to retain the existing residence; the remaining proposed allotments are vacant.
Anticipated Wastewater Load	Maximum anticipated - based on a four bedroom home with standard fixtures on town water: (4 bedroom + 1) Therefore 5 x 150 L = 750 L/day
Availability of Sewer	The subdivision will be unsewered. (Gippsland Water have no plan for it to become sewerred as of January 2013.

The significant environmental features of the property are presented in Table 2. The property was assessed according to the environmental factors that may limit or prevent sustainable wastewater dispersal on the property according to the MAV Land Capability Assessment Template.

The property is mostly well elevated and has slopes varying from 5 to 15 %, which will assist in the removal of excess surface water. To protect against any potential upslope lateral seepage or surface water run-on into the wastewater LAA, upslope diversion drains depicted in Figure 2 **must be** installed. This drain will intercept surface and subsurface seepage from entering the LAA.

There is a watercourse flowing through the middle of this property so the location of wastewater LAAs therefore must comply to the required EPA setback of 60 m for absorption trenches with primary treated wastewater and 30 m for subsurface irrigation with secondary treated wastewater. In Figure 1, the required setbacks from the water course are shown with the 30 m setback in yellow and the 60 m setback in blue.

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Table 2. Significant environmental features of the property

Feature	Description
Rainfall	Estimated by calculation to be 845 mm - The mean annual rainfall for Traralgon has been estimated from Met Stations at Morwell (La Trobe Valley Airport), Yallourn and Yallourn SEC.
Evaporation	Estimated to be 1182 mm - The mean annual Class A pan evaporation level is estimated from Yallourn SEC Met Station.
Vegetation	Mostly pasture.
Landform	Dissected gully.
Slope	All land on the property drains towards the watercourse which flows through the property towards the north west. The land to the west of the watercourse has a convex slope with gradients which vary from 10 % at the high slope up to 15 % on the lower mid slope towards the watercourse. The land to the east of the watercourse has variable slope but mostly between 8 and 12 %.
Fill & Disturbed soil	All soil profiles on the site were considered natural with no fill. There is an area of disturbed soil in the eastern end of proposed Lot 3. If this area were to be used for the wastewater LAA, it should be levelled prior to installation of the land application system.
Erosion Potential	No erosion was observed on site. There is some risk of erosion, but the potential is considered low while the land remains vegetated.
Surface Water	A primary tributary of Boyd's Creek flows through the middle of proposed subdivision. There is also a dam located on the eastern side of this tributary, but it is assumed that this dam will be filled in as part of the proposed development of the subdivision. Setbacks of 30 m apply to wastewater LAAs with secondary treated wastewater with subsurface irrigation upslope of surface waters. All setbacks are shown in Figure 1. Setbacks of 60m apply to non-potable watercourses apply to wastewater LAAs with primary treated wastewater with absorption trenches upslope of surface waters.
Groundwater	No groundwater was found on site within the depth of augered soil holes. The closest groundwater bore approximately 630 m away to the east. This bore is 100 m deep
Stormwater run-on and upslope seepage	Given the sandy loam topsoil and relatively high anticipated infiltration rates, there is a relatively low risk of stormwater run-on from upslope. However as a result of the moderate slope and low subsoil permeability, upslope seepage entering wastewater LAAs presents a significant risk. Diversion drains as shown in Figure 2 must be installed above each LAA. Intercepted stormwater must be diverted away from the LAAs.
Site drainage and subsurface drainage	A bleached A2 soil horizon and evidence of root oxidation in the surface soil is likely to have been caused by low subsoil permeability. Subsurface drainage is likely to be an issue during prolonged periods of wet weather and intermittent waterlogging is likely to occur. The use of stormwater diversion drains (Figure 2) upslope of wastewater LAAs in conjunction with the available slope will improve site drainage. Sizing the LAA based upon nutrients and water balance will ensure the LAA is sized according to the local climate and nutrient load.

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Figure 1. Proposed Subdivision Plan overlaid on an aerial photo with EPA Victoria setbacks of 30 m in yellow and 60 m in blue.

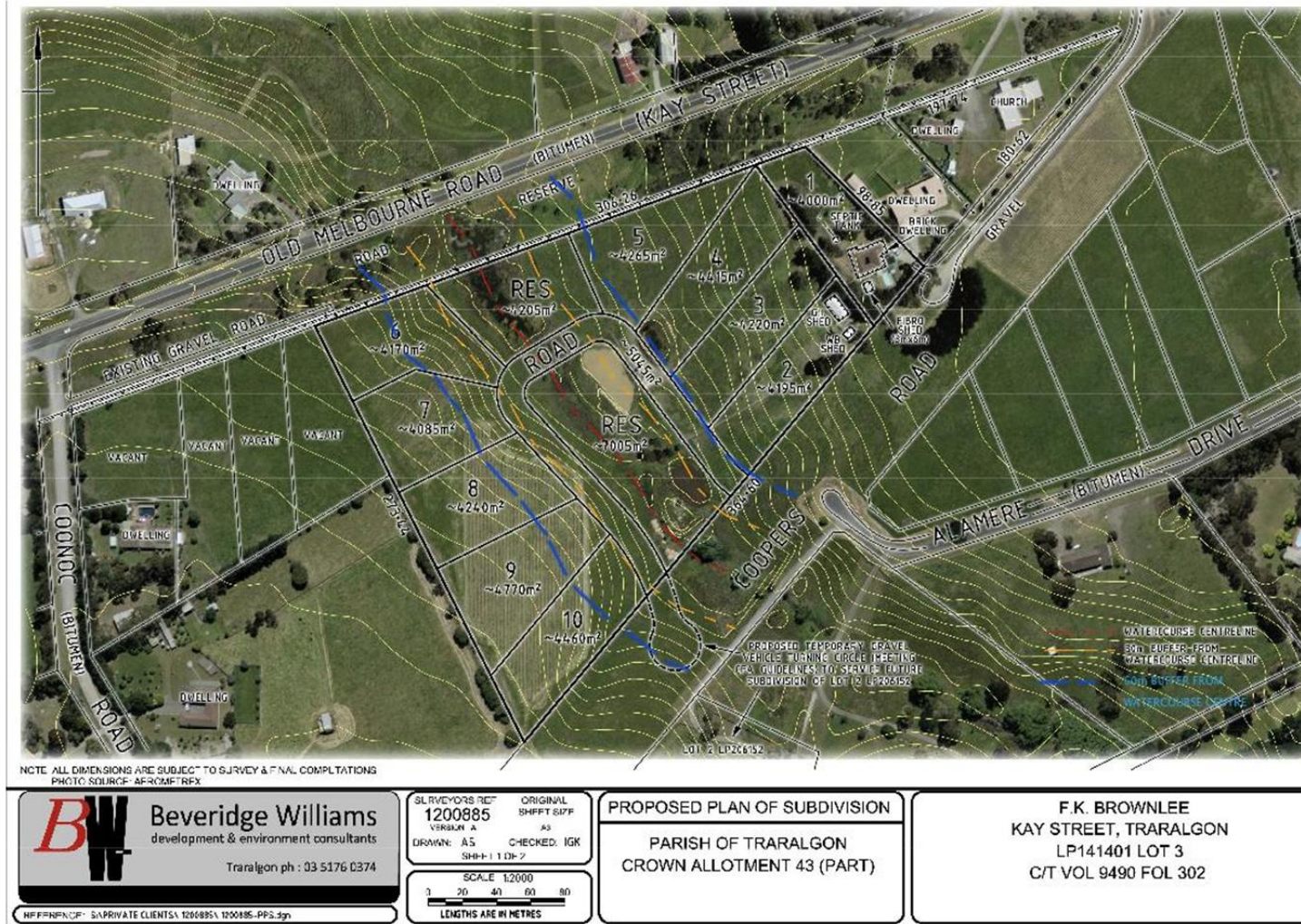
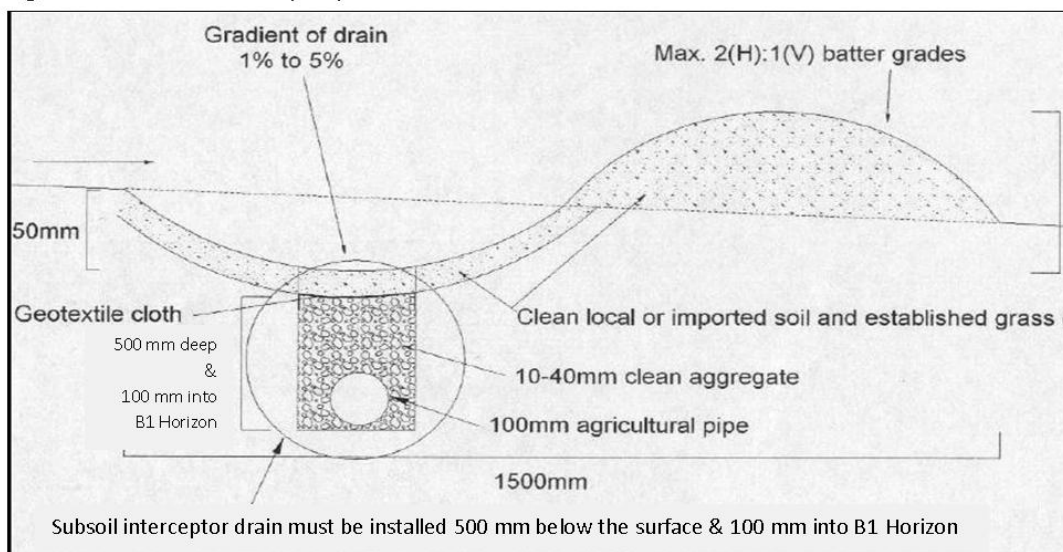


Figure 2. Cross Section: Upslope Diversion Drain².



3. Soil Assessment and Site Constraints

The soils of the property have been assessed for their suitability for the application of domestic wastewater. The soils vary slightly across the property, but are mostly yellow brown duplex soils. The soils on the western side of the Creek were assessed in October 2008 and consist of dark brown loams topsoil over greyish brown medium clay subsoils, with buckshot gravel at the transition. The soils on the eastern side of the Creek consist of dark brown clay loam A1 horizon overlying a bleached light brownish grey sandy loam A2 soil horizon. The B1 horizon consists of a yellowish brown heavy clay. Soils were classified according to Australian/New Zealand Standard (AS/NZS 1547:2012). Soil profile descriptions are included in Appendix 1.

The soils were investigated to a depth of 100 cm with a hand auger. Soil samples were taken at a depth of 50 to 90 cm. The full set of laboratory results is included in Appendix 10, with a summary of the pertinent parameters included in Section 3.1.

3.1 Soil Chemical and Physical Analysis

Full soil chemical and physical analysis results are provided in Appendix 10 for a soil samples collected from the B1 soil horizon between depths of 50 – 90 cm. The following is a discussion of the soil chemical and physical parameters likely to impact on the soils ability to disperse wastewater in a sustainable manner. A summary of the soil features is included in Table 3.

² Domestic Wastewater Management Technical Workshop – Centre for Environmental Training – Baw Baw Shire Council 4 December 2006

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Table 3. Soil features: Yellow brown duplex

Soil Feature	Description
Soil Depth	Soil depth estimated to be at least 2 m.
Coarse Fragments	Gravel in the A2 horizon on the western side of the watercourse.
Soil Permeability (K_{sat}) at depth of 350 mm – 600 mm	Measured in Oct 2008 at 0.07 m/day on the western side of the watercourse in proposed Lot 5. And is considered indicative of the remainder of the property.
Soil Category (AS/NZ1547:2012)	5
Design Irrigation Rate (DIR) for subsurface irrigation & required Land Application Area (LAA)	The DIR for a category 5 soil is 21 mm/week or 3.0 mm/day, however this has been reduced to 17.5 mm/week or 2.5 mm/day for additional conservatism in the design based on the constraints which impact on the property. Land Application Area (LAA) of 552 m ² – 4 bedroom home
Design Loading Rate (DLR) for absorption trenches	The DLR for a category 4 soil is 28 mm/week or 4 mm/day, Land Application Area (LAA) of 501 m ² – 4 bedroom home
Soil pH (1:5 water)	5.7 (50 – 90 cm): Moderately acidic soil pH, no action required
Exchangeable Sodium Percentage (ESP)	9 % (50 – 90 cm): Soil is sodic and gypsum must be applied at 2 kg/m ²
Electrical Conductivity (EC)	0.08 dS/m (50 – 90 cm): Low level of salinity of little concern
Calcium Magnesium ratio	0.2 (50 – 90 cm): Very low value should be closer to 4 for desirable plant growth and soil structural stability, should be increased with gypsum.
Dispersion Index (Loveday-Pyle)	15 (50 – 90 cm): significant dispersion, to be minimised with gypsum application. gypsum is required at a rate of 2 kg/m ²

- The pH subsoil (50 – 90 cm) is moderately acidic at pH of 5.7_(1:5 water). No action is required as soil pH in this range is suitable for the growth of most plants and gypsum will still work effectively.
- The Exchangeable Sodium Percentage (ESP) of the subsoil (50 – 90cm) is 9 % and therefore sodic. There is a high risk that these soils will disperse upon application of sodium-rich but low salinity domestic wastewater based upon the dispersion index values of 15 on a scale of zero to 16. Gypsum **must** be applied to minimise loss of soil permeability under the application of wastewater. The application of gypsum at a rate

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- of 2 kg/m² to the wastewater LAA is recommended. This will assist in the creation and maintenance of soil structure and enhance soil permeability.
- The calcium magnesium ratio is consistently 0.2 at a depth of 50 – 90 cm. This is very low and should be closer to 4 to ensure plant health and soil structural stability. The application of gypsum at a rate of 2 kg/m² will provide additional calcium to lift this ratio.
 - The level of soil salinity as measured by the electrical conductivity (EC_{1.5}) of the subsoil is 0.08 dS/m, which is a low level of salinity and indicates that most of the salts have been removed from the soil profiles during rain events.
 - The phosphorus binding capacity is moderate based upon the Phosphorus Binding Index (PBI) values of 160. The ability of the subsoil to bind and lock up phosphorus applied in the wastewater is acceptable, even at a moderate to low value of 160.

Overall these soils are capable of sustainable wastewater application provided gypsum is applied at a rate of 2 kg/m² in order reduce the soils tendency to slake and disperse.

3.2 Soil Permeability

A set of seven soil permeability (K_{sat}) measurements were conducted on the property on the western side of the watercourse as part of a separate investigation in 2008. The geometric mean K_{sat} value recorded was 0.07 m/day and is considered representative of the soils on rest of this property.

Soil permeability was not measured on the eastern side of the watercourse during the most recent site visit in December 2012 due to the saturated soil conditions present and as such the soil water conditions required for the Talsma-Hallam method were not met. The essential condition for any *in situ* test method for soil permeability is that there be no soil saturation between the soil surface and at least 0.5 m below the bottom of a test hole. This condition was not fulfilled when the fieldwork took place.

Temporary intermittent saturated soils and perched water tables are a normal and common occurrence across Victoria and do not preclude the land from being suitable for the application to land of domestic wastewater, provided wastewater is applied at a suitable rate and lateral seepage from upslope is intercepted and prevented from impacting upon the wastewater LAA.

4. On-site Wastewater management

According to “Table 5 of AS/NZS 1547:2012 standard soil categories” found in Appendix 8 of this report, the soil type identified on the property can be classed as category 5, based on the geometric mean K_{sat} value of 0.07 m/day.

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For subsurface irrigation a conservative Design Irrigation Rate (DIR) of 17.5 mm/week or 2.5 L/m²/day for secondary treated wastewater is recommended.

A design loading rate (DLR) of 28 mm/wk or 4 L/m²/day is recommended for absorption trenches with primary treated wastewater.

Gypsum should be applied to all Land Application Areas (LAAs) at a rate of 2 kg/m².

4.1 Required Area for Subsoil Absorption Trenches

The length of absorption trench required has been determined with a water balance constructed by Dr Robert Patterson³ with a conservative DLR of 4 L/m²/day. The length of absorption trench required for the existing four bedroom home has been determined based upon a daily design flow rate of 750 L/day.

According to the water balance in Appendix 3 a total trench length of 156 m is required to adequately disperse 750 L/day of wastewater generated by a four bedroom dwelling on town water (assuming a trench depth of 400 mm and width of 700 mm).

This water balance takes into account soil absorption from the trench base and also 250 mm up the sides of each wall. This means that the water balance allows for storage of effluent in the trench of up to 250 mm in depth, which still allows 150 mm between the highest water mark and the surface with 400 mm deep trenches. This aspect has been factored in to allow for the varying water level in the trench and the absorption potential of the trench side walls.

According to the water balance in Appendix 3, assuming trench widths of 0.7 m and depths of 0.4 m, 156 m of absorption trench is required to disperse 750 L/day of wastewater from a four bedroom home.

The trenches should be laid parallel to the contour (across the slope) with 3 m of undisturbed soil between each trench. As per the latest EPA regulations⁴, the 3 m spacing between each trench is still a requirement as it protects a reserve area. Should the system fail, additional trenches can be installed between the original trenches, or else a secondary wastewater treatment can be installed and subsurface irrigation used as the wastewater dispersal method.

The total LAA in Table 4 does not include EPA setback distances, these have been included in Appendix 7. There are EPA setbacks of 60 m from the watercourse running through the property.

³ R.A. Patterson (2006) Water balance spreadsheet derived from water balance included in Table G1, AS 1547:1994. Lanfax Labs Armidale, NSW.

⁴ EPA Onsite Newsletter No. 11 (30 September 2009) issued by Sarah West Onsite Wastewater Program Manager

Table 4. Absorption trench specifications assuming 750 L/day of wastewater and absorption trench widths of 700 mm and 3 m spacing between trenches.

No. of Trenches	Length of each Trench (m)	Total Trench length req'd (m)	Width of LAA (m)	Total LAA (m ²)
6	26	156	19.2	501

4.2 Required Area for Subsurface Irrigation

Wastewater applied to land via subsurface irrigation, must be treated up to a secondary (20/30) standard⁵. Methods of treating wastewater up to a 20/30 standard are discussed in Appendix 12 of this report.

There are a number of benefits from using pressure compensated subsurface irrigation with secondary treated wastewater including:

- the application of wastewater under pressure so wastewater is applied evenly across the entire land application area (LAA), maximising the uptake of nutrients
- the wastewater can be pumped to higher parts of the property more easily
- wastewater can be used beneficially to irrigate either garden or lawn
- The LAA can be comprised of multiple areas of irregular shape
- reduced EPA setback distances of up to 50 %
- avoids the need for a reserve area⁶.

The MAV water balances in Appendix 4 and 5 calculate the size of the LAA on the most limiting factor while obviating the need for winter storage. The size can be limited by (a) the sustainable dispersal of the water in the effluent or (b) the sustainable dispersal of the nutrients in the effluent. The largest area predicted by either of the two MAV balances should be implemented as the LAA. The water balance assumes zero storage and is based upon a 4 bedroom home using 750 L/day.

For subsurface irrigation with secondary treated wastewater, the MAV method predicts that a 552 m² LAA is required on these allotments.

Secondary treatment and subsurface irrigation avoids the need for a reserve area⁷. Should a subsurface irrigation system fail, the irrigation pipe work can be relatively easily removed and replaced. Some soil remediation may be required, but the same land area can be used.

Figure 3 and Figure 4 have been included to demonstrate how subsurface irrigation is installed and a typical subsurface irrigation line.

⁵ Secondary standard wastewater (20/30) requires treatment to 20 mg/L of Biological Oxygen Demand (BOD) and 30 mg/L of Suspended Solids (SS).

⁶ EPA Victoria (2008) Guidelines for Environmental Management – Onsite Wastewater Management Code of Practice. Document No. 891.2

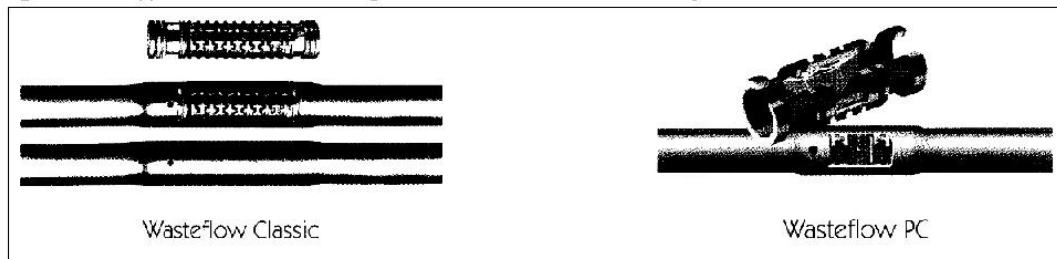
⁷ EPA Victoria (2008) Guidelines for Environmental Management – Onsite Wastewater Management Code of Practice. Document No. 891.2

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Figure 3. Photo of typical subsurface irrigation installation from *Netafim* brochure.
Note the cutter wheel making a narrow slot for the pipe that rolls off the drum and is inserted below the surface.



Figure 4. A typical subsurface irrigation line taken from *Wasteflow* brochure.



5. Conclusion and Recommendations

The 5.9075 ha property on Kay St has been assessed by Land Safe for its suitability to manage domestic wastewater in a sustainable manner in accordance with local Council and EPA Victoria Guidelines.

The most significant environmental constraints impacting upon the sustainable application to land of wastewater on this property include:

- The watercourse,
- Lateral seepage from upslope
- Low subsoil permeability

Provided the remedial measures documented in this report (appropriate setbacks and upslope diversion drains, conservative loading rates) are fully implemented, the property is considered suitable for the sustainable application to land of 750 L/day of domestic wastewater on each of the proposed ten allotments.

The soils across the property consist of sodic yellow brown duplex soils. Due to the sodicity and potential for dispersion gypsum **must be applied** at a rate of 2 kg/m² to all Land Application Areas (LAAs). The gypsum will improve the soil structure and promote deep percolation and treatment of wastewater through the soil profile.

Soil permeability (K_{sat}) was measured at 0.07 m/day using the Talsma-Hallam constant head method on this property on the western side of the tributary and is considered indicative of the rest of the property. This soil permeability is acceptable for the application to land of domestic wastewater, by either absorption trenches with primary treated wastewater or subsurface irrigation with secondary treated.

All LAAs in this report have been sized taking into account both water and nutrient balance requirements.

For subsurface irrigation a Design Irrigation Rate (DIR) of 2.5 L/m²/day or 17.5 mm/week has been assigned. The LAA with subsurface irrigation should be 552 m² for a four bedroom home. This LAA does not include EPA setback distances. Subsurface irrigation with secondary treatment is the most suitable wastewater management option for proposed subdivision.

For absorption trenches a Design Loading Rate (DLR) of 4 L/m²/day or 28 mm/week is recommended. According to the water balance a wastewater LAA of 501 m² is required with primary treated wastewater and absorption trenches.

Given that the area required for subsurface irrigation is larger than that required for absorption trenches it is recommended that a 552 m² be assigned for wastewater land

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application to ensure there is sufficient area available in the future for a subsurface irrigation system with secondary treated wastewater, should the need arise.

There is sufficient land available within each of the proposed allotments for wastewater application to land with either absorption trenches or else subsurface irrigation.

Overflow from rainwater tanks and any other stormwater from impervious surfaces such as driveways etc. should be diverted away from LAAs.

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Appendix 1 Soil Profile Descriptions

Soil Profile Descriptions – 20 December 2012 – Eastern side of the Creek.

Site 1

East of the creek, 30m west of North Fence and row of pines

Gradient 10 %

GPS Co-ordinates - S38°11.968' E146°30.153 (DATUM Aus Geod 66)

Horizon	Depth (cm)	Description
A1	0-15	Dark Brown (7.5YR 3/2) Clay Loam, high organic matter. Root oxidation. <i>--Gradual change--</i>
A2	15-40	Bleached Light Brownish Grey. Sandy loam (just coherent), weak structure, coarse sand, minor gravel (<5%, < 5mm). <i>--Abrupt change—variable depth to B1 between 40 & 70 cm</i>
B1	40-90	Yellow Brown (10YR 5/8) and minor Strong Brown (7.5 YR 5/8), Heavy clay. Firm consistence (moist). <i>---Diffuse change---</i>
B2	90-100	Colour as per B1 horizon but more red (2.5YR 4/8) mottles , Medium Clay <i>---Hole terminated---</i>

Structure of B1 and B2 obscured by auger. Soil typical of those in this area of Traralgon.



Figure 6 – Soil Profile at site 1

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Site 2– lower slope south end of property

GPS Co-ordinates - S38°12.008' E146°30.124 (DATUM Aus Geod 66)

Soil as per site 1, But more grey in the B horizon, with less reddish mottles

Increase in silt and no root oxidation

Site 3 – lower slope north end, down slope of drainage line

GPS Co-ordinates - S38°11.972' E146°30.100 (DATUM Aus Geod 66)

Similar to site 2, but with root oxidation, soil well pugged and not suitable for LAA

Site 4– north west of site 3.

GPS Co-ordinates - S38°11.968' E146°30.081 (DATUM Aus Geod 66)

Similar to site 3, but with silty clay B1.

Soil Profile Descriptions – 9 October, 2008

– Western side of the Creek in proposed Lot 5 of this 10 Lot subdivision.

Site #1. Northern end of proposed Lot 1. 5 % slope measured with clinometer.

GPS: S 38°11.983 E 146°29.985

Soil moist throughout the profile

Depth (cm)	Horizon	Description
0 – 18	A1	Dark Brown Loam, high in organic matter, moderate pedal structure. Occasional gravel (small 1 – 2 mm) <i>Clear transition to:</i>
18 – 23	A2	Predominately Buck shot gravel. <i>Clear transition to:</i>
23 – 35	B1	Greyish Brown Medium Clay. <i>Diffuse transition to:</i>
35 – 60	B2	Pale Brown Medium-Heavy Clay. Firm consistency when moist. Weak structure. Organic matter present in the form of plant roots. Mottles of red, orange and grey.
60 – 118	B3	Pale Orange Brown. Structure distorted in auger. Becoming lighter in colour with depth at 80 cm below the surface but texture relatively unchanged

Site #2.

Lot 2, mid slope

Similar soil profile to site 1, except for a slight increase in the depth of the A1 horizon and a deeper A2 horizon of buckshot gravel.

Appendix 2 Soil Hydraulic Conductivity Talsma-Hallam Method

SOIL PERMEABILITY MEASUREMENT - CONSTANT-HEAD TEST⁸

INTRODUCTION

The Constant head method described here for measuring soil permeability *in-situ*, is described in more detail in Appendix G of the Australian/New Zealand Standard AS1547: 2012.

This method can be used for sizing effluent dispersal systems. The permeameter described below is suitable for a soil permeability range of 1×10^{-7} to 3×10^{-4} m/sec (≈ 0.009 to 26 m/day). With certain modifications it can also be used for permeabilities less than 1×10^{-7} m/sec.

TEST METHODOLOGY

1 Scope

In a constant head test, the water that runs out of an unlined test hole is replenished at the same rate from a reservoir, and one measures the loss of water from the reservoir over time. During this test the head of water in the hole remains the same, and a well-validated mathematical model can be used to calculate K_{sat} from the measurement.

2 Apparatus

The following is required to carry out soil permeability tests using the constant head method;

- (a) soil auger of 75 to 100 mm diameter,
- (b) permeameter and tripod as illustrated in Figure 1,
- (c) anti scouring device,
- (d) suction flask,
- (e) stopwatch and field data sheets,
- (f) water container.

3 Procedure

Excavate the required number of holes to 50 cm depth⁹, spacing holes over required area. Record the depth of the holes. Remove most of the loose earth at the bottom of the hole by hand.

Measure depth of hole and adjust tripod on permeameter to maintain 25 cm head of water in hole. Record the height of the head.

Place anti scouring device in hole and fill hole with water to approximately 25 cm depth soak test holes until the water infiltration is not influenced by the dryness of the soil, and record time of soaking

Fill permeameter with water, invert and place into hole so that water flows out of base. To the start test, suck water out of hole using suction flask apparatus until first air bubble appears. Set stop watch to 0.00 and start recording drop in solution reservoir (in cm) over time. Five minute intervals enable 8

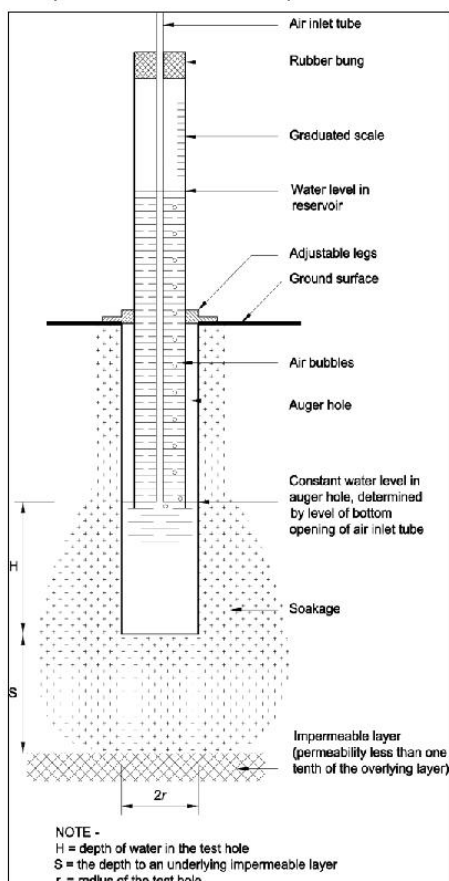
⁸ As per procedure in AS 1547:2012

⁹ The depth of hole and height of head may be varied for particular situations, and the depths should be recorded to ensure the calculations are performed correctly.

tubes to be measured, with tubes read 30 seconds apart in 4 minutes. The time should be adjusted if the drop in the water level is too rapid. With very high infiltration rates, each tube is read separately to its finish.

Record drop in water level in the reservoir using the field sheet (see next page) until it becomes “constant”, i.e. the last drop differs by less than 10% of the preceding drop.

Well permeameter assembly



4 Calculations

Calculate the soil hydraulic conductivity according to the equation;

$$K_{sat} = 4.4 Q [0.5 \sinh^{-1}(H/2r) - \sqrt{\{(r/H)^2 + 0.25\}} + r/H] / 2\pi H^2$$

Where:

- K_{sat} = saturated hydraulic conductivity of the soil in cm/min.
- 4.4 = correction factor for a systematic under-estimate of soil permeability in the mathematical derivation of the equation,
- Q = rate of loss of water from the reservoir in cm^3/min ,
- H = depth of water in the test hole in cm,
- r = radius of the test hole in cm.

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Appendix 3 Water Balance – Absorption Trenches – Four Bedrooms

Nominated Area for 700 mm wide Absorption Trenches										
Site Address		Kay St - Traralgon - Brownlee			Evap. data		Yallourn SEC (085103)			
Mean		Mean of Morwell (085280), Yallourn (08			average Pan evaporation					
Source: AS1547-1994 - Table G1		(Prepared by R.A. Patterson, Lanfax Labs. Armidale updated April 2006)								
1	2	3	4	5	6	7	8	9	10	
Month	Days	daily pan	Pan Eo	Et	Rainfall	Retained	LTAR*N	Disposal	Effluent	Size of
	per	per	Eo	+C*Eo	P	Rainfall	4	(Et-Re)+	per month	area
	month	(B.Met)			Re=(1-r)P			LTAR*N	750	(8)/(7)
		mm	mm	mm	mm	mm	mm	mm	L	m2
Jan	31	5.9	182.9	146	55.6	44.5	124	225.8	23250	103
Feb	28	5.6	156.8	125	52.3	41.8	112	195.6	21000	107
Mar	31	3.9	120.9	97	58.3	46.6	124	174.1	23250	134
Apr	30	2.7	81.0	57	70.3	56.2	120	120.5	22500	187
May	31	1.7	52.7	37	68.8	55.0	124	105.9	23250	220
Jun	30	1.2	36.0	25	73.7	58.9	120	86.3	22500	261
Jul	31	1.3	40.3	28	72.9	58.3	124	93.9	23250	248
Aug	31	1.6	49.6	35	78.9	63.1	124	95.6	23250	243
Sep	30	2.4	72.0	50	78.5	62.8	120	107.6	22500	209
Oct	31	3.3	102.3	82	84.6	67.7	124	138.1	23250	168
Nov	30	4.4	132.0	106	78.2	62.6	120	163.0	22500	138
Dec	31	5.0	155.0	124	69.1	55.3	124	192.7	23250	121
Totals		1181.5	912	841.2	673.0					

TABLE G2 - Depth of stored effluent First trial - choose from col.9 table above

1	2	3	4	5	6	7	8	9	10	11
month	first trial	application	Disposal	(3)-(4)	Increase	Starting	increase	computed	reset if	equivalent
	area	rate	rate		depth of	depth	depth	depth	Et deficit	storage
	(m ²)	(8)/(2)	per month	(above)	stored	effluent	effluent	effluent	<0	10 x area
		(mm)	(mm)	(mm)	(5)/porosity	month	+	(mm)	(mm)	(L)
Dec								0.0	0	0
Jan	203	3733	114	226	-112	-372	0	-372	-372	0
Feb			103	196	-92	-308	0	-308	-308	0
Mar			114	174	-60	-199	0	-199	-199	0
Apr			111	120	-10	-33	0	-33	-33	0
May			114	106	8	28	0	28	28	1723
Jun			111	86	24	81	28	81	109	6679
Jul			114	94	20	68	109	68	178	10839
Aug			114	96	19	62	178	62	240	14641
Sep			111	108	3	10	240	10	250	15253
Oct			114	138	-24	-79	250	-79	171	10410
Nov			111	163	-52	-175	171	-175	-4	0
Dec			114	193	-78	-261	0	-261	-261	0
Jan			114	226	-112	-372	0	-372	-372	0
Feb			103	196	-92	-308	0	-308	-308	0
Mar			114	174	-60	-199	0	-199	-199	0
Apr			111	120	-10	-33	0	-33	-33	0
May			114	106	8	28	0	28	28	1723

From calculations in tables above for optimised drainfield area, using Appendix G AS1547-1994

Porosity in disposal area	30%
Variables Table	Runoff Coeff = 0.2 percentage runoff
	Summer Crop Factor = 0.8 crop transpiration rate Oct-Mar
	Winter Crop Factor = 0.7 crop transpiration rate -Apr-Sep
Change as required	DLR = 4 L/m2/day
	FLows = 750 L/day
Estimated base area of trench =	203 square metres
Maximum depth of stored effluent =	250 mm depth
Trench dimensions (mm)	width = 700 mm depth = 400 mm
Length of trench required =	156 metres

LCA – Kay St & Alamere Dr – Traralgon – Brownlee

Appendix 4 MAV Water Balance – Subsurface Irrigation – Four bedrooms

<u>Nominated Area Water Balance & Storage Calculations For Irrigation</u>																
Site Address:	Kay St - Traralgon - Brownlee															
INPUT DATA																
Design Wastewater Flow	Q	750	L/day	4	1	5	150	750								
Design DIR	DIR	17.5	mm/week													
Daily DIR		2.5	mm/day													
Nominated Land Application Area	L	552	m sq													
Crop Factor	C	0.7-0.8	unitless													
Retained Rainfall		0.8	unitless													
Rainfall Data (mean monthly)	Mean of Morwell (085280), Yallourn (085098) & Yallourn SEC (085103)															
Evaporation Data	Yallourn SEC (085103)															
Parameter	Symbol	Formula	Units	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Days in month	D	\	days	31	28	31	30	31	30	31	31	30	31	30	31	365
Rainfall	R	\	mm/month	54	54	60	71	69	74	72	79	78	83	79	69	845
Evaporation	E	\	mm/month	183	157	121	81	53	36	40	50	72	102	132	155	1182
Crop Factor	C			0.80	0.80	0.80	0.70	0.70	0.70	0.70	0.70	0.70	0.80	0.80	0.80	
OUTPUTS																
Evapotranspiration	ET	ExC	mm/month	146	125	97	57	37	25	28	35	50	82	106	124	912
Percolation	B	(DIR/7)xD	mm/month	77.5	70	77.5	75.0	77.5	75.0	77.5	77.5	75.0	77.5	75.0	77.5	913
Outputs		ET+B	mm/month	223.8	195	174	132	114	100	106	112	125	159	181	202	1825
INPUTS																
Retained Rainfall	RR	R*0.80	mm/month	43.466667	43.41333	48.21333	56.74667	55.25333	59.39	57.63	63.17	62.21	66.61	63.04	55.25	674
Effluent Irrigation	W	(QxD)/L	mm/month	42.1	38.0	42.1	40.8	42.1	40.8	42.1	42.1	40.8	42.1	40.8	42.1	496
Inputs		RR+W	mm/month	85.6	81.5	90.3	97.5	97.4	100.1	99.7	105.3	103.0	108.7	103.8	97.4	1170
STORAGE CALCULATION																
Storage remaining from previous month			mm/month	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Storage for the month	S	(RR+W)-(ET+B)	mm/month	-138.2	-114.0	-89.9	-34.2	-17.0	-0.1	-6.0	-6.9	-22.4	-50.6	-76.8	-104.1	-262
Cumulative Storage	M		mm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
Maximum Storage for Nominated Area	N		mm	0.00												
	V	NxL	L	0												
LAND AREA REQUIRED FOR ZERO STORAGE			m ²	129	138	185	300	393	551	484	474	356	251	191	159	
MINIMUM AREA REQUIRED FOR ZERO STORAGE:			m ²	551.3												

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Appendix 5 Nutrient Balance – Irrigation

Nutrient Balance					
Site Address:		Kay St - Traralgon - Brownlee			
<i>Please read the attached notes before using this spreadsheet.</i>					
SUMMARY - LAND APPLICATION AREA REQUIRED BASED ON THE MOST LIMITING BALANCE =					420 m²
INPUT DATA ^[1]					
Wastewater Loading			Nutrient Crop Uptake		
Hydraulic Load	750 L/Day		Crop N Uptake	250 kg/ha/yr	which equals 68 mg/m ² /day
Effluent N Concentration	48 mg/L		Crop P Uptake	50 kg/ha/yr	which equals 14 mg/m ² /day
% Lost to Soil Processes (Geary & Gardner 1996)	0.2 Decimal		Phosphorus Sorption		
Total N Loss to Soil	7200 mg/day		P-sorption result	300 mg/kg	which equals 4500 kg/ha
Remaining N Load after soil loss	28800 mg/day		Bulk Density	1.5 g/cm ³	
Effluent P Concentration	13 mg/L		Depth of Soil	1 m	
Design Life of System	50 yrs		% of Predicted P-sorp. ^[2]	0.75 Decimal	
METHOD 1: NUTRIENT BALANCE BASED ON ANNUAL CROP UPTAKE RATES					
Minimum Area required with zero buffer		Determination of Buffer Zone Size for a Nominated Land Application Area (LAA)			
Nitrogen	420 m ²	Nominated LAA Size	562 m ²		
Phosphorus	303 m ²	Predicted N Export from LAA	-3.29 kg/year		
		Predicted P Export from LAA	-2.93 kg/year		
		Phosphorus Longevity for LAA	233 Years		
		Minimum Buffer Required for excess nutrient	0 m ²		
PHOSPHORUS BALANCE					
STEP 1: Using the nominated LAA Size					
Nominated LAA Size	562 m ²				
Daily P Load	0.00975 kg/day	→ Phosphorus generated over life of system	177.9375 kg		
Daily Uptake	0.0075616 kg/day	→ Phosphorus vegetative uptake for life of system	0.250 kg/m ²		
Measured p-sorption capacity	0.45 kg/m ²				
Assumed p-sorption capacity	0.338 kg/m ²	→ Phosphorus adsorbed in 50 years	0.338 kg/m ²		
Site P-sorption capacity	186.30 kg	→ Desired Annual P Application Rate	6.486 kg/year		
P-load to be sorbed	0.80 kg/year		which equals 0.01777 kg/day		

Appendix 6 EPA Setback Distances



CODE OF PRACTICE – ONSITE WASTEWATER MANAGEMENT

Table 4.2: Setback distances for primary and secondary treated sewage in unsewered areas¹

Item	Setback distance ^{2,3} (m)
Building	
Wastewater field up-slope of building ⁴	6
Wastewater field down-slope of building	3
Allotment boundary	
Wastewater field up-slope of adjacent lot	6
Wastewater field down-slope of adjacent lot	3
Services	
Water supply pipe	3
Potable supply channel (wastewater field up-slope)	300
Potable supply channel (wastewater field down-slope)	20
Gas	3
Underground water tank	15
Stormwater drain	6
Swimming pool	6
Cutting/escarpment	15
Surface waters (up-slope from)	
Dam or reservoir (potable, includes water for food production) ⁵	300
Stream, river, waterways (potable water supply catchment) ⁶	100
Dam or reservoir (stock & non-potable) ⁵	60
Stream or channel (continuous or ephemeral, non-potable)	60
Groundwater bore	
Potable or non-potable	20

- These distances act as a guide and must be measured horizontally from the defined boundary of the disposal/irrigation area. They do not apply vertically. For streams and dams, the measuring point shall be the 'bank-full' discharge level'. See Table 5.3 for setback distances for irrigating with treated greywater.
- With the exception of groundwater bores, the setback distances may be reduced by up to 50 per cent where all the following conditions are met:
 - effluent quality meets 20/30 standard when used for sub-surface irrigation
 - or
 - effluent quality meets 20/30/10 standard when used for surface irrigation
 - and
 - slopes are <5% or pressure compensated sub-surface irrigation drip lines along the contour.
- Effluent typically contains high levels of nutrients that may have a negative impact on native vegetation. When considering setbacks, council should consider not only the potential impact of nutrients in regards to the proposed onsite wastewater system, but in regards to other existing onsite wastewater systems located in the same area.
- Setback distances help protect human health. However, establishing an effluent disposal field/irrigation area upslope of a building may have implications for the structural integrity of the building. This issue is beyond this Code's scope and should be examined by a building professional on a site-by-site basis.
- Does not apply to dams and reservoirs located above ground-level.
- Means a water course within a Special Water Supply Catchment Area listed in Schedule 5 of the *Catchment and Land Protection Act 1994*.

Appendix 7 EPA Design Flow Rates

CODE OF PRACTICE – ONSITE WASTEWATER MANAGEMENT

Table 4.1: Typical domestic wastewater flow design allowances*

* Reference: AS/NZS 1547:2000 (page 141). NOTE: when calculating the flow allowance for a premise, use the most recent version of AS/NZS 1547.

Source	Typical wastewater flow allowance in L/person/day (see Note 1)	
	On-site roof water tank supply	Reticulated community or a bore-water supply
Households with standard fixtures (including automatic washing machine)	140	180
Households with standard water-reduction fixtures (see Note 2)	115	145
Households with full water-reduction facilities (see Note 3)	80	110
Households with extra wastewater producing facilities	170	220
Households (blackwater only)	50	60
Households (greywater only)	90	120
Motels/hotels		
– guests, resident staff	140	180
– non-resident staff	30	40
– reception rooms	20	30
– bar trade (per customer)	20	25
– restaurant (per diner)	20	30
Community halls		
– banqueting	20	30
– meetings	10	15
Restaurants (per diner)		
– dinner	20	30
– lunch	15	25
Tea rooms (per customer)		
– without restroom facilities	10	15
– with restroom facilities	15	25
School (pupils plus staff)	30	40
Rural factories, shopping centres	30	50
Camping grounds		
– fully serviced	100	130
– recreation areas	50	65

NOTES:

- 1 These flows are minimum rates unless actual flows from past experience can be demonstrated.
- 2 Standard water-reduction fixtures include dual-flush 11/5.5-litre water closets, shower-flow restrictors, aerator faucets (taps) and water-conserving automatic washing machines.
- 3 Full water-reduction fixtures include the combined use of reduced-flush 6/3-litre water closets, shower flow restrictors, aerator faucets, front-load washing machines and flow/pressure control valves on all water-use outlets. Additionally, water reduction may be achieved by treatment of greywater and recycling for water closet flushing (reclaimed water cycling).



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Appendix 8 DLR & DIR Table 5.2 from AS/NZS 1547:2012

TABLE 5.2 SOIL CATEGORIES AND RECOMMENDED DESIGN IRRIGATION/LOADING RATES (DIR/DLR) FOR LAND-APPLICATION SYSTEMS													
Soil Category	Soil texture	Structure	Indicative permeability (K_{sat}) (m/d)	Design irrigation/loading rate (DIR/DLR) (mm/day)									
				Trenches and beds (see Table L1)			ETA/ETS beds and trenches (Table L1)	Drip and spray irrigation (Table M1)	LPED irrigation (Table M1)	Mounds (basal area) (Table N1)			
				Primary treated effluent		Secondary treated effluent							
				Conservative rate	Maximum rate								
1	Gravels and sands	Structureless (massive)	> 3.0	(see Note 1 of Table L1 for DLR values)			5 (see Note 2 of Table M1)	(see Note 3 of Table M1)	32				
2	Sandy loams	Weakly structured massive	> 3.0	15	25	50		(see Note 4 of Table L1)	4	24			
3	Loams	High/moderate structured	1.5 – 3.0				15		25	50	4 (see Note 1 of Table M1)	3.5	24
		Weakly structured or massive	0.5 – 1.5				10		15	30			16
4	Clay loams	High/moderate structured	0.5 – 1.5	10	15	30	12	3.5 (see Note 1 of Table M1)	3	16			
		Weakly structured	0.12 – 0.5	6	10	20				8	8		
		Massive	0.06 – 0.12	4	5	10				5	(see Note to Table N1)		
5	Light clays	Strongly structured	0.12 – 0.5	5	8	12	8	3 (see Note 1 of Table M1)	2.5 (see Note 4 of Table M1)	8			
		Moderately structured	0.06 – 0.12		5	10				5	(see Note to Table N1)		
		Weakly structured or massive	< 0.06			8							
6	Medium to heavy clays	Strongly structured	0.06 – 0.5	(see Notes 2 and 3 of Table L1)			(see Notes 2, 3, and 5 of Table L1)	2 (see Note 2 of Table M1)	(see Note 3 of Table M1)	(see Note to Table N1)			
		Moderately structured	< 0.06										
		Weakly structured or massive	< 0.06										

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Appendix 9 Estimating Coefficient of Run-off

Estimating coefficient of run-off R, as a percentage value, for use with the rational formula ($Q = RiA$) or catchments with area less than 1 square mile (2.56 square km). Values in brackets are percentage run-off and are to be added together for each combination of the five catchment characteristics Burton¹⁰ 1965).

Run-off producing characteristics				
Catchment characteristics	Extreme - 100	High - 75	Normal - 50	Low – 25
Rainfall Intensity	(30) 75-100 mm/hour	(25) 50-75 mm/hour	(15) 25-50 mm/hour	(5) < 25 mm/hour
Relief	(10) Steep rugged country with average slope above 20%	(5) Hilly with average slopes of 10%-20%	(0) Rolling with average slopes of 5%-10%	(0) Relatively flat land with average slopes of 0%-5%
Surface retention stream and surface storage	(10) Negligible; few surface depressions; water courses steep with thin film overland flow	(5+) Well-defined system of small water courses	(5) Considerable surface depressions; overland flow is significant; some farm ponds and swamps; some contour banks and furrows	(0) Poorly defined and meandering stream courses; large surface storage; water and soil conservation plan on 90% of the catchment
Infiltration	(25) No effective soil cover; either solid rock or thin mantle of negligible infiltration capacity	(20) Slow water infiltration; e.g. sodic soils when surface sealed or saturated	(10) Loam soils or well-structured clay soils; e.g. krasnozems	(5) Deep sands or well-aggregated soil, e.g. chernozems
Cover	(25) No effective plant cover	(20) Sheet-eroded native pasture; less than 10% of area under good native or improved pasture; clean cultivated crops	(10) About 50% of area with improved cover; not more than 50% cultivation; open woodlands	(5) About 90% of area with improved pasture; dry sclerophyll type forest

Note: Determine the cumulative value for each of the characteristics of the catchment in question by summing individual % run-off values. In this instance a run off of 20 % is thought to be too great, 10 % has been used instead in the water balance calculations.

¹⁰ Burton J.R (1965). "Water Storage on the Farm", Bulletin No.9, Water Research Foundation of Australia.

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Appendix 10 Soil Laboratory Chemical Analysis

Sample ID		21308497
Sample Name		BROWNLEE TRARALGON
User ID		637
User Name		Glenn Marriott
Grower Name		BROWNLEE
Customer Name		AG CHALLENGE CONSULTING P/L
Paddock Name		SITE 1
Sampling Date		24/12/12
Sample Depth From		50
Sample Depth To		90
Crop		UNKNOWN
Test Code		2011-069
Results Only		0
pH (1:5 Water)		5.7
pH (1:5 CaCl ₂)		4.3
Elect. Conductivity	dS/m	0.08
Phosphorus (Colwell)	mg/kg	<5
Phosphorus Buffer Index (PBI-Col)		160
Available Potassium	mg/kg	48
Calcium (Amm-acet.)	Meq/100g	1.5
Potassium (Amm-acet.)	Meq/100g	0.12
Magnesium (Amm-acet.)	Meq/100g	7.6
Sodium (Amm-acet.)	Meq/100g	1.2
Calcium/Magnesium Ratio		0.2
Aluminium (KCl)	Meq/100g	3
Cation Exch. Cap.	Meq/100g	13.4
Sodium % of Cations (ESP)	%	9
Aluminium Saturation	%	22
Disp. Index, Loveday/Pyle		15
Slaking 2Hrs		Water Stable
Aluminium (KCl)	mg/kg	270
Calcium (Amm-acet.)	%	11
Magnesium (Amm-acet.)	%	57
Potassium (Amm-acet.)	%	0.9
Potassium to Magnesium Ratio		0

Appendix 11 Details of Secondary Treatment Systems

There are many ways in which wastewater may be treated to a secondary (20/30) standard and a full list of EPA approved wastewater treatment systems is available on the EPA Victoria website¹¹. There are some disadvantages associated with Aerated Wastewater Treatment Systems (AWTS), including the continuous need for electrical power and maintenance to be carried out every three months by an accredited person¹². The options of a Sand filter and Rootzone Reed Bed have been included in this report as alternatives to an AWTS for the treatment of effluent up to a secondary standard (20/30).

- Sand filter beds require annual maintenance by an accredited person or servicing agent¹³, but still use electric pumps to ensure even effluent distribution over the sand, and for irrigation to land.
- Rootzone Reed beds require four maintenance visits by an accredited person or servicing agent in the first year, and annual maintenance thereafter¹⁴.

¹¹ EPA Victoria online : Wastewater treatment systems with Certificates of Approval

<http://epanote2.epa.vic.gov.au/epa/septic.nsf/2830336ba1417b774a25664a002344d5?OpenView>

¹² EPA Victoria (2002) – Guidelines for Environmental Management – Guidelines for On-site Aerated Wastewater Treatment Systems. Domestic Wastewater Management Series. Document No. 760 Page 39

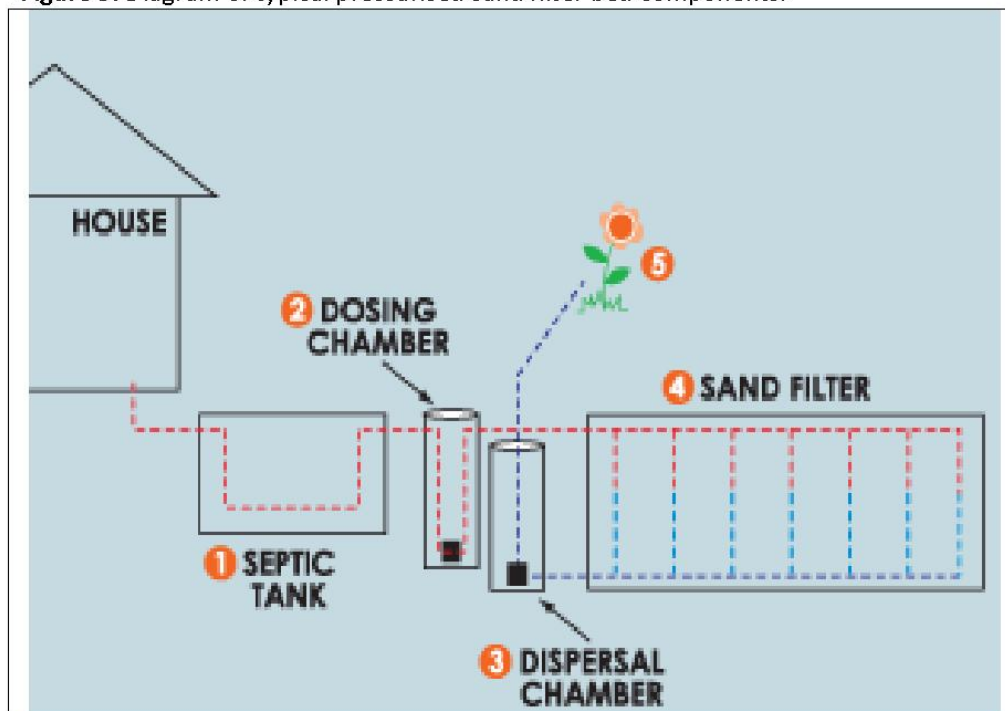
¹³ EPA Victoria (2003) Certificate of Approval Sand Filters. CA 1.3/03

¹⁴ EPA Victoria (2009) Certificate of Approval Rootzone. CA 103/09

Sand Filter Bed

A typical pressurised sand filter system involves the primary treated effluent being collected in a 500 L dosing chamber after leaving the septic tank. From the dosing tank the effluent is pumped to the sand filter bed (7 m x 4 m and 1.4 m deep for 900 L/day) and then returned to a 500 L dispersal tank, before being pumped to irrigation or absorption trenches. The sand filter is normally covered with a thin layer of topsoil with lawn allowed to grow over the top. The area would then blend into the surrounds and can be easily mown over with the rest of the lawn. Figure 5 have been included to demonstrate the components and layout of a typical sand filter bed¹⁵.

Figure 5. Diagram of typical pressurised sand filter bed components.



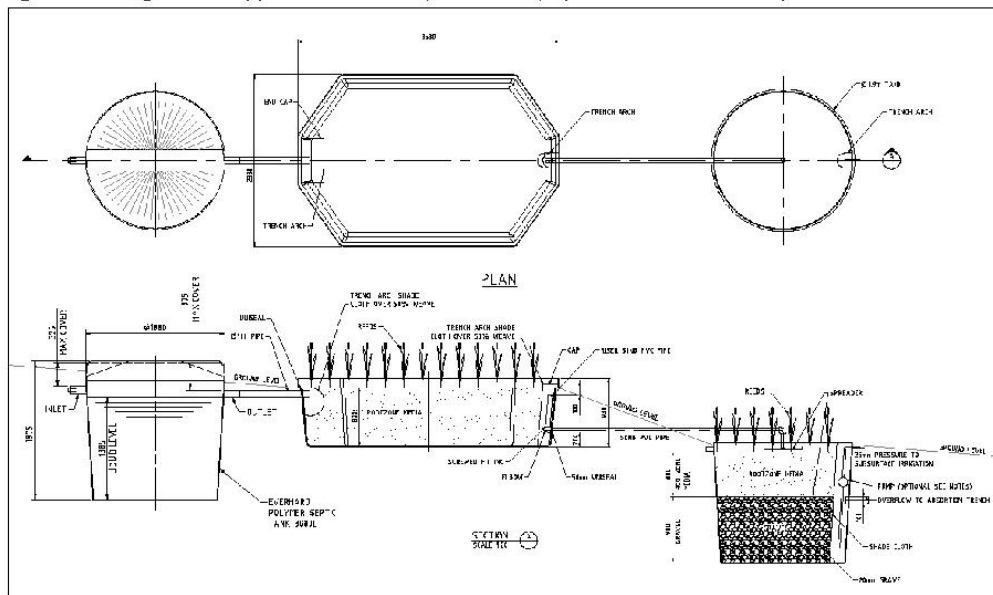
¹⁵Valley Septics Sand Filter - <http://www.valleyseptics.com.au/Sand%20Filter.htm> Accessed 17 Jan 2008

Rootzone Reed Bed

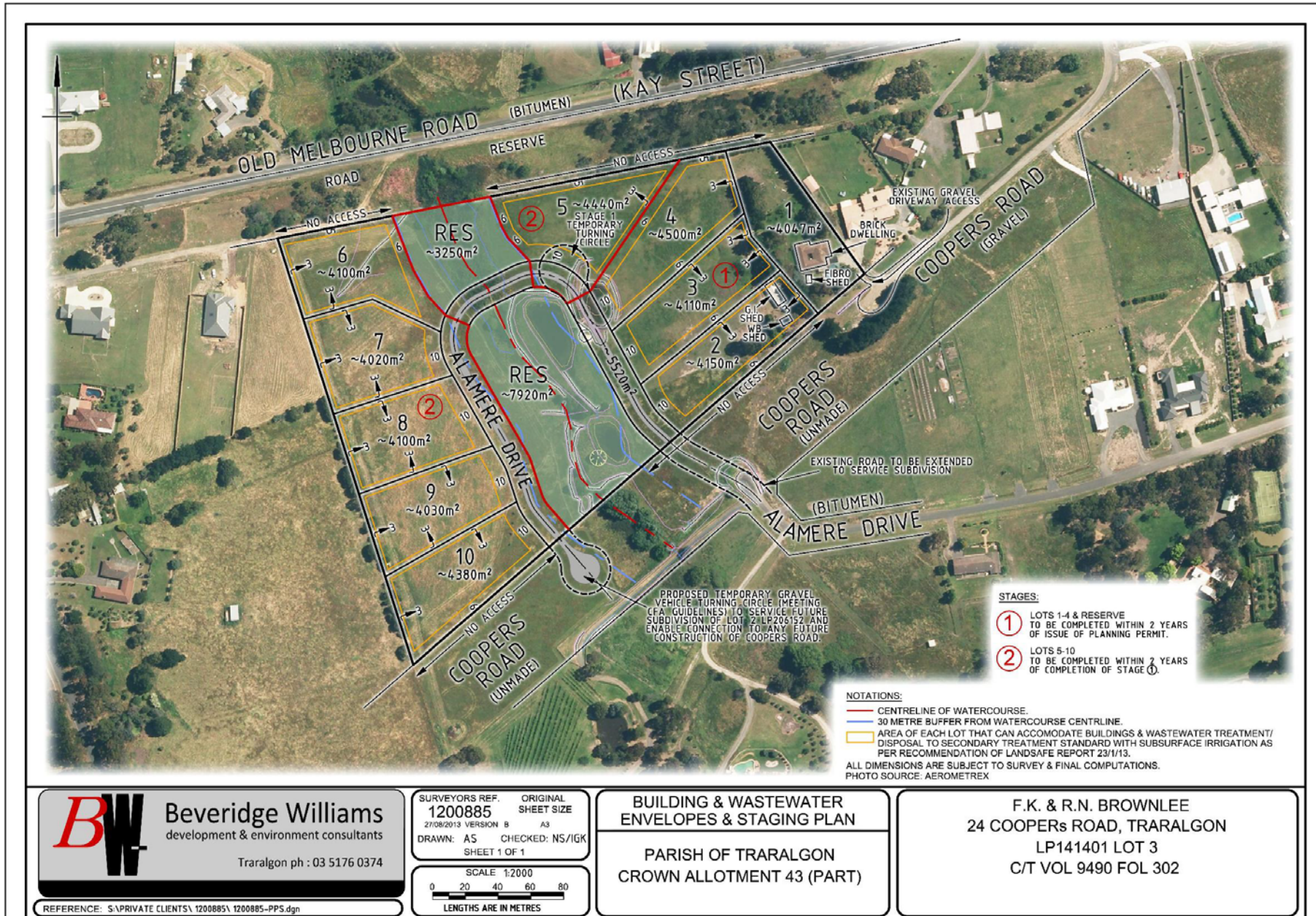
The Rootzone reed bed system consists of two different reed beds - a horizontal reed bed and a vertical reed bed (Figure 6). Primary treated effluent from the septic tank (minimum capacity of 3000 L) flows into the front end of the first reed bed (constructed in a 930 mm deep tub with the base 800 mm below ground level) and flows horizontally through the filter media. Effluent traversing this filter exits the bed near the base and flows into the top of the vertical reed bed (constructed in a 3000 L tank containing filter media to a depth of 600 mm on top of 900 mm of gravel), where it flows vertically through the filter media into the gravel storage area below.¹⁶

A suitably sized pressure pump is located in the exit well of the vertical filter for distribution of the treated effluent to the subsurface irrigation system. An emergency outlet pipe is installed above the gravel section to enable effluent to enter a short (10 m) subsoil absorption trench in the event of electricity disruption or pump failure. Reed beds are designed to retain effluent for five to seven days to allow for ideal secondary treatment before irrigation occurs. The Rootzone reed bed 1200G model would be the most appropriate model for this site as it is capable of treating up to 1200 L/day and there is sufficient slope for gravity to be relied upon for transfer between the two reed beds, provided reed beds are appropriately positioned. The 1200P model would be required if a pump was needed for effluent transfer between the two reed beds, which is a requirement for level sites.

Figure 6. Diagram of typical reed bed (Rootzone) system for secondary treatment.



¹⁶ EPA Victoria (2009) Certificate of Approval Rootzone. CA 103/09



BW Beveridge Williams
development & environment consultants
Traralgon ph : 03 5176 0374

SURVEYORS REF. 1200885 ORIGINAL SHEET SIZE A3
27/08/2013 VERSION B
DRAWN: AS CHECKED: NS/IGK SHEET 1 OF 1

SCALE 1:2000
0 20 40 60 80
LENGTHS ARE IN METRES

BUILDING & WASTEWATER ENVELOPES & STAGING PLAN

PARISH OF TRARALGON
CROWN ALLOTMENT 43 (PART)

F.K. & R.N. BROWNLEE
24 COOPERS ROAD, TRARALGON
LP141401 LOT 3
C/T VOL 9490 FOL 302

REFERENCE: S:\PRIVATE CLIENTS\1200885\1200885-PPS.dgn

History of Application

30 July 2013	Planning permit application received by Council.
14 August 2013	Referred internally to Infrastructure and Health
20 August 2013	Request for further information
27 August 2013	Response to further information received
12 & 13 September 2013	Application advertised and referred to Gippsland Water, SP Ausnet and APA. Application sent to West Gippsland Catchment Management Authority (WGCMA) for comment. Application referred internally to Infrastructure Planning, Health, Recreation and Strategic Planning.
3 October 2013	Completed statutory declaration returned by the applicant.
7 October 2013	All external referral authorities' responses received.

●
LATROBE PLANNING SCHEME

State Planning Policy Framework

Clause 11.02 'Urban Growth'
Clause 11.05 'Regional Development'
Clause 15.01 'Urban Environment'
Clause 16.01 'Residential Development'
Clause 18.01 'Integrated Transport'
Clause 18.02 'Movement Networks'
Clause 19.03 'Development Infrastructure'

Local Planning Policy Framework

Clause 21.01 'Municipal Profile'
Clause 21.02 'Municipal Vision'
Clause 21.03 'Natural Environment Sustainability'
Clause 21.04 'Built Environment Sustainability'
Clause 21.05 'Main Towns'
Clause 21.07 'Economic Sustainability'
Clause 21.08 'Liveability'

Zoning – Low Density Residential Zone

The subject land is located within the Low Density Residential Zone.

Overlay

There are no overlays that affect this property.

Particular Provisions

Clause 52.01 'Public Open Space Contribution and Subdivision'

General Provisions

Clause 65 'Decision Guidelines'

Incorporated Documents (Clause 81):

There are no incorporated documents that relate to the consideration of this application.

**16.5 LATE REPORT - STATUTORY PLANNING DECISION MAKING
PROCESS**

General Manager

Planning and Governance

For Decision

PURPOSE

This report outlines options previously considered by Council for the review of decision making processes relating to its statutory function as the Responsible Planning Authority.

DECLARATION OF INTEREST

No officer declared an interest under the Local Government Act 1989 in the preparation of this report.

STRATEGIC FRAMEWORK

This report is consistent with Latrobe 2026: The Community Vision for Latrobe Valley and the Latrobe City Council Plan 2013-2017.

Latrobe 2026: The Community Vision for Latrobe Valley

Strategic Objectives – Built Environment

In 2026, Latrobe Valley benefits from a well planned built environment that is complimentary to its surroundings and which provides for connected and inclusive community.

Latrobe City Council Plan 2013 – 2017

Theme and Objectives

Theme 5: Planning for the future

Strategic Directions - Planning for the future

- *Explore the establishment of a Council planning committee to guide land use planning, development and growth.*
- *Provide efficient and effective planning services and decision making to encourage development and new investment opportunities.*

BACKGROUND

‘Planning for the Future’ and ‘Job Creation and Economic Sustainability’ are themes identified in the Council Plan for 2013-2017. A focus has been placed on the objective ‘to reduce the time taken to process land use and development planning applications’ and ‘to provide incentives and work proactively to attract new businesses and industry to locate in Latrobe City.’

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Strategic directions of the Council Plan include *'Exploring the establishment of a Council Planning Committee to guide land use planning, development and growth. To provide efficient and effective planning services and decision making to encourage development and new investment opportunities'*.

ISSUES

The Planning & Environment Act determines the duties and function of Councils as responsible authorities. The Act provides that a Council acting as responsible authority may delegate certain authority, responsibility and functions to Committees of Council or Council officers.

Throughout the State Councils delegate decision making to its officers in several ways. Below provides details of nine like Councils and their performance in efficiently dealing with planning applications.

Currently, Planning Officers AT Latrobe City Council have no delegation

Municipality	% of applications dealt within 60 days (FYD)*	Delegation Practice
Bass Coast	35%	1 Objection – Director (GM) Delegation (sign off) 2-4 Objections & refusals – Heard at a meeting with Coordinator, Manager and Director – Delegation (sign off) 5 or more Objections – Full Council Meeting (Decision by Council)
Baw Baw	48%	1-5 objections & Refusals however Councillors can call in on any application - Officer Delegation (sign off).
Latrobe City	59%	No Delegation for applications with objections or for refusals (Decision by Council)
East Gippsland	67%	1-5 Objections: Manager & Senior Planning Delegation (sign off)
Geelong	72%	1-5 objections: Officer Delegation (sign off)
Ballarat	75%	Full Officer Delegation (Manager signs off refusals) except for applications relating to specific liquor licences
South Gippsland	76%	1-5 objections & Refusals: Officer Delegation (sign off), Manager signs off refusals
Warrnambool	82%	1-4 objections or refusals: Heard at a meeting with Planner and Coordinator/ Manager – Delegation (sign off) 5 or more Objections – Full Council Meeting (Decision by Council)
Cardinia	83%	1-4 objections: Officer Delegation (sign off) except for specific applications (i.e. major development).
Wellington	97%	Full Officer Delegation (sign off) for all applications

for applications that receive an objection or any refusals of applications.

If an objection is received for a planning application, or an application is recommended for refusal, decisions must be made at an Ordinary Council Meeting which can take up to 5 months for a decision. Some of the delays with this current process are:

- The ability to set up a discretionary mediation meetings considering applicant, objector(s) and Councillor(s) availability,
- Time required preparing a Council report,
- Providing time for checking and authorisation of reports,
- Availability in scheduling the report for a Council meeting date.

Councils Statutory Planning team is undertaking improvement process opportunities internally and is reinforcing a culture of continuous improvement within the department. Areas that are undergoing review are:

- Implementing the STEP Planning Process Improvement Program introduced by MAV.
- Review the internal application process from start to finish and implement improvement opportunities.
- Fully engage in SPEAR
- Streamline Pathway program
- Engage with internal stakeholders and developers to understand and implement their requirements
- Recognising and implementing the core values and themes of the Council Plan 2013/2017

Concurrently with this process a review of Council's current decision making process for applications that receive objections or are recommended for refusal is also being embarked on. This report concentrates on this aspect of the improvement process.

Council plays the key role in the development and review of policy to support the development and interests of their community. Delegation of planning matters to Council staff is one process that provides the opportunity for efficient decision making.

It is important that Councils are kept involved in the decision making circle. Councils should be able to make decisions on applications that generate strong community interest or relate to strategic policy direction.

Below are two options provided to Council that will improve the efficiency of statutory planning service delivery for the community.

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Option 1	
5 or less objectors	With approved guiding principles (policy/resolutions/Planning Scheme) CEO has delegation to determine application. At the discretion of the CEO, report can be referred to <i>Ordinary Council Meeting</i>
More than 5 objectors	Application heard at <i>Ordinary Council Meeting</i>
Refusal of application	CEO delegation in consultation with GM Planning & Governance and Manager of Statutory Planning
Application of strategic or policy significance	At direction of the CEO application heard at Ordinary Council Meeting
Section 173 Agreement Signing	CEO has delegation to sign 173 agreements
With prior consultation with CEO, Councillors can request any application to be heard at Council meeting	
OPTION 2	
5 or less objectors	With approved guiding principles (policy/resolutions/Planning Scheme, CEO has delegation to determine application. At the discretion of the CEO, report can be referred to <i>Planning Committee Meeting</i>
More than 5 objectors	Application heard at <i>Planning Committee Meeting</i>
Refusal of application	CEO delegation in consultation with GM Planning & Governance and Manager Statutory Planning
Application of strategic or policy significance	At direction of the CEO Application heard at <i>Planning Committee Meeting</i>
Section 173 Agreement Signing	CEO has delegation to sign 173 agreements

As part of these options, officers will provide Councillors with a weekly briefing note that will indicate

- New applications received
- Description of application
- Permit requirement
- Ward
- Status / concerns of application
- Delegation exercised

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An example of this report can be found at Attachment 1.

A review of the practice would be undertaken after six months of implementation.

Option 1 - Implementation of Option 1 would reduce the timeframes on decisions substantially (approx. by 10 weeks) and result in better allocation of resources.

Option 2 - involves a Planning Committee to be established. Potential structure of a Planning Committee could have the following components:

- Falls within a Section 86 Committee framework
- Five (5) Councillors form the committee
- Council Officers to assist at meetings (Manager Statutory Planning, Manager Future Planning, GM Planning & Governance, Officers as required and an Administration Officer to take minutes)
- Briefing/report provided to committee members one week prior to meeting
- Meet weekly

It is considered that although a planning committee will reduce the current timeframes, the following is still required:

- a Planning Committee report;
- separate meeting date from a Council meeting;
- record taking, and minutes distributed; and
- an application can still be required to be heard at an Ordinary Council meeting.

Option 2 would reduce the timeframes on decisions of approx. by 4-6 weeks, it may add extra time burden to Councillors and, if the application is required to be heard at an Ordinary meeting, added time for the community.

Section 173

Current practice results in any 173 Agreement submitted to a Council Meeting who then provides delegation to the Chief Executive Officer to sign the Section 173 Agreements.

This can result in applicants waiting 2-4 weeks for a simple administrative outcome. On behalf of the Responsible Authority, 173 Agreements can be signed under delegation by the CEO, which eliminates the need for a 173 agreement to be sent to a Council meeting for signing.

**ORDINARY COUNCIL MEETING MINUTES
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Risk has been considered as part of this report and it is considered to be consistent with the Risk Management Plan 2011-2014.

INTERNAL/EXTERNAL CONSULTATION

Benchmarking with municipalities on their Delegation processes was undertaken. Liaison with the MAV and DTPLI also formed part of the research in the review of decision making process.

OPTIONS

1. Adopt option 1 to vary current delegation practices with a review in six months
2. Adopt option 2 to vary current delegation practices with a review in six months
3. Not adopt options provided and seek further information for decision

CONCLUSION

It is considered that adopting an approach that allows decision making to fall within CEO delegation, may drive more efficient, effective and consistent planning outcomes. A report distributed each week will still allow Councillors to play an important role in the process.

Attachments

1. Sample Planning Report

RECOMMENDATION

- A. That Council implement the following planning delegations immediately;**
1. Any application with five or less objections can be approved by the Chief Executive Officer in accordance with the Latrobe Planning Scheme.
 2. The Chief Executive Officer may refer any application to Council for consideration should they deem it appropriate to do so.
 3. Any application that has more than five objections to it must be referred to an Ordinary Council meeting for a decision.
 4. The Chief Executive Officer in consultation with the appropriate General Manager and Manager may refuse an application that is not in accordance with the Latrobe Planning Scheme.
 5. In consultation with the Chief Executive any Councillor can request an application to be presented to Council for consideration at an ordinary Council meeting.
 6. The Chief Executive Officer is delegated the power to sign all s.173 agreements on behalf of Latrobe City Council.

**ORDINARY COUNCIL MEETING MINUTES
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B. That a further report be presented to Council reviewing the appropriateness and success of the planning delegations after an initial six month period.

C. That the Chief Executive Officer make all necessary amendments to the relevant Instruments of Delegation to put the new planning delegations into effect immediately.

Moved: Cr Rossiter

Seconded: Cr Harriman

That the Recommendation be adopted.

For the Motion

Councillor/s Rossiter, Gibbons, Gibson, Kam, White, Harriman

Against the Motion

Councillor/s Middlemiss, O'Callaghan

The Mayor confirmed that the Recommendation had been CARRIED

16.5

Late Report - Statutory Planning Decision Making Process

- 1 Sample Planning Report 483**

SAMPLE STATUTORY PLANNING REPORT 3 MARCH TO 7 MARCH**New Applications**

Application number	Description	Permit trigger	Address	Ward	Status / Concerns
2014/1	Use and develop the land for a dwelling	Farming zone, property less than 40ha	111 Smit Street, Smith	Central	Compatibility with the Farming Zone, Further Information requested
2014/33	Extension of Liquor licence	Extend the hours of liquor licence from 11pm to 3 pm	222 John Street, Johns Grove	East	Likely community concerns, application to be advertised.

Delegation Exercised

Application number	Description	Permit trigger	Address	Ward	Decision
2013/358	Subdivision of the land	10 lot subdivision in residential 1 zone	333 James Street, St James	South	Approved
2014/12	Use land for medical centres and reduction of car parking	Medical centre in residential zone and reduce number of carparking by 15	444 Stuart Road, Stuart Land	South	Refused by CEO delegation

ORGANISATIONAL EXCELLENCE

17. ORGANISATIONAL EXCELLENCE

Nil reports

MEETING CLOSED TO THE PUBLIC

18. MEETING CLOSED TO THE PUBLIC

Section 89(2) of the Local Government Act 1989 enables the Council to close the meeting to the public if the meeting is discussing any of the following:

- (a) Personnel matters;
- (b) The personal hardship of any resident or ratepayer;
- (c) Industrial matters;
- (d) Contractual matters;
- (e) Proposed developments;
- (f) Legal advice;
- (g) Matters affecting the security of Council property;
- (h) Any other matter which the Council or Special Committee considers would prejudice the Council or any person;
- (i) A resolution to close the meeting to members of the public.

RECOMMENDATION

That the Ordinary Meeting of Council closes this meeting to the public to consider the following items which are of a confidential nature, pursuant to section 89(2) of the Local Government Act (LGA) 1989 for the reasons indicated:

18.1 ADOPTION OF MINUTES

Agenda item 18.1 *Adoption of Minutes* is designated as confidential as it relates to a matter which the Council or special committee considers would prejudice the Council or any person (s89 2h)

18.2 CONFIDENTIAL ITEMS

Agenda item 18.2 *Confidential Items* is designated as confidential as it relates to a matter which the Council or special committee considers would prejudice the Council or any person (s89 2h)

18.3 REQUEST TO ENTER INTO PROCUREMENT AUSTRALIA CONTRACTS

Agenda item 18.3 *REQUEST TO ENTER INTO PROCUREMENT AUSTRALIA CONTRACTS* is designated as confidential as it relates to contractual matters (s89 2d)

13.4 GIPPSLAND HEAVY INDUSTRY PARK- INFRASTRUCTURE PROVISION OFFER VICTORIAN GOVERNMENT

Agenda item 13.4 *Gippsland Heavy Industry Park- Infrastructure Provision Offer Victorian Government* is designated as confidential as it relates to legal advice (s89 2f)

**ORDINARY COUNCIL MEETING MINUTES
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Moved: Cr Rossiter
Seconded: Cr Kam

That the Recommendation be adopted.

CARRIED UNANIMOUSLY

Meeting was adjourned for tea break at 7: 40 PM

Meeting recommenced at 7:45 PM

The Meeting closed to the public at 7:45 PM.