

## Form 2

**NOTICE OF AN APPLICATION FOR PLANNING PERMIT**

<b>The land affected by the application is located at:</b>	<b>127 Mill Point Road TOORLOO ARM 3909 Lot: 1 PS: 907217</b>
<b>The application is for a permit to:</b>	<b>Use and Development of a Dwelling and Outbuilding.</b>
<b>The applicant for the permit is:</b>	<b>Development Solutions Victoria Pty Ltd</b>
<b>The application reference number is:</b>	<b>5.2023.431.1</b>

You may look at the application and any documents that support the application free of charge at: <https://www.eastgippsland.vic.gov.au/building-and-development/advertised-planning-permit-applications>

You may also call 5153 9500 to arrange a time to look at the application and any documents that support the application at the office of the responsible authority, East Gippsland Shire. This can be done during office hours and is free of charge.

Any person who may be affected by the granting of the permit may object or make other submissions to the responsible authority.

**An objection must**

- ♦ **be made to the Responsible Authority in writing,**
- ♦ **include the reasons for the objection, and**
- ♦ **state how the objector would be affected.**

The responsible authority must make a copy of every objection available at its office for any person to inspect during office hours free of charge until the end of the period during which an application may be made for review of a decision on the application.

<b>The Responsible Authority will not decide on the application before:</b>	<b>Subject to applicant giving notice</b>
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If you object, the Responsible Authority will tell you its decision.

**REGISTER SEARCH STATEMENT (Title Search) Transfer of Land Act 1958**

Page 1 of 3

VOLUME 12456 FOLIO 796

Security no : 124109596570W

Produced 06/10/2023 04:20 PM

**LAND DESCRIPTION**

Lot 1 on Plan of Subdivision 907217T.  
PARENT TITLE Volume 09439 Folio 123  
Created by instrument PS907217T 27/02/2023

**REGISTERED PROPRIETOR**

Estate Fee Simple  
Sole Proprietor

**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 PS907217T 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: 127 MILL POINT ROAD TOORLOO ARM VIC 3909

**ADMINISTRATIVE NOTICES**

NIL

DOCUMENT END

# Imaged Document Cover Sheet

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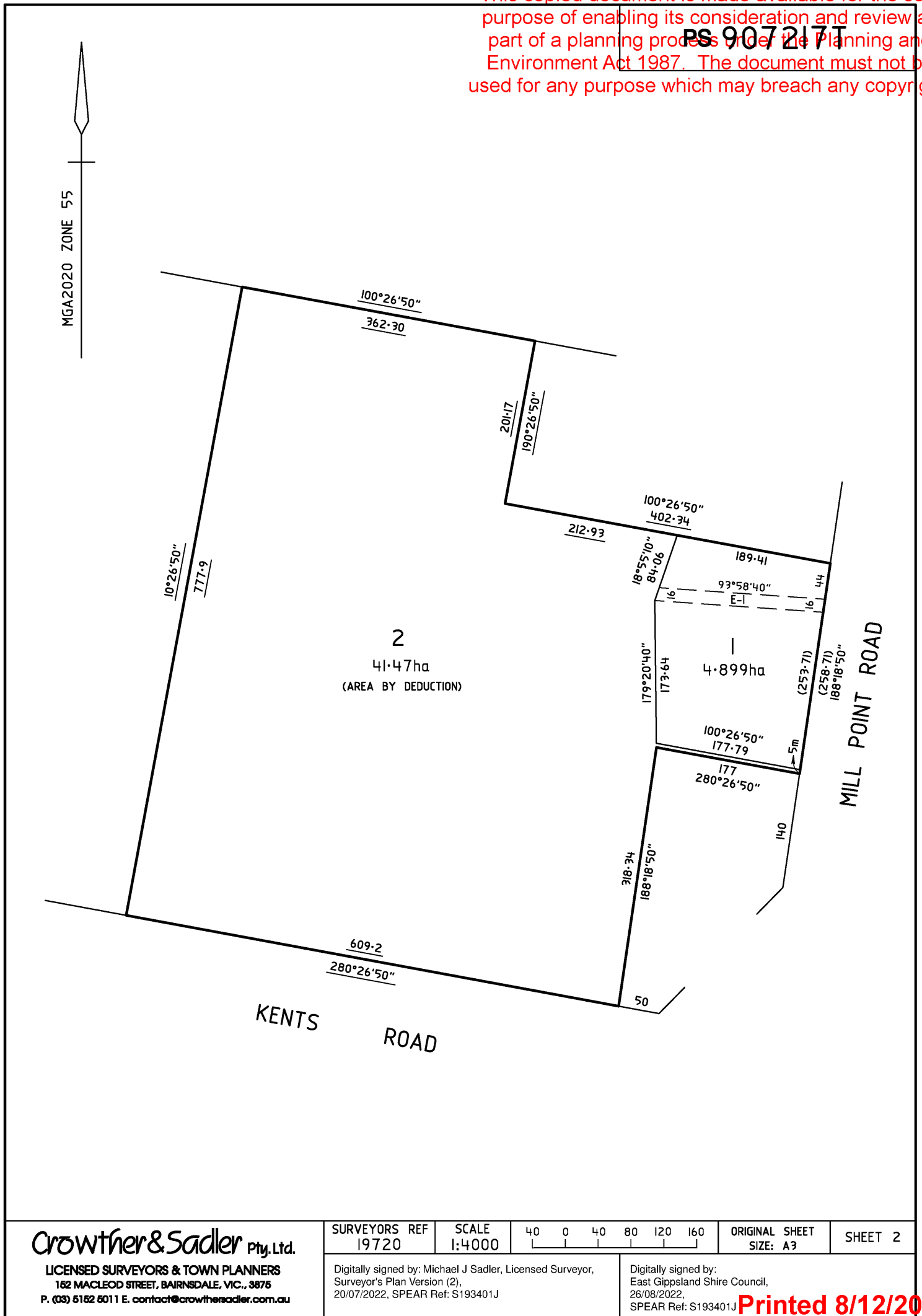
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<b>PLAN OF SUBDIVISION</b>				<b>EDITION 1 PS 907217T</b>	
<b>LOCATION OF LAND</b>  <b>PARISH:</b> COLQUHOUN <b>TOWNSHIP:</b> _____ <b>SECTION:</b> _____ <b>CROWN ALLOTMENT:</b> 156 (PART) <b>CROWN PORTION:</b> _____ <b>TITLE REFERENCE:</b> VOL 9439 FOL 123  <b>LAST PLAN REFERENCE:</b> LOT 1 - LP134496  <b>POSTAL ADDRESS:</b> 6 KENTS ROAD, (at time of subdivision) TOORLOO ARM, 3909  <b>MGA2020 CO-ORDINATES:</b> E: 594 040 <b>ZONE:</b> 55 (of approx centre of land in plan) N: 5811 560				Council Name: East Gippsland Shire Council  Council Reference Number: PS907217T Planning Permit Reference: 503/2021/P SPEAR Reference Number: S193401J  <b>Certification</b>  This plan is certified under section 6 of the Subdivision Act 1988  Public Open Space  A requirement for public open space under section 18 or 18A of the Subdivision Act 1988 has not been made  Digitally signed by: Robert Pringle for East Gippsland Shire Council on 26/08/2022  <b>Statement of Compliance</b> issued: 03/01/2023	
<b>VESTING OF ROADS AND/OR RESERVES</b>				<b>NOTATIONS</b>	
IDENTIFIER	COUNCIL/BODY/PERSON			DIMENSIONS SHOWN UNDERLINED ARE NOT THE RESULT OF THIS SURVEY. THE AREA OF LOT 2 IS BY DEDUCTION FROM TITLE.	
NIL	NIL				
<b>NOTATIONS</b>					
<b>DEPTH LIMITATION</b> 15.24 METRES BELOW THE SURFACE					
<b>SURVEY:</b> This plan is based on survey.  <b>STAGING:</b> This is not a staged subdivision. Planning Permit No. 503/2021/P  This survey has been connected to permanent marks No(s). 182  In Proclaimed Survey Area No. NIL					
<b>EASEMENT INFORMATION</b>					
<b>LEGEND:</b> A - Appurtenant Easement      E - Encumbering Easement      R - Encumbering Easement (Road)					
Easement Reference	Purpose	Width (Metres)	Origin	Land Benefited/In Favour Of	
E-1	POWERLINE	SEE DIAG.	THIS PLAN - SECTION 88 OF THE ELECTRICITY INDUSTRY ACT 2000	AUSNET ELECTRICITY SERVICES PTY LTD	
<b>Crowther &amp; Sadler Pty. Ltd.</b> LICENSED SURVEYORS & TOWN PLANNERS 162 MACLEOD STREET, BAIRNSDALE, VIC., 3875 P. (03) 6162 6011 E. <a href="mailto:contact@crowthersadler.com.au">contact@crowthersadler.com.au</a>		SURVEYORS FILE REF: 19720  Digitally signed by: Michael J Sadler, Licensed Surveyor, Surveyor's Plan Version (2), 20/07/2022, SPEAR Ref: S193401J		ORIGINAL SHEET SIZE: A3  PLAN REGISTERED TIME: 4:24 PM      DATE: 27/02/2023 YL Assistant Registrar of Titles	SHEET 1 OF 2 SHEETS



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PS 907217T



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APPLICATION FOR PLANNING PERMIT

# USE AND DEVELOPMENT OF A DWELLING AND OUTBUILDING

127 MILL POINT ROAD, TOORLOO ARM  
BRENT RICHARDSON  
REF: 23118

## CONTENTS

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## APPENDIX

A	Copy of Title and Plan of Subdivision
B	Proposed Development Plans
C	Bushfire Management Plan
D	Geotechnical Risk Assessment Waiver
E	Land Capability Assessment

## DOCUMENT REVISION

1	Draft Report	DAC	20/10/2023
2	Final Report	CMC	22/10/2023







## 1. INTRODUCTION

Development Solutions Victoria Pty Ltd act on behalf of Brent Richardson, the applicant for the planning permit application for the use and development of a dwelling and an outbuilding at 127 Mill Point Road, Toorloo Arm.

This submission and supporting documentation provide details of the subject site, relevant planning controls and policies and delivers an assessment against the provisions of the East Gippsland Planning Scheme.

The proposal is consistent with the objectives of the East Gippsland Planning Scheme, is an appropriate development in this location and will result in a positive planning outcome.

<b>Address</b>	<b>127 Mill Point Road, Toorloo Arm</b>
<b>Site Description</b>	Lot 1 on Plan of Subdivision 907217T
<b>Title Particulars</b>	Vol 12456 Fol 796
<b>Site Area</b>	4.89 hectares
<b>Proposal</b>	Use and Development of a Dwelling and Outbuilding
<b>Planning Scheme</b>	East Gippsland Planning Scheme
<b>Zone</b>	Rural Living Zone – Schedule 3
<b>Overlays</b>	Bushfire Management Overlay Erosion Management Overlay Environmental Significance Overlay – Schedule 1-54 Significant Landscape Overlay – Schedule 4
<b>Aboriginal Cultural Heritage</b>	The site is identified as an area of Cultural Heritage Sensitivity
<b>Permit Triggers</b>	Clause 35.03-1 Rural Living Zone – Use of land for a dwelling Clause 35.03-4 Rural Living Zone – Buildings and works within a setback Clause 44.06-2 Bushfire Management Overlay – Buildings and works Clause 44.01-2 Erosion Management Overlay – Earthworks exceeding 1 metre in depth and outbuilding exceeding 200m <sup>2</sup> Clause 42.01-2 Environmental Significance Overlay – Buildings and works Clause 42.03-2 Significant Landscape Overlay – Buildings and works
<b>Notice</b>	No exemption available
<b>Referrals</b>	CFA
<b>Work Authority Licence</b>	Not Applicable
<b>Planning Scheme requirements</b>	Municipal Planning Strategy – Clause 02 Environmental and landscape values – Clause 02.03-2 Environmental risks and amenity – Clause 02.03-3 Built environment and heritage – Clause 02.03-5 Planning Policy Framework – Clause 10 Settlement – Clause 11 Environmental and landscape values – Clause 12 Environmental risks and amenity – Clause 13 Built environment and heritage – Clause 15 Rural Living Zone – Clause 35.03 Bushfire Management Overlay – Clause 44.06 Erosion Management Overlay – Clause 44.01 Environmental Significance Overlay – Clause 42.03 Significant Landscape Overlay – Clause 42.03 Bushfire Planning – Clause 53.02 Decision guidelines – Clause 65

## 2. SITE CONTEXT

### Site

The subject site is located at 127 Mill Point Road, Toorloo Arm. A copy of the Title and Plan of Subdivision is contained in **Appendix A**. The title is not affected by any restrictive covenants or agreements.

The site is irregular in shape, has a total area of approximately 4.89 hectares and is currently vacant land, with a dam located centrally on the property.

The site is undulating in nature, contains scattered vegetation throughout, a dam in the centre and an ephemeral watercourse in the northern portion of the site. Details of the site are depicted in the photographs provided below.

Access is existing via a bitumen crossover along the eastern boundary directly from Mill Point Road. Mill Point Road is a sealed bitumen road with grassed shoulders and swale drains traversing in a north to south direction.

The subject site in relation to Toorloo Arm and Lakes Entrance as well as the surrounding land, is shown in the locality plans in **Figure 1** and **Figure 2**.

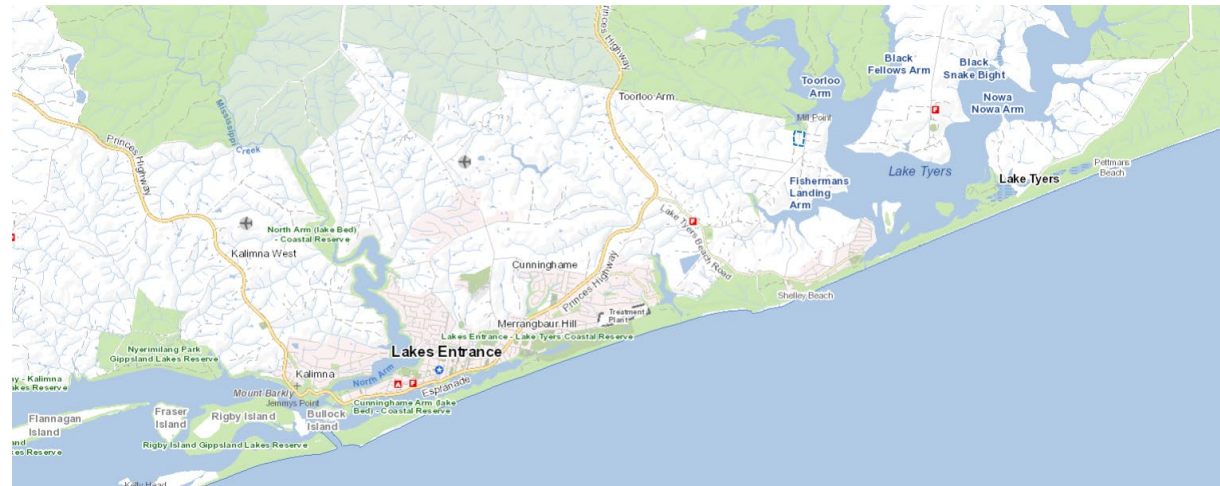


Figure 1 – Locality Plan – 127 Mill Point Road, Toorloo Arm (source: mapshare.vic.gov.au)



Figure 2 – Locality Plan – 127 Mill Point Road, Toorloo Arm (source: mapshare.vic.gov.au)



## Surrounds

The land in this locality is predominantly rural living development and public land.

Adjoining the northern boundary of the subject site is vacant land and further public land containing Mill Point Boat Ramp, adjoining the eastern boundary is Mill Point Road and further rural residential development, adjoining the southern and western boundaries is land containing existing dwellings and associated facilities.

Toorloo Arm is a rural locality located approximately 11.7 kilometres north of Lakes Entrance and 20.6 Kilometres southwest of Nowa Nowa.

Lakes Entrance offers a range of community and commercial services and facilities. A larger suite of services and facilities is available further afield in Bairnsdale.

The subject site in relation to surrounding land is shown in the aerial photograph below.





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Photograph 1 – Aerial Photograph of the subject site and surrounding land  
– 127 Mill Point Road, Toorloo Arm (source: dpi.vic.gov.au)

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**Photograph 2** – Subject site at 127 Mill Point Road, Toorloo Arm



**Photograph 4** – Subject site facing northwest.



**Photograph 6** – Subject site facing west showing the central dam onsite.



**Photograph 3** – Subject site facing southwest.



**Photograph 5** – Southern boundary of subject site, facing west.



**Photograph 7** – Northern boundary of subject site, facing northwest.





**Photograph 8** – Opposite the subject site at 130 Mill Point Road, Toorloo Arm.



**Photograph 10** – Mill Point Road facing north.



**Photograph 9** – Neighbouring property to the south of subject site at 115 Mill Point Road, Toorloo Arm.



**Photograph 11** – Mill Point Road facing south.

### 3. THE PROPOSAL

This application seeks approval for the use and development of a dwelling and outbuilding. The proposed development plans are contained in **Appendix B**.

The proposed dwelling and outbuilding will be located in the southeastern portion of the site. The proposed dwelling will have a setback of approximately 36.35 metres to the eastern boundary. The proposed outbuilding will be located approximately 15 metres north of the proposed dwelling and will have a setback of approximately 17.12 metres to the eastern boundary being Mill Point Road.

The proposed dwelling and detached garage will have a total building footprint of approximately 463.88m<sup>2</sup> and will be single storey. The overall height of the proposed dwelling will be 6.81 metres.

The finished materials of the proposed dwelling will include fibre cement weatherboard wall cladding and the roof will be Colorbond metal roofing as provided in the proposed development plans in **Appendix B**. Colours have not been finalised yet.

The proposed outbuilding will be a barn style and will have a total building footprint of 288m<sup>2</sup>. The outbuilding will be approximately

12 metres wide and 24 metres long with an overall height of 7.42 metres. The finished material will be Colorbond metal sheeting in the colour dune for the wall cladding and monument for the roof and roller doors.

An indication of the proposed colours are located below.



Vehicle access to the site is existing directly from Mill Point Road along the eastern boundary and will be extended to the proposed dwelling, detached garage and outbuilding as indicated on the proposed development plans.

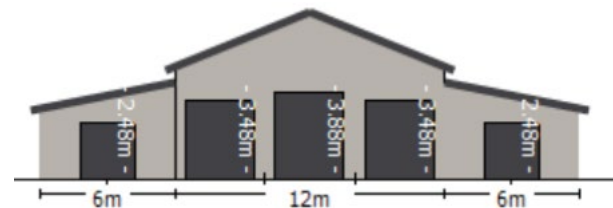


Figure 3 – Outbuilding elevation – Riviera Barns and Garages



Figure 4 – East Elevation – Atelier 1:7

#### 4. ZONES AND OVERLAYS

##### Rural Living Zone – Schedule 3

The purpose of the Rural Living Zone is:

- To implement the Municipal Planning Strategy and the Planning Policy Framework.
- To provide for residential use in a rural environment.
- To provide for agricultural land uses which do not adversely affect the amenity of surrounding land uses.
- To protect and enhance the natural resources, biodiversity and landscape and heritage values of the area.
- To encourage use and development of land based on comprehensive and sustainable land management practices and infrastructure provision.

An extract of the Rural Living Zone Map is provided to the right in **Figure 5**.

Schedule 3 of Clause 35.03 provides the minimum area for which no permit is required to use land for a dwelling is 8 hectares. The subject site is under 8 hectares and as such a permit is required for the use.

Clause 35.03-4 provides a permit is required for a building within a setback and within 100

metres of a waterway. The proposed outbuilding will be located within 20 metres of a road and the proposed dwelling and outbuilding will be within 100 metres of a waterway.

As such a permit is required for the use and development of a dwelling and outbuilding under the provisions of the Rural Living Zone. The relevant decision guidelines are addressed below in Section 5.

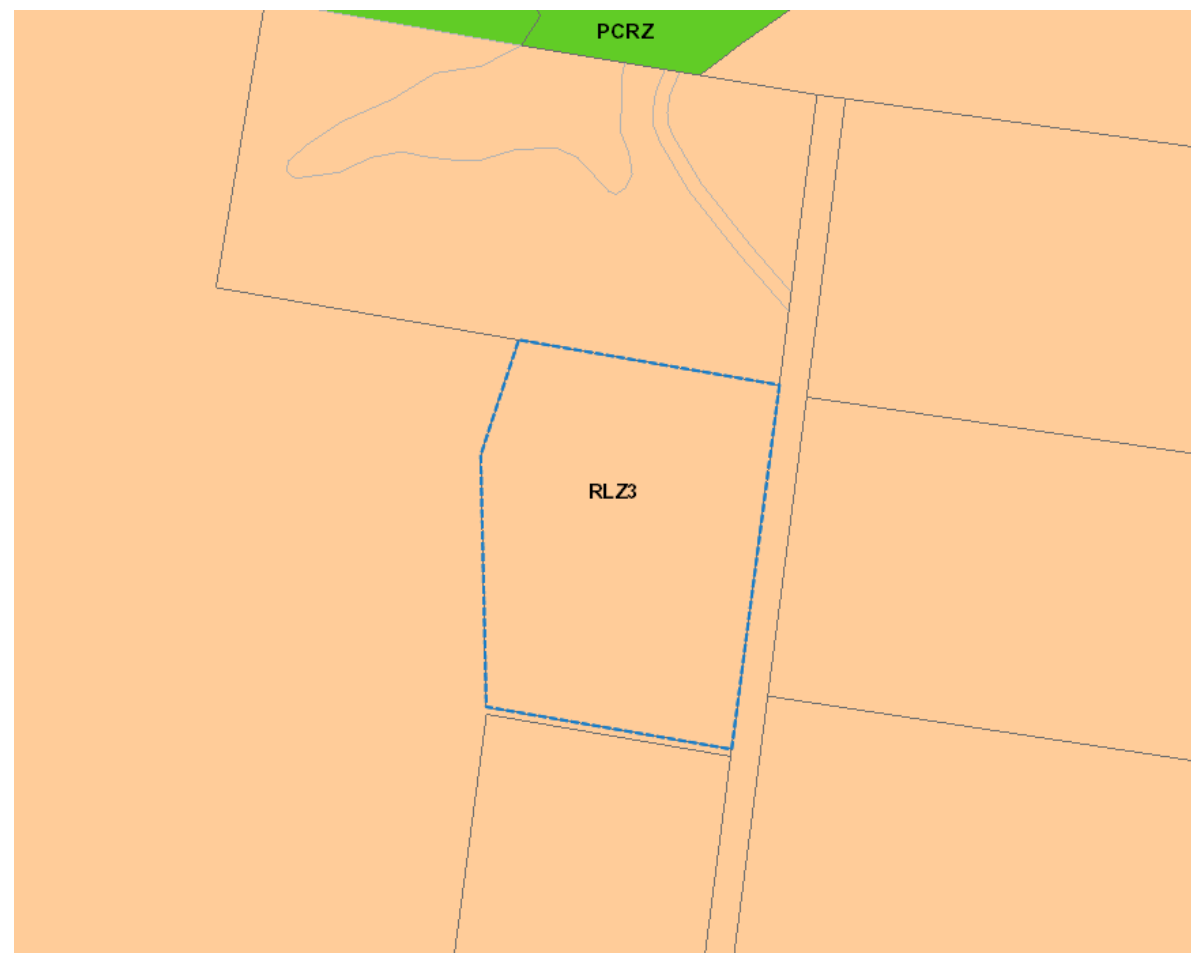


Figure 5 – Zoning Map – (source - mapshare.vic.gov.au)

## Bushfire Management Overlay

The purpose of the Bushfire Management Overlay is:

- To implement the Municipal Planning Strategy and the Planning Policy Framework.
- To ensure that the development of land prioritises the protection of human life and strengthens community resilience to bushfire.
- To identify areas where the bushfire hazard warrants bushfire protection measures to be implemented.
- To ensure development is only permitted where the risk to life and property from bushfire can be reduced to an acceptable level.

An extract of the Bushfire Management Overlay Map is provided to the right in **Figure 6**.

Clause 44.06-2 provides a permit is required to construct a building or construct or carry out works. The proposed dwelling will not be located within the area affected by the Bushfire Management Overlay.

The proposed outbuilding will be within the Bushfire Management Overlay area, will

exceed 100 square metres, not used for accommodation and is ancillary to a dwelling.

Clause 44.06-4 provides an application must meet the requirements of Clause 53.02 unless the application meets all of the requirements specified in a schedule to this overlay.

A schedule to this overlay must specify substitute approved measures, additional alternative measures and additional or

substitute decision guidelines for the purposes of Clause 53.02. There is no schedule applicable to the subject site.

As such a permit is required under the provisions of the Bushfire Management Overlay and Clause 53.02. The relevant decision guidelines are addressed below in Section 5. A Bushfire Management Plan is provided in **Appendix C**.

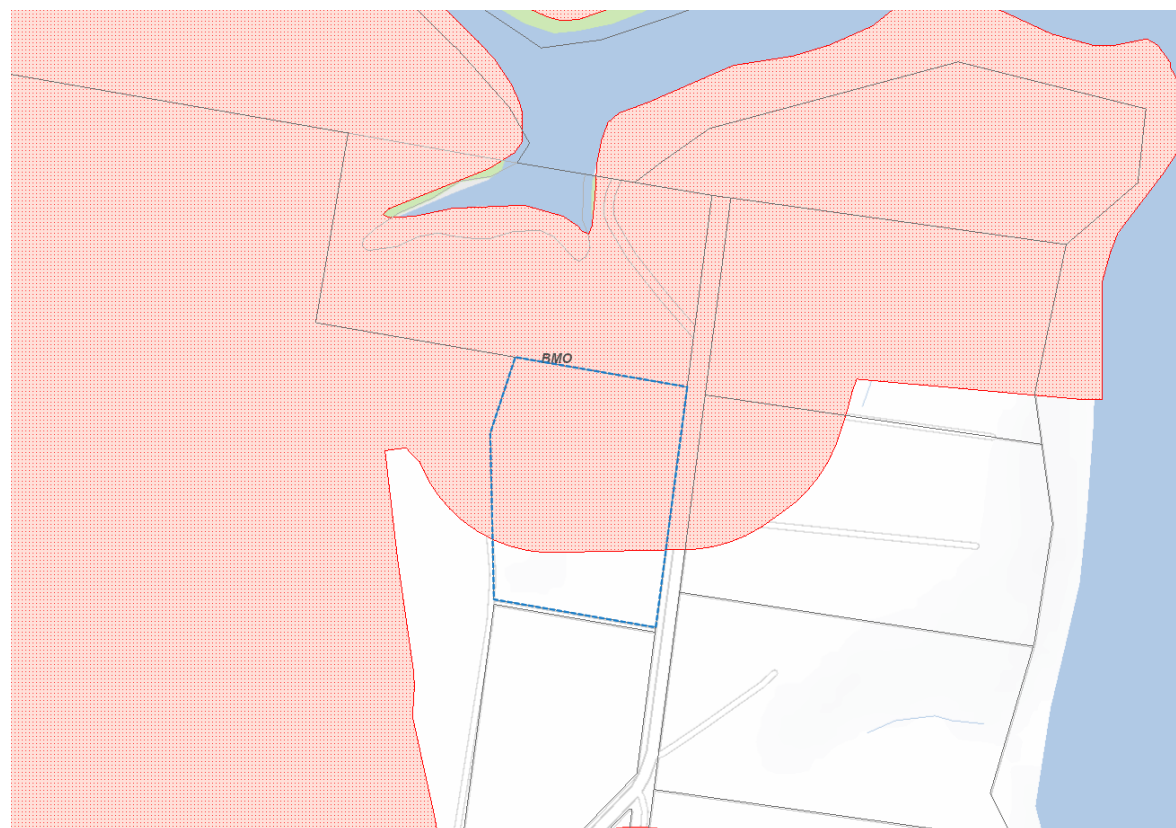


Figure 6 – Bushfire Management Overlay – (source - mapshare.vic.gov.au)



## Erosion Management Overlay

The purpose of the Erosion Management Overlay is:

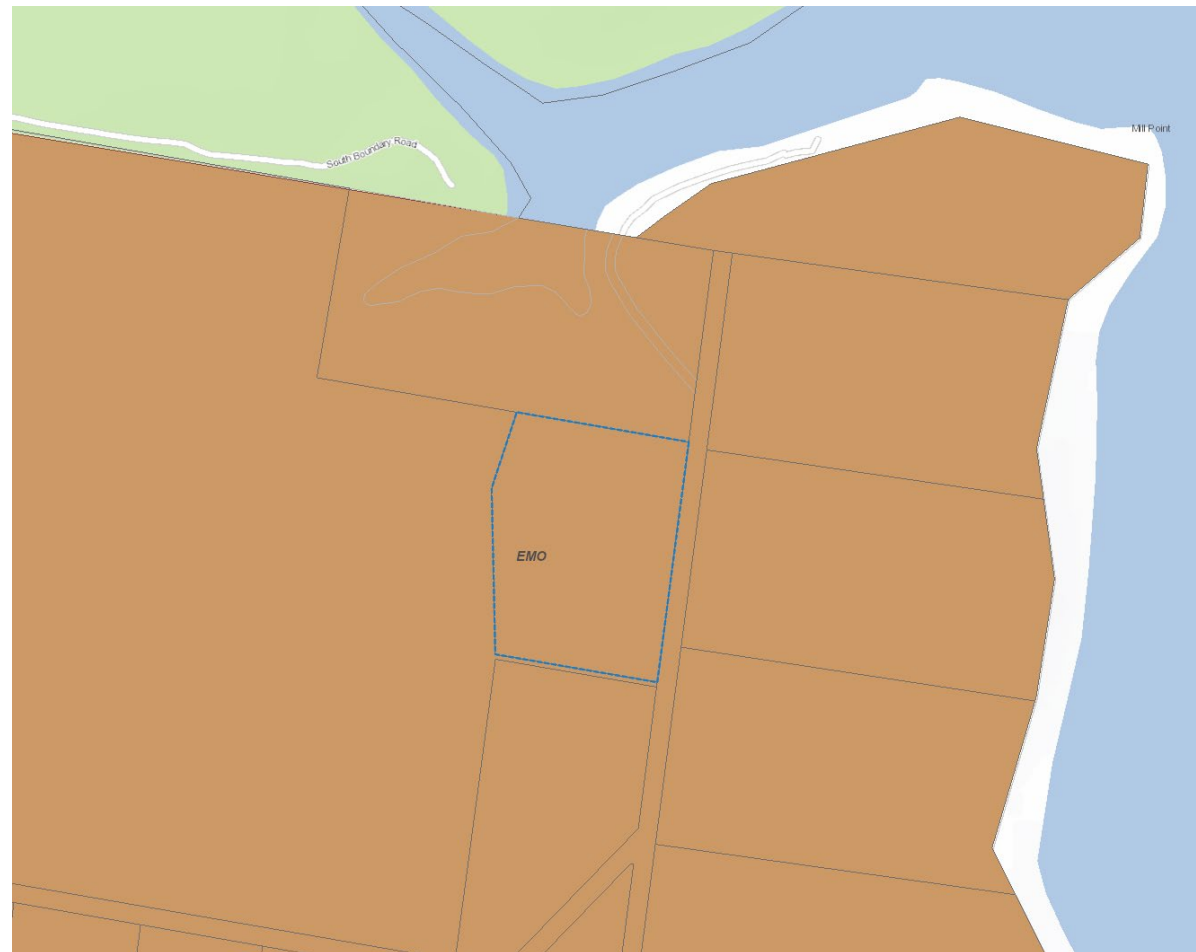
- To implement the Municipal Planning Strategy and the Planning Policy Framework.
- To protect areas prone to erosion, landslip, other land degradation or coastal processes by minimising land disturbance and inappropriate development.

An extract of the Erosion Management Overlay Map is provided to the right in **Figure 7**.

Clause 44.01-2 provides a permit is required to construct a building or carry out works. The schedule provides in 3.0 that a permit is not required for the development of a dwelling however, the proposed outbuilding will exceed 200m<sup>2</sup> and the proposed earthworks will exceed 1 metre in depth.

As such a permit is required under the provisions of the Erosion Management Overlay. The relevant decision guidelines are addressed below in Section 5.

A Geotechnical Risk Assessment is provided in **Appendix D**.



**Figure 7** – Erosion Management Overlay – (source - mapshare.vic.gov.au)

## Environmental Significance Overlay – Schedule 1-54

The purpose of the Environmental Significance Overlay is:

- To implement the Municipal Planning Strategy and the Planning Policy Framework.
- To identify areas where the development of land may be affected by environmental constraints.
- To ensure that development is compatible with identified environmental values.

An extract of the Environmental Significance Overlay Map is provided to the right in **Figure 8**.

Schedule 1 of the Environmental Significance Overlay provides the following statement of environmental significance.

*“The overlay areas comprise Sites of Biological Significance containing specific values as listed in Table 1 below and representing either: rare or threatened species; restricted, rare or threatened vegetation communities; vegetation which is important as a corridor; high species richness; or other unusual biological features. The sites include suitable habitat for either the local population or the local occurrence of a species or community.”*

The environmental objective to be achieved is:

*“To ensure that development occurs so as not to adversely impact upon the environmental values of the site or any other value that may be identified within the overlay area. To conserve and enhance the environmental sustainability and ecological integrity of these values.”*



Figure 8 – Environmental Significance Overlay – (source - mapshare.vic.gov.au)

## Significant Landscape Overlay – Schedule 4

The purpose of the Significant Landscape Overlay is:

- To implement the Municipal Planning Strategy and the Planning Policy Framework.
- To identify significant landscapes.
- To conserve and enhance the character of significant landscapes.

An extract of the Significant Landscape Overlay is provided to the right in **Figure 9**.

Clause 42.03-2 provides a permit is required to construct a building or construct or carry out works. The schedule does not provide any exemptions and as such a permit is required under the provisions of the Significant Landscape Overlay. The relevant decision guidelines are addressed below in Section 5.

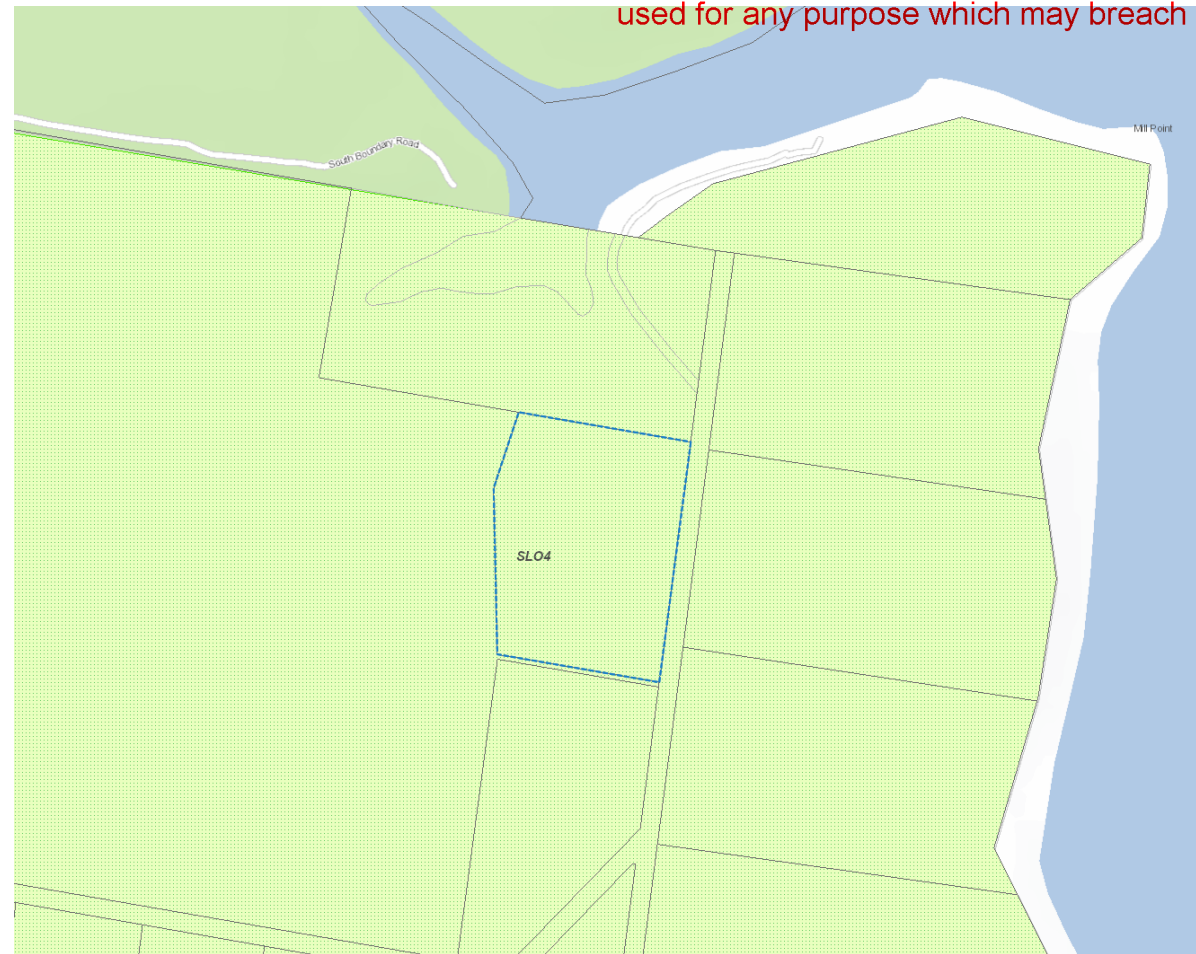


Figure 9 – Significant Landscape Overlay – (source - mapshare.vic.gov.au)



#### Schedule 4 of the Significant Landscape Overlay:

Schedule 4 provides the following statement of nature and key elements of landscape:

*"Lake Tyers is a complex inland water body with scenic landscape qualities of regional significance.*

*The lake is contained by steep natural escarpments, giving the landscape a dramatic edge that contrasts with the flat plains around Lake Tyers Beach. There are expansive views along the Ninety Mile Beach and to the Gippsland Lakes from high points along the escarpments.*

*The area attracts visitors from across the state for its natural beauty and scenic views, as well as for its recreation opportunities. The Ramsar Convention notes this landscape as a wetland system of international significance. The Register of the National Estate recognises the Aboriginal heritage values of this landscape, particularly as the site of the Lake Tyers Aboriginal mission and reserved land. The National Trust endorses this as a landscape that "... demonstrates the colonisation process of Gippsland, including the displacement of the Kurnai."*

Landscape character objectives to be achieved:

*"To maintain and strengthen indigenous vegetation cover throughout the landscape, particularly on prominent slopes to reduce the visual impact of the built form, and around all new developments to create linkages between existing bushland and forest parks and coastal vegetation.*

*To protect a vegetated and natural character at Lakes Tyers.*

*To protect locally significant views and vistas that contribute to the character of the landscape, including extensive and scenic outviews from Lake Tyers Beach across Ninety Mile Beach.*

*To ensure that development around the settlement of Lake Tyers does not impact on the characteristics of the landscape, including key views and viewing opportunities.*

*To minimise and reduce the visual intrusion of buildings and structures at the edge of Lake Tyers.*

*To ensure buildings and structures sit within, rather than dominate the landscape, especially adjacent to lakes, waterways and the coast.*

*To encourage landscape change that is consistent with the cultural heritage values of the area.*

*To minimise the visual impact of signage and other infrastructure, particularly on hill faces, in coastal areas and in other areas of high landscape values or visibility.*

*To ensure that the open rural character and scenic coastal features of this area are not dominated by plantation forestry.*

*To recognise, and protect, the landscape of Lake Tyers and surrounds as a place of significant Aboriginal cultural heritage value."*

## Aboriginal Cultural Heritage

Under the provisions of the *Aboriginal Heritage Act 2006* the subject site is partially recognised as being partially within an area of Aboriginal Cultural Heritage Sensitivity.

The use and development of a dwelling and outbuilding are considered an exempt activity, and as such a Cultural Heritage Management Plan is not required.

An extract of the Aboriginal Cultural Heritage Map is provided to the right in **Figure 10**.



**Figure 10** – Aboriginal Cultural Heritage Overlay – (source - mapshare.vic.gov.au)

## 5. PLANNING ASSESSMENT

This proposal has been assessed against the objectives and standards of applicable clauses of the East Gippsland Planning Scheme and it is considered that the proposal is appropriate for the following reasons:

- The proposal meets the objectives of the Municipal Planning Strategy at **Clause 02** and the Planning Policy Framework at **Clause 10** providing for the appropriate use and development of a dwelling and outbuilding that can be respectful of the existing surrounding development and the environment.
- The proposal will contribute to a high standard of environmental sustainability, urban design and amenity by designing the dwelling and outbuilding to meet the constraints of the land reducing any potential negative environmental implications as sought to achieve by the relevant clauses including **Clause 02.03** and **Clause 11**. The site does not contain any vegetation that requires removal.
- **Clause 13.04-2S** requires consideration of erosion and landslip. The subject site and proposed development is within an area identified as being susceptible to erosion. The proposed earthworks associated with the development will exceed 1 metre in

depth. All preventative measures will be undertaken during the construction phase of the proposed development to ensure no erosion hazards occur. A Geotechnical Risk Assessment Waiver is contained in **Appendix D**.

- The proposal meets the objectives of **Clause 16** by providing an additional dwelling within an existing rural living area of Toorloo Arm that will in turn support housing for the community.
- The proposal is consistent with the decision guidelines of the Rural Living Zone at **Clause 35.03-5** which seeks to provide for residential use in a rural environment.
- The proposed use and development of a dwelling and outbuilding has been designed to be respectful of the existing surrounding development and the environment. The subject site is not of a size that is considered to be sustainable or suitable for agricultural practices. No vegetation is required to be removed to facilitate the proposal.
- The proposed development is unlikely to be visible from Lake Tyers being the waterway surrounding the area to the north, east and south, particularly given the topography of the area and existing dense vegetation surrounding. Access to the subject site is existing directly from Mill Point Road along the eastern boundary via a bitumen

crossover. The subject site has a suitable level of services including reticulated water, electricity, telecommunications and the existing road network. Wastewater will be treated and retained within the allotment boundaries via subsoil absorption trenches and a standard septic system as provided in the Land Capability Assessment contained in **Appendix E**.

- **Clauses 02.03-3, 13.01-1S and 44.06** require consideration of bushfire hazards and implications as a result of any proposed development. A Bushfire Management Plan is provided in **Appendix C**. There is no construction standards for the outbuilding as it is more than 10 metres from the proposed dwelling. The proposed dwelling will be located outside the area affected by the Bushfire Management Overlay. All approved bushfire protection measures have been incorporated into the proposal including defensible space for a distance of 10 metres around the entire outbuilding. Access to the site is existing however will be extended to the proposed dwelling, detached garage and outbuilding as indicated on the proposed development plans.
- **Clause 44.06-4** provides the application must meet the requirements of **Clause 53.02**. All of the approved measures set out

- in Clause 53.02-4 have been incorporated into the proposal and it is concluded the risks can be reduced to an acceptable level.
- The proposal is consistent with the decision guidelines of the Erosion Management Overlay at **Clause 44.01** which seeks to protect areas prone to erosion, landslip, other land degradation.
  - The proposal requires earthworks that will exceed 1 metre in depth. Disturbed ground will be appropriately battered and be re grassed to prevent erosion.
  - Access is existing directly from Mill Point Road along the eastern boundary and will be extended to the proposed dwelling, detached garage and outbuilding.
  - The subject site contains an ephemeral watercourse in the central northern portion of the site and feeds into a dam located to the west of the proposed dwelling and outbuilding, the proposed buildings will be within 100 metres of the watercourse.
  - A Geotechnical Risk Assessment waiver is contained in **Appendix D** that concludes the proposal is unlikely to contribute or cause additional erosion hazards provided silt fences are constructed to the down slope to protect the existing watercourse.
  - The proposal is consistent with the decision guidelines of the Environmental Significance Overlay at **Clause 42.01-5**

which seeks to identify areas where the development of land may be affected by environmental constraints.

- The statement of environmental significance and the environmental objective is contained in Section 4 of this submission.
- The subject site contains existing scattered vegetation however no vegetation is required to be removed to facilitate the proposed use and development of a dwelling and outbuilding.
- Revegetation is not considered an appropriate response particularly given the elevated bushfire hazards associated with the site.
- The proposal is consistent with the decision guidelines of the Significant Landscape Overlay at **Clause 42.03-5** which seeks to identify significant landscapes. The statement of nature and key elements of the landscape and the landscape character objectives to be achieved is contained in Section 4 of this submission.
- The statement of significance relates to the views to and from the site including vegetation. The subject site contains scattered vegetation mostly along the north and east boundary as shown in the arial photograph above. No vegetation removal is required to facilitate the proposed use

and development of a dwelling and outbuilding.

- The subject site is affected by the Bushfire Management Overlay and as such revegetation is not considered an appropriate response given the elevated bushfire hazards.
- The proposed use and development of a dwelling and outbuilding will be used for rural residential purposes. The proposed overall height of the buildings will not be excessive and will be below the prevailing tree canopy.
- The proposed buildings will not be intrusive to the existing landscape particularly when viewed from the surrounding waterways.
- This submission has addressed the decision guidelines of **Clause 65** and the proposed use and development of a dwelling and outbuilding supports orderly planning of the area whilst taking into consideration the potential effect on the environment, human health and the amenity of the area. The proposal does not require the removal of any native vegetation and there will be no negative impact on the existing road network.
- The site is identified as being susceptible to bushfire and erosion hazards. A Bushfire Management Plan is contained in **Appendix C** that concludes the subject site and

proposed outbuilding can meet the overlay requirements and all approved measures integrated with the proposal. A Geotechnical Risk Assessment Waiver is contained in **Appendix D** that concludes the risks associated with erosion can be reduced to an acceptable level.

- There are no factors of this proposal that are likely to cause or contribute to land degradation, salinity or reduce water quality.
- The proposed use and development of a dwelling is considered appropriate in this location and the potential hazards can be reduced to an acceptable level.



## 6. CONCLUSION

This submission is in support of a planning permit application for the use and development of a dwelling and outbuilding at 127 Mill Point Road, Toorloo Arm.

The relevant provisions of the East Gippsland Planning Scheme have been addressed and it has been ascertained that the proposed development is appropriate in this location, and it is requested that the proposal be supported for the following reasons:

- The proposal is consistent with the objectives and strategies outlined in the Municipal Planning Strategy and the Planning Policy Framework.
- The proposal is generally consistent with the objectives of the Rural Living Zone, Bushfire Management Overlay, Environmental Significance Overlay and the Significant Landscape Overlay.
- The design of the buildings are complementary to the existing surrounding development and is consistent with the rural character of the area.

It is requested that a planning permit be granted for this development.

**Development Solutions Victoria**

### Disclaimer:

*This document has been prepared for planning permit application purposes only. The report has been made with careful consideration and with the best information available to Development Solutions Victoria Pty Ltd at the time.*

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CHRIS O'BRIEN & COMPANY PTY LTD  
CONSULTING CIVIL & STRUCTURAL ENGINEERS

Reference No: B23369

**Project No: 41023**

6/10/2023

Development Solutions Victoria  
48 Bailey Street  
BAIRNSDALE Vic 3875

Attn: Olivia Zagami

Email: [olivia@devsolvic.com.au](mailto:olivia@devsolvic.com.au)

Dear Olivia,

**RE: GRA Waiver for Proposed Dwelling & Outbuilding  
127 Mill Point Road, Toorloo Arm**

Chris O'Brien & Company Pty Ltd have been engaged by Olivia Zagami of Development Solutions Victoria to determine whether or not a full Geotechnical risk assessment report is required for the proposal to construct a new dwelling and outbuilding at 127 Mill Point Road, Toorloo Arm Vic 3909. An erosion management overlay exists over the property.

The purpose of this letter is to determine if the works to be carried out on this site will be a risk to the surrounding environment and is to be used in the planning application process only. This letter is not a soil classification report and shall not be used for this purpose.

Information contained in this letter is from a visual inspection of the site and based on information supplied to Chris O'Brien & Company Pty Ltd on the work to be completed on the site.

The site was inspected by Andrew Powell on the 5<sup>th</sup> October 2023.

The allotment is on the western side of Mill Point Road with inspection of the site showing no erosion problems currently exist. Access to the site is in the south east corner with the driveway crossover already formed. The allotment has an excellent cover of grass where the dwelling & outbuilding are to be constructed with the land falling towards the existing dam and natural water course which runs south to north. The allotment falls mainly from east to west but also towards the north west with falls of up to 1 in 10 observed where the dwelling & outbuilding are to be constructed. Photos of our findings are attached to this report.

For the construction of the proposed dwelling & outbuilding along with the formation of driveway areas some earthworks and material placement will be done to form platforms for the dwelling and outbuilding to be constructed on and to form the proposed driveways. During any earthworks or material placement and compaction protection barriers such as silt fences are to be placed on the downslope side of any works to protect the existing dam



**Development Solutions Victoria**

Proposed Dwelling &amp; Outbuilding at 127 Mill Point Road, Toorlool Arm

Project No. 41023

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and natural water course from any silt run-off. Protection barriers are to remain in place until all batters on the site have been stabilised by topsoiling and re-grassing and all driveway formation works have been completed. Cut batters must not exceed 1 in 1.5 and fill batters 1 in 2. Provided this is done we expect no environmental risks from the work to be undertaken.

Footings for both the dwelling and outbuilding will only require minor earthworks and provided protection barriers are in place as stated above then no environmental risks are expected from this source.

Storm water created from the proposed dwelling, outbuilding and driveway will be directed to the legal point of discharge via water tanks or underground drainage system with any outlets to drains and water tank overflows to be treated with rock beaching. Provided this is done, no environmental risks are expected from this source.

We therefore suggest that a full geotechnical risk assessment report is not required for this development. As long as all precautions as detailed in this report are strictly adhered to, we anticipate no environmental risks on this site with the work to be undertaken.

Should you need to clarify anything, please contact the Andrew Powell on 0402384596

Yours faithfully,



**Andrew Powell Assoc.Dip (Civil)**  
for CHRIS O'BRIEN & COMPANY PTY LTD



**Development Solutions Victoria**

Proposed Dwelling & Outbuilding at 127 Mill Point Road, Toorlool Arm

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Photos below show site access locations from Mill Point Road

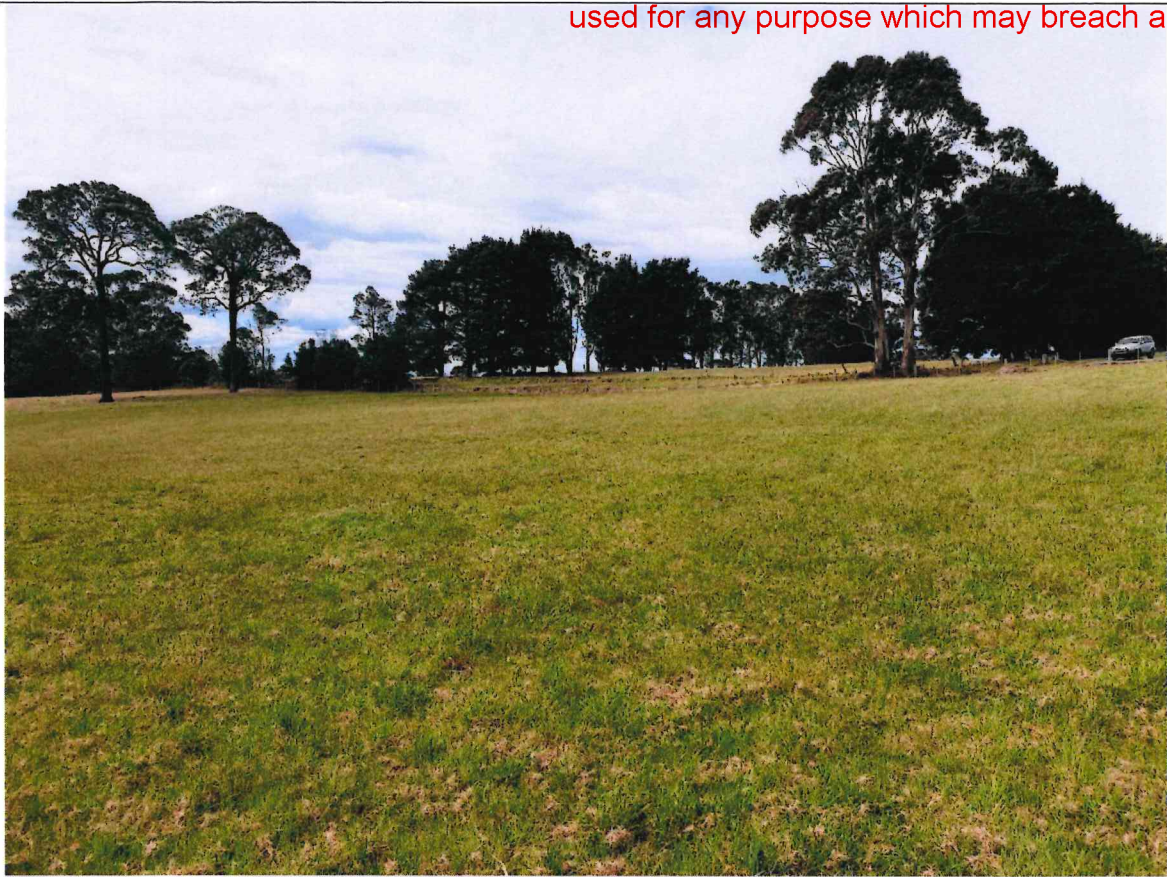




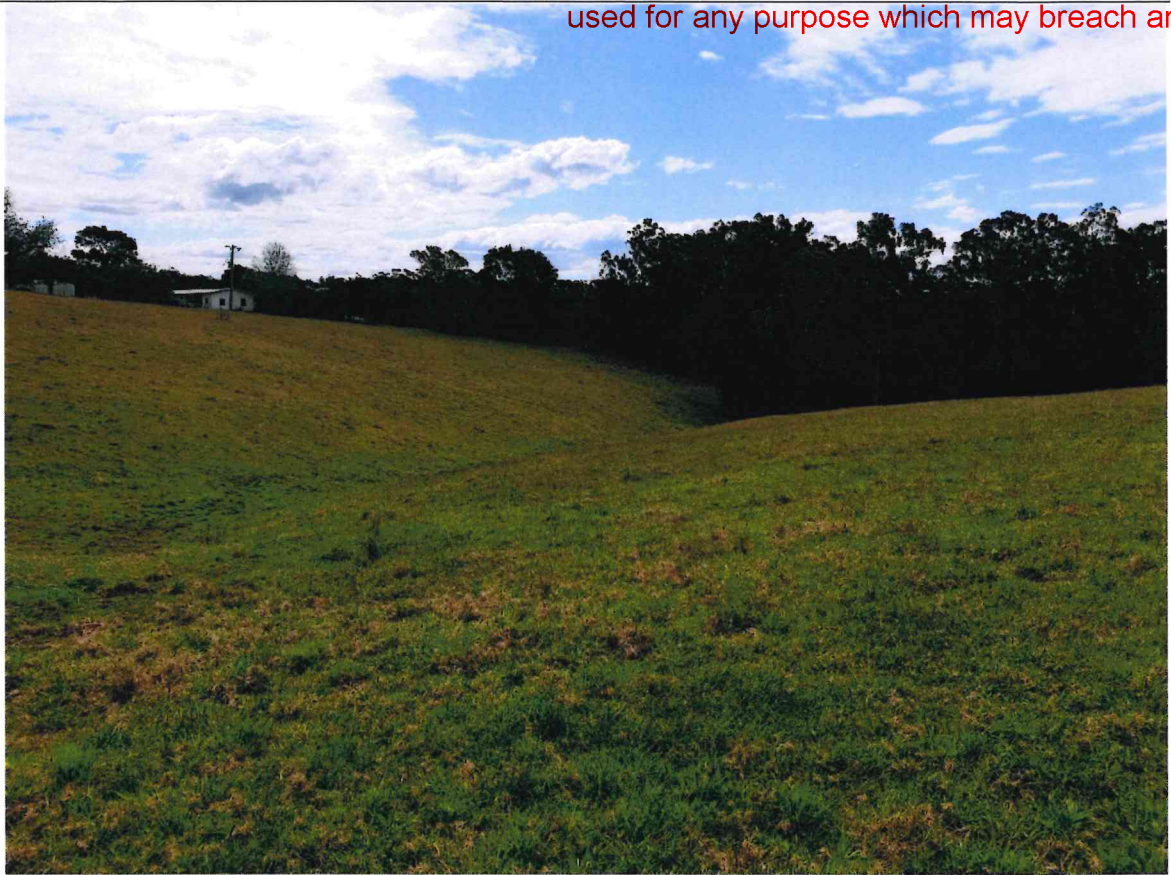
Photos below show general allotment profile



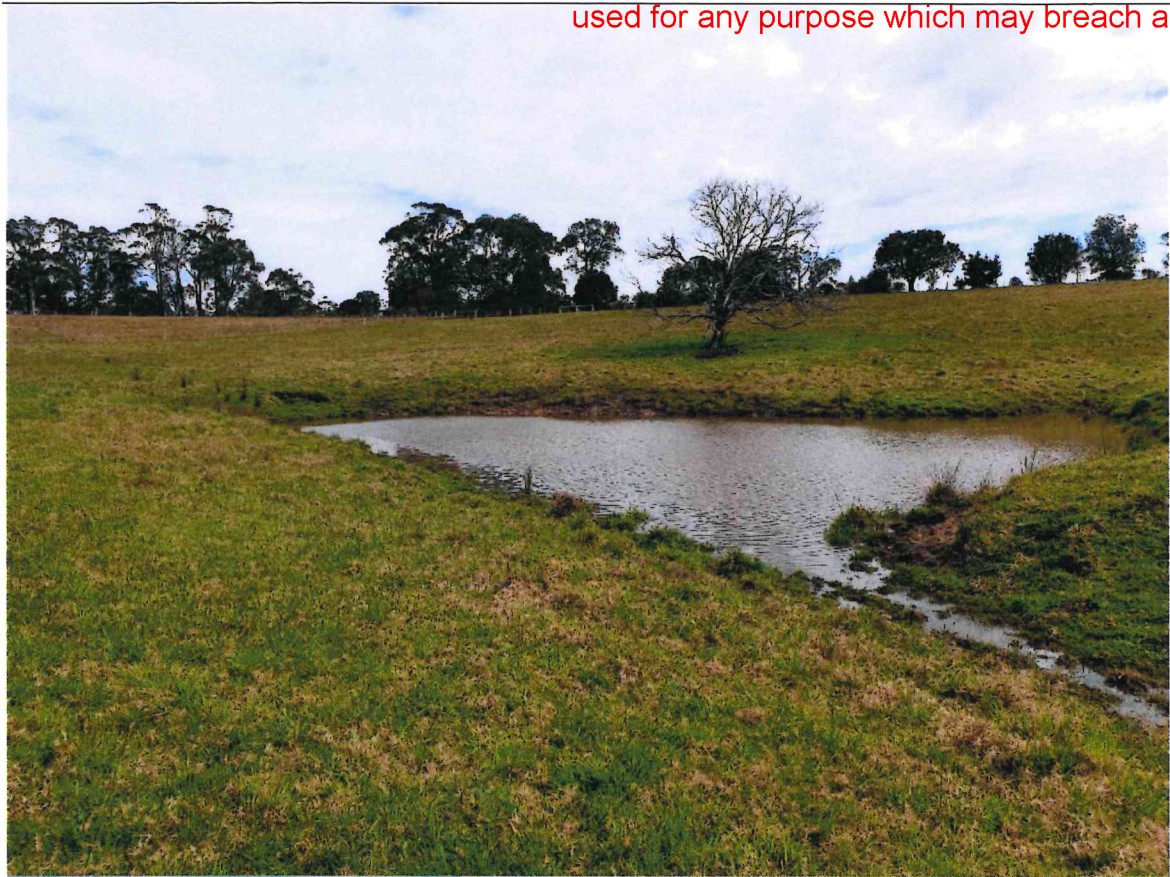




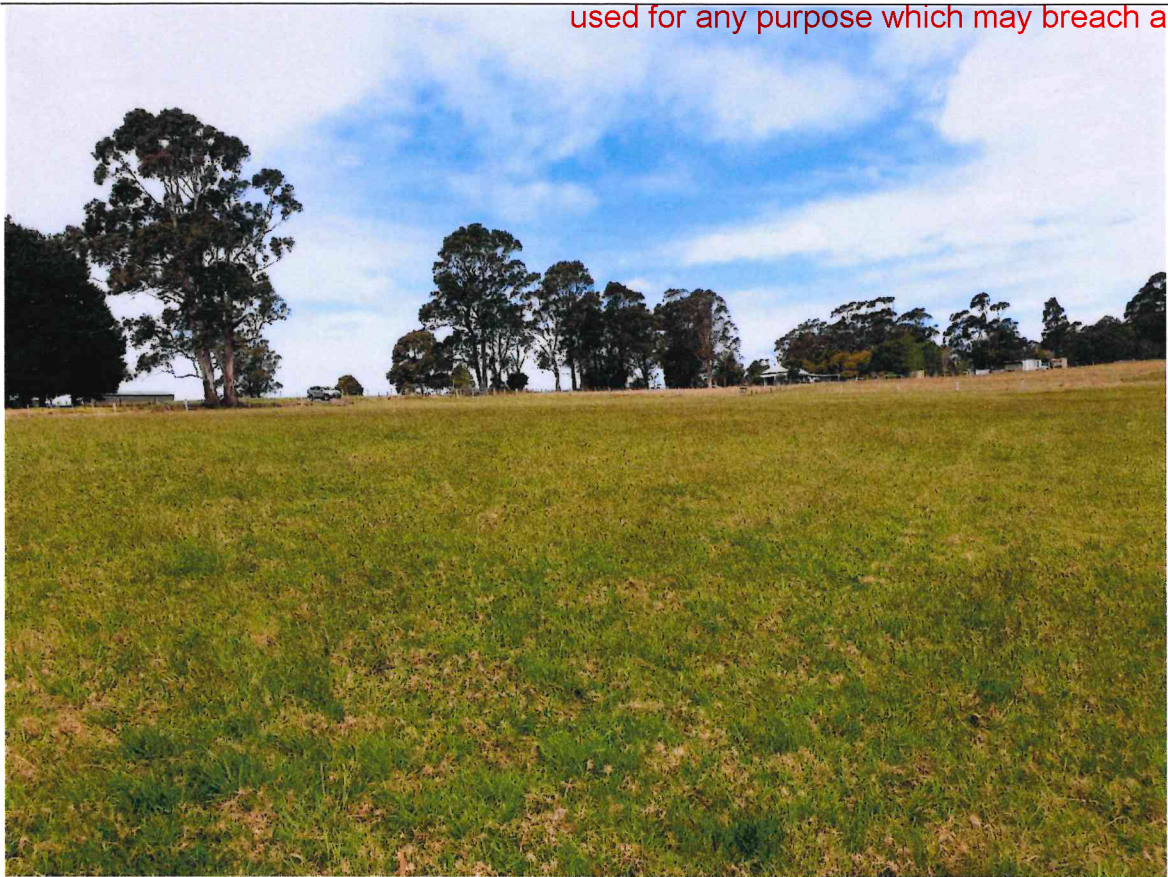















 <b>Simon Anderson Consultants</b> <small>CIVIL   STRUCTURAL   PROJECT ENGINEERS</small> P.O. Box 1700 111 Main St Bairnsdale, Vic, 3875 ACN 073 392 266 P.O. Box 566 191-193 Raymond St Sale, Vic, 3850 ACN 145 437 065	<b>Job:</b> Proposed Residence 127 Mill Point Rd Toorloo Arm	<b>Date:</b> 22 June 2022 <b>Designed:</b> SJA
	<b>Client:</b> Stroud Homes	<b>Job No.:</b> 427918
	<b>Checked:</b>	<b>Page No.:</b> 1 of 14

## LAND CAPABILITY ASSESSMENT ON-SITE DOMESTIC WASTEWATER



127 Mill Point Rd, Toorloo Arm

### 1.0 INTRODUCTION

Simon Anderson Consultants were engaged to undertake a land capability assessment for the purpose of on-site domestic wastewater management of the Proposed Residence at 127 Mill Point Rd, Toorloo Arm. The field investigation and report have been undertaken by suitable experienced staff.

The assessment was completed in accordance with the Environment Protection Authority's *Code of Practice – Onsite Wastewater Management* (EPA Publication No. 891.4, July 2016), guidelines for *Land Capability Assessment For On-Site Wastewater Management* (EPA Publication No. 746.1, March 2003), *On-Site Domestic Wastewater Management* (AS/NZS 1547:2012) and East Gippsland and Wellington Shires *Domestic Wastewater Management Plan*.

Information and results are presented in table form for clear data presentation and ease of identification of key points. **Detailed recommendations presented on page 7 of the report. LCA is to be read in conjunction with Site Features Plan 427918-LC1.**

<b>Subject Land</b>	127 Mill Point Rd, Toorloo Arm
<b>Client</b>	Stroud Homes
<b>Email Address</b>	<a href="mailto:Terry.young@stroudhomes.com.au">Terry.young@stroudhomes.com.au</a>
<b>Contact</b>	Mob: 0428 363 888
<b>Map Reference</b>	Vicroads 85 C7
<b>Municipality</b>	East Gippsland Shire Council
<b>Proposed Development</b>	Assume a 4 Bedroom Residence (Potential Occupancy = No. of Bedrooms + 1) <sup>1</sup>
<b>Design Flow</b>	150 L/person/day <sup>2</sup>
<b>Anticipated Wastewater Load</b>	750 L/day
<b>Treatment System Required</b>	Secondary treated effluent to minimum 20/30 standard (ie. AWTS <sup>3</sup> or sand filter)
<b>Disposal System Required</b>	Sub-surface irrigation – Area of 240m <sup>2</sup>


<sup>1</sup> As identified in Victorian EPA Code of Practice – Onsite Wastewater Management (publication 891.4, July 2016) Section 3.4.1

<sup>2</sup> As identified in AS/NZS 1547:2012 – Onsite Domestic Wastewater Management (Appendix H, Table H1)

<sup>3</sup> AWTS – Aerated Wastewater Treatment System (EPA approved)

427918 LCA



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## 2.0 PURPOSE/SCOPE OF ASSESSMENT

<b>Purpose and Scope of Assessment</b>	Broad-scale assessment for subdivisional purposes (often requires further lot-specific assessment at later date)	<input type="checkbox"/>
	Detailed investigation for lot-specific management requirements	<input checked="" type="checkbox"/>

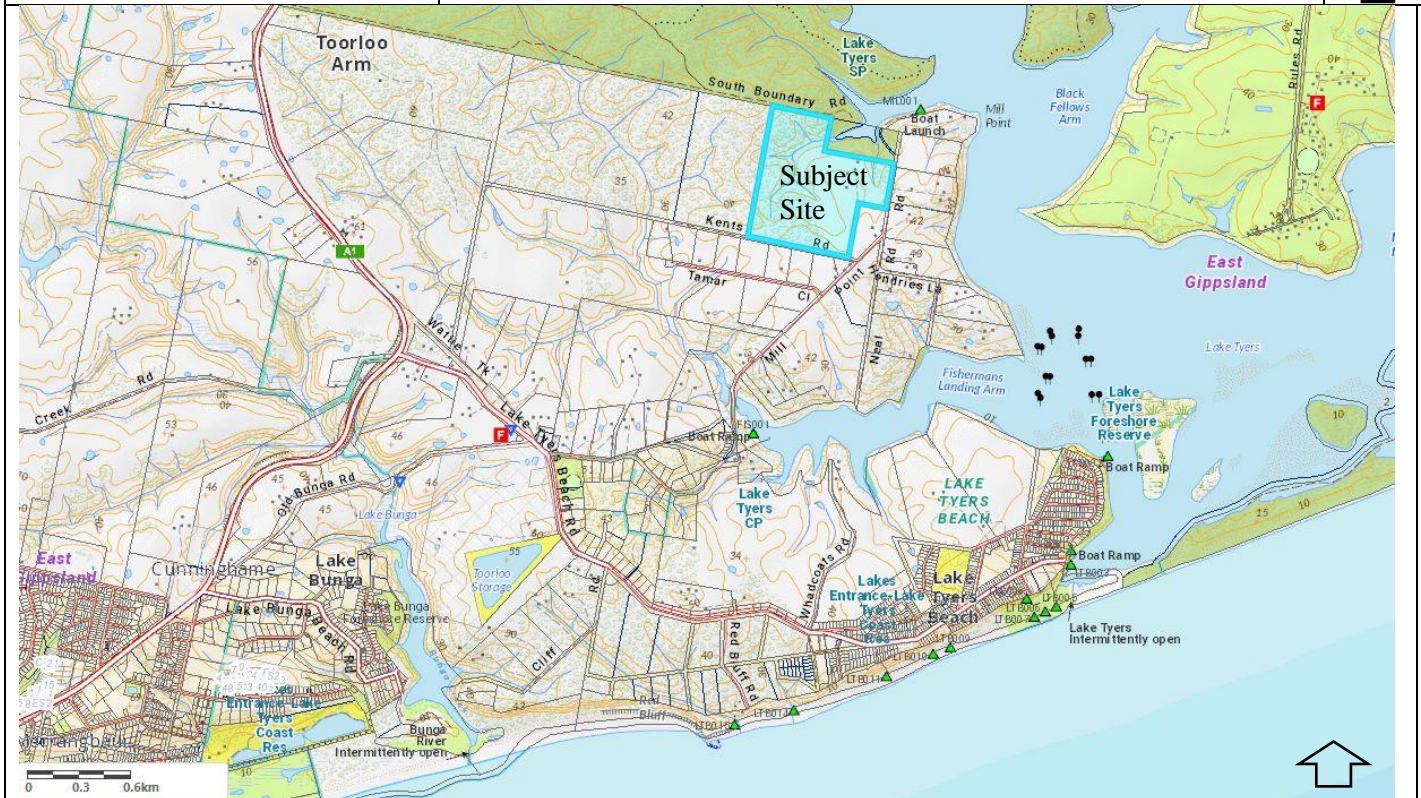



Figure 1: Locality Plan




Figure 2: Aerial view of subject site (approximate title boundaries shown)



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	<b>Client: Stroud Homes</b>	<b>Job No.: 427918</b>
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### 3.0 SITE KEY FEATURES

Criteria / Feature	Description	Implications for Wastewater Management
<b>Allotment/s</b>		
Title details	Lot 1, LP 134496, Council Property No: 47638	
No. of Lots Proposed	2	
Lot size (EPA recommended minimum lot size = 1.0 ha)	Current Lot size 46.37 ha  Proposed Lot 1 – 45.17 ha (existing dwelling) Proposed Lot 2 – 1.2 ha (new dwelling) <i>Note: Lot sizes estimates only. Areas to be confirmed at proposed subdivision stage of development</i>	Large allotments, with ample capacity to locate dwelling and effluent field in a number of sites within allotment boundaries and hence for effluent to be contained on-site.
Dwelling Usage	Likely to be permanent	
Adjoining Lot sizes	Large rural lots 4.2 ha – 100+ha in size	Overall volume of wastewater being disposed to land in the local district is low.
Current Land Use	Existing Residence	The existing effluent disposal field will be contained within the new lot boundaries with adequate setback distances. The system is reported to be working satisfactorily.
<b>Infrastructure</b>		
Zoning & Overlays	Rural Living Zone (RLZ) Bushfire Management Overlay (BMO) Environmental Significance Overlay (ESO) Significant Landscape Overlay-Schedule 1 (SLO1) Vegetation Protection Overlay-Schedule 1 (VPO1) Design & Development Overlay-Schedule 6 (DD06)	
Nearest Reticulated Sewer	Township of Lakes Entrance	Not feasible to connect to reticulated sewer. The area is unlikely to ever be sewered
Reticulated Water	None available on existing allotment	On-site roof water collection – Occupants will rely solely on tank water for potable and non-potable supply
Power	Available on existing allotment	Allows ready use of wastewater treatment plant
<b>Land Features</b>		
Geology	Nl (Tmp) - Tertiary Marine deposits consisting of Marine, non-marine: gravel, sand	Observed Soils dominated by silty sands, overlying stiff heavy clays
Elevation	Approx 30m AHD	
Landscape Elements	The site is situated mid slope (waxing convergent) on a rolling low hill system, with a yellow duplex sedimentary landscape.	Contoured landscape providing good drainage, but may concentrate runoff; run-off is accelerated. Use of bunds required.
Fill	Natural soil profiles were observed	No filling is proposed in the effluent disposal area.
Aspect	Area of investigation slopes to the northwest	Increases sun exposure for improved efficiency of effluent disposal field
River/Stream Catchment	A number of Ephemeral Watercourses run through the property and feed into Lake Tyers, directly north of the subject site.	Necessary setbacks are easily achieved
Dams/Surface Water	Several small agricultural dams over subject site	Necessary setbacks are achievable
Rock Outcrop	None	Reduces limitations and maximises efficiency of effluent disposal fields
Erosion	No evidence of sheet or rill erosion.	The erosion hazard is low.
Vegetation	Pasture/Grass EVC16 – Lowland Forests	No vegetation clearing required for establishment of effluent disposal field or dwelling development
Climate	Temperate	Reduces variation in efficiency of effluent field
Solar Exposure	High.	Maximises efficiency of effluent disposal fields
Recommended Buffer Distances	All buffer distances recommended in Table 5 of EPA Publication 891.4 (July 2016) are achievable and do not significantly limit siting of the LAA in this case	
Available Land Application Area (LAA)	Considering all site constraints and the buffers mentioned above, the site has ample land that is suitable and available for land application of treated effluent.	By using a system that provides secondary treatment and pressurized sub-surface irrigation, there will be ample protection for surface and groundwater

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## 4.0 SOIL ASSESSMENT & CONSTRAINTS

The sites soils have been assessed for their suitability for onsite wastewater management by a combination of soil survey and desktop review of published soil survey information as outlined below.

### 4.1 Published Soils Information

Soils of the site have been mapped and described in Sustainable Soil Management “A reference manual to the major agricultural soils of the Bairnsdale and Dargo regions” and are described as belonging to the Stockdale (Sd) map unit with Munro (Mu). This unit occurs on rolling low hills and is comprised of Tertiary sediments and sands. Most of the land has been cleared of native vegetation and used for grazing. The surface soils are mostly fine textured soils, with a sandy loam to fine sandy loam sharply separated from a medium clay subsoil occurring at around 20-40cm, although some subsoils are clayey sands and sandy clays. Some of the sandier surface soils have developed a “coffee rock” layer at the base of the A2 horizon.

#### Soil Profile Morphology – Stockdale (Sd) Map unit

##### Surface soil

- A1** 0 – 300 Dark greyish brown (10YR4/2); *sandy loam*; weak medium (10 – 20 mm) polyhedral structure; firm moist; clear wavy change to:
- A2** 300 – 500 Pale brown (10YR6/3) conspicuously bleached (10YR/8/1d); *sandy loam or loamy sand*; apedal, single grain; firm consistence dry; sharp change to:

##### Subsoil

- B21** 500 – 800 Yellowish brown (10YR5/6); *heavy clay*; moderate coarse (20 – 50 mm) polyhedral structure; strong consistence, moist; diffuse change to:
- B22** 800 – 1m Yellowish brown (10YR5/6) with greyish brown (10YR5/2) and increasing yellowish red (5YR5/6) mottles; *heavy clay*; moderate coarse (20 – 50 mm) lenticular structure; strong consistence moist.


##### Key profile features

- Strong texture contrast between the surface (A) horizons and subsoil (B) horizons.
- Conspicuously bleached subsurface (A2) horizon.

### 4.2 Soil Survey and Analysis


A Soil survey was carried out at the site to determine suitability for application of treated effluent. Subsoil investigations were conducted at two locations in the vicinity of the proposed building, as shown on the Site Features Plan, using a hand auger (B1-2). This was sufficient to adequately characterise the soils, as only minor variation would be expected throughout the area of interest.

Samples of all discrete soil layers for test bore 2 were collected for subsequent laboratory analysis of pH<sup>4</sup>, electrical conductivity<sup>5</sup> and Emerson Aggregate Class. The soil profile of bore 1 is detailed below.

Depth (m)	Description	Horizon	
0.0	<b>TOPSOIL:</b> Saturated Sandy Loam	<b>A1</b>	
0.1			
0.2			
0.3	<b>SILT:</b> Saturated Fine Sandy Unworkable Soils	<b>A2</b>	
0.4	Perched water seepage at depth		
0.5			
0.6			
0.7	<b>CLAY:</b> Moist Stiff with Veins of Wet Sand	<b>B1</b>	
0.8			
0.9			
1.0+			

<sup>4</sup> The pH of 1:5 soil/water suspensions was measured using a Merck pH strip


<sup>5</sup> EC (dS m<sup>-1</sup>) was calculated by measuring the electrical conductivity of 1:5 soil water suspension.  
427918 LCA

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Soil Features: TEST BORE B2			
Soil Horizon	A1	A2	B1
Depth (mm)	0 - 400	400 - 1000	1000 +
Boundary Type	NA	Clear	Gradual
Field Texture Grade <sup>6</sup>	SL	FSL	HC
Structure	Weak	Massive	Massive
pH	7	7	6
EC (dS m <sup>-1</sup> )	0.00	0.02	0.03
Dominant Colour	10YR2/1 Black	10YR4/2 Dk Greyish Brown	10YR5/4 Yellowish Brown
Mottles	-	-	-
Dispersion	8	5	1
Coarse Fragments (% Volume)	-	-	-
<b>Soil Category<sup>7</sup> (AS/NZ1547:2012)</b>	<b>2a</b>	<b>3b</b>	<b>6c</b>
Design Irrigation Rate <sup>8</sup> (DIR mm/day)	5	4	2
Design Loading Rate <sup>9</sup> (DLR mm/day)	NR	10	NR

NA: Not Applicable

NR: Not Recommended

	Depth (m)	Description	Horizon		
	0.0	<b>TOPSOIL:</b> Wetn Sandy Loam	<b>A1</b>		<b>BORE 2</b>
	0.1				
	0.2				
	0.3				
	0.4	<b>SILT:</b> Saturated Fine Sandy Perched water seepage at depths	<b>A2</b>		
	0.5				
	0.6				
	0.7				
	0.8				
	0.9				
	1.0	<b>CLAY:</b> Moist Stiff with Veins of Sand	<b>B1</b>		
	1.2				
	1.5+				

Soil Bore Log Profile


<sup>6</sup> Refer Appendix D for description details(all soil samples have been sieved to minus 2mm and air-dried before being analyzed)

<sup>7</sup> As identified in Victorian EPA Code of Practice – Onsite Wastewater Management (publication 891.4, July 2016) Appendix A, Table 9

<sup>8</sup> For sub-surface irrigation (Refer Table M1 of AS/NZS 1547:2012)

<sup>9</sup> For absorption trenches and bed



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## 5.0 LAND CAPABILITY ASSESSMENT MATRIX


Land features	Land capability class rating				
	Very good (1)	Good (2)	Fair (3)	Poor (4)	Very Poor (5)
<b>General characteristics</b>					
Site drainage	No visible signs of dampness	Moist soil, but no water in pit		Visible signs of dampness	Water ponding on surface
Runoff	None	Low	Moderate	High - diversionary structures req'd	Very High - diversion not practical
Flood/inundation potential (yearly return exceedence)	Never		< 1 in 100	< 1 in 30	> 1 in 20
Proximity to watercourses	> 60m				< 60m
Slope (%)	0 - 2	2 - 8	8 - 12	12 - 20	> 20
Landslip	None Evident		Low potential for failure	High potential for failure	Present or past failure
Seasonal water table depth (m) (incl. perched water tables)	>5	5 - 2.5	2.5 - 2.0	2.0 - 1.5	< 1.5
Rock Outcrop (% of land surface containing rocks > 200mm)	0	< 10%	10-20%	20-50%	>50%
Vegetation Type	Turf or pasture				Dense forest with little understorey
Average Rainfall (mm/yr)	< 450	450 - 650	650 - 750	750 - 1000	> 1000
Pan Evaporation (mm/yr)	> 1500	1250 - 1500	1000 - 1250	-	< 1000
Fill	No Fill		Fill present		
<b>Soil profile characteristics*</b>					
Structure	High	Moderate	Weak	Massive	Single Grained
Profile depth (of limiting Horizon B1)	> 2.0m	1.5m - 2.0m	1.5m - 1.0m	1.0m - 0.5m	< 0.5m
Soil permeability category <sup>10</sup>	2 and 3	4		5	1 and 6
Presence of mottling	None				Extensive
Coarse Fragments (% volume)	<10	10-20	20-40		>40
pH	6 - 8		4.5 - 6		<4.5, >8
Emerson Aggregate Test (dispersion/slaking)	4, 6, 8	5	7	2, 3	1
Salinity (dS/m) (Electrical Conductivity)	<0.3	0.3 - 0.8	0.8 - 2	2 - 4	>4
<b>Overall Site Rating<sup>11</sup></b>	<b>Poor</b>				<b>4</b>

\* relevant to the sites most restrictive soil layer(s)

<sup>10</sup> Refer Table 5.1 (Determination of Soil Category) of AS/NZS 1547:2012

<sup>11</sup> A description of each Land Capability Class Rating is provided in Appendix A.  
427918 LCA



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## 6.0 CONCLUSION

This LCA has been prepared to accompany a development application to East Gippsland Shire Council for a Proposed Residence and associated necessary wastewater management system. As such, this report provides recommendations for treatment and land application systems that are appropriate to the land capability.

The following section provides an overview of a suitable system, with sizing and design considerations. **Detailed design for the system is beyond the scope of this study, but should be undertaken at the time of building application and submitted to Council.**

## 7.0 RECOMMENDATIONS


It is recommended based on this LCA, that if the development of a Proposed Residence on 127 Mill Point Rd, at the location indicated on the Site Features Plan 427918 - LC1:

- Install a system that provides secondary treatment with disinfection to meet EPA requirements for irrigation. Indicative target effluent quality is a minimum EPA standard 20mg/L BOD and 30mg/L SS. Several suitable options are available, including aerated wastewater treatment systems (AWTS) and single pass sand filters. Either of these options is capable of achieving the desired level of performance and final selection is the responsibility of the property owner, who will forward details to Council for approval.
- On-site disposal of domestic wastewater should occur within the proposed Land Application Area (refer Site Features Plan 427918 - LC1). The client is allowed flexibility in selecting the final location and configuration of the irrigation system, provided it remains within this envelope and in accordance with the relevant codes/standards.
- Calculation of Irrigation Area based on AS/NZ 1547 equation  $A=Q/DIR$

	2 Bedrooms	3 Bedrooms	4 Bedrooms	5 Bedrooms
Q (L/day)	450	600	750	900
DIR (mm/day)	4	4	4	4
Irrigation Area (m <sup>2</sup> )	115	150	190	225
<b>Water Balance (m<sup>2</sup>)</b>	<b>145</b>	<b>190</b>	<b>240</b>	<b>290</b>
<b>Note: Water Balance<sup>12</sup> modelling has been undertaken to achieve zero wet weather storage. (refer Appendix B)</b>				

- Minimum setbacks and buffer distances must be obtained when establishing effluent disposal envelopes, as per *EPA Code of Practice – Onsite Wastewater Management, publication 891.4, (July 2016)*.
- The owner shall consult an irrigation expert familiar with wastewater irrigation equipment, to help design and install the irrigation system. The irrigation plan must ensure good, even application of effluent.

<sup>12</sup> Water Balance undertaken in accordance with EPA Publication 168 (1991), Guidelines for Wastewater Irrigation.  
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## 8.0 MANAGEMENT PROGRAM

### 8.1 Installation Issues

To ensure the satisfactory installation and operation of the AWTS & Sub-surface irrigation, the following measures are to be implemented:

- Construction of a shallow table or cut-off drain along the high sides of the effluent disposal area, extending to below the effluent disposal field;
- Overflow from all water storage tanks to be directed into a table drain, or equivalent, to discharge below the effluent disposal field in a manner to avoid scouring or washing away downstream of the discharge point;
- Stormwater flows from the roof must be discharged at a point well clear of the effluent disposal field and runoff from paved surfaces and driveways must be directed away from the disposal site.
- Installation of the sub-surface irrigation system to be undertaken when the soils are dry or moist, not when the ground is saturated;
- Sub-surface irrigation system to be designed to minimise root intrusion from trees;
- Sub-surface irrigation system to utilise pressure dosing to ensure effluent is applied uniformly throughout the effluent disposal area.

### 8.2 Ongoing Management & Maintenance Issues

To ensure the satisfactory ongoing performance of the proposed AWTS & Sub-surface irrigation, the owners/occupiers will need to ensure that:

- No buildings or impermeable surfaces are constructed on or over the effluent disposal areas;
- Heavy equipment is kept away from effluent disposal areas whilst the soil is saturated;
- The effluent disposal field is maintained as a grassed area, or planted out with shrubs that tolerate wet conditions, have high evapo-transpiration capacity and can tolerate phosphorus levels typically found in treated effluent;
- Trees and/or thick shrubs **are not** to be planted out along the northern or western edges of the effluent disposal areas to prevent exposure to both wind and sun.

The installer of the AWTS & Sub-surface irrigation is to ensure that the owners/occupants are aware of and fully understand their responsibilities in relation to operating the treatment system, maintenance requirements and what should be done in the event of any problems. The satisfactory ongoing performance and longevity of the AWTS & Sub-surface irrigation can be enhanced by:

- Ensuring that maintenance requirements are undertaken regularly in accordance with the systems' requirements and that both they and future owners/occupiers are aware of the systems capabilities, limitations and ongoing requirements;
- Using biodegradable soaps, low phosphorous detergents and detergents that have low salt, sodium and chlorine levels;
- Limiting the use of germicides (such as strong detergents, disinfectants, toilet cleaners, whiteners and bleaches);
- Not flushing disposable nappies, sanitary napkins or other hygiene products into the systems;
- Not flushing chemicals, paint or similar substances into the systems.

**NOTE:** This report and associated plan(s) does not constitute a Septic Tank Permit. Such a permit should be obtained separately from the Environmental Health Department of East Gippsland Shire Council after development approval is obtained and prior to plumbing works commencing.

## APPENDIX A

Capability Class	Degree of Limitation	General Description
Rating 1	None to Very Slight	The proposed subdivision is suitable for on-site disposal of septic tank discharge. The limitations or environmental hazard from long-term use are considered very slight. Standard performance measures for design, installation and management should prove satisfactory.
Rating 2	Slight	The site has been identified as generally suitable for on-site effluent disposal but there is a slight associated environmental hazard expected. One or more land limitations are present, which may not be compatible with 'straight forward' conventional on-site disposal. The wastewater management program will require careful planning, adherence to specifications and adequate supervision.
Rating 3	Moderate	The site has only a fair capability for on-site effluent disposal with a moderate associated environmental risk always present. Very careful site selection, preparation and specialized design will be required to address the identified land constraints. A management program should be delivered to the responsible authority with the development application and prior to earthworks commencing. It is recommended that, in order to achieve BPWM, wastewater-processing systems which can attain a higher level of treatment with basic monitoring should be considered as an alternative to standard conventional trench disposal.
Rating 4	High	Areas have a poor capability rating with a high associated environmental risk. Considerable difficulties are expected during siting and installation of the wastewater treatment system and during routine operation. A very high Engineering input and close supervision would be needed to minimize the environmental impact. Alternative wastewater processing systems capable of consistently producing a high quality secondary effluent (such as aerated wastewater treatment plants) together with a close monitoring program should be seriously investigated and adopted.
Rating 5	Severe	Areas have a very poor capability and there is severe associated environmental risk. The areas are not generally considered suitable for disposal of septic tank effluent by trench systems. The high levels of Engineering input and management needed at all stages are unlikely to adequately address the identified land constraints and achieve a sustainable outcome. Reticulated sewerage is usually the only acceptable option.



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127 Mill Point Rd  
Toorloo Arm

**Client:** Stroud Homes

**Checked:**

**Date:** 22 June 2022

**Designed:** SAA

**Job No.:** 427918

**Page No.:** 9 of 14

## APPENDIX B

### Lakes Entrance 084083

#### Mean

Source: AS1547-1994 - Table G1

Evap.data

### Orbost 084030

average Pan evaporation

(Prepared by R.A. Patterson, Lanfax Labs. Armidale updated April 2006)

1			2	3	4	5	6	7	8	9
Month	Days	daily pan	Pan Eo	Et	Rainfall	Retained	LTAR*N	Disposal	Effluent	Size of
	per	Eo		+C*Eo	P	Rainfall		rate/month	applied	area
	month	(B.Met)				Re=(1-r)P	4	(Et-Re)+	per month	(8)/(7)
								LTAR*N	450	
		mm	mm	mm	mm	mm	mm	mm	L	m2
Jan	31	5.0	155.0	132	55.9	41.9	124	213.8	13950	65
Feb	28	4.6	128.8	109	41.5	31.1	112	190.4	12600	66
Mar	31	3.5	108.5	92	53.7	40.3	124	176.0	13950	79
Apr	30	2.4	72.0	43	62.8	47.1	120	116.1	13500	116
May	31	1.6	49.6	30	65.6	49.2	124	104.6	13950	133
Jun	30	1.2	36.0	22	61.9	46.4	120	95.2	13500	142
Jul	31	1.3	40.3	24	54.2	40.7	124	107.5	13950	130
Aug	31	2.0	62.0	37	50.3	37.7	124	123.5	13950	113
Sep	30	2.6	78.0	47	59.2	44.4	120	122.4	13500	110
Oct	31	3.4	105.4	90	63	47.3	124	166.3	13950	84
Nov	30	4.1	123.0	105	71	53.3	120	171.3	13500	79
Dec	31	4.6	142.6	121	70.8	53.1	124	192.1	13950	73
Totals			1101.2	852	709.9	532.4				

**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 area (m2)	application rate (8)/(2) (mm)	Disposal rate per month (above) (mm)	(3)-(4) (mm)	Increase depth of stored effluent (5)/porosity (mm)	Starting depth effluent for month (mm)	increase depth effluent (6) (mm)	computed depth effluent (X) (mm)	reset if Et deficit <0 (mm)	equivalent storage 10 x area (L)
Dec								0.0	0	
Jan	145	96	214	-118	-294	0	-294	-294	0	0
Feb		87	190	-103	-259	0	-259	-259	0	0
Mar		96	176	-80	-199	0	-199	-199	0	0
Apr		93	116	-23	-57	0	-57	-57	0	0
May		96	105	-8	-21	0	-21	-21	0	0
Jun		93	95	-2	-5	0	-5	-5	0	0
Jul		96	108	-11	-28	0	-28	-28	0	0
Aug		96	123	-27	-68	0	-68	-68	0	0
Sep		93	122	-29	-73	0	-73	-73	0	0
Oct		96	166	-70	-175	0	-175	-175	0	0
Nov		93	171	-78	-195	0	-195	-195	0	0
Dec		96	192	-96	-240	0	-240	-240	0	0
Jan		96	214	-118	-294	0	-294	-294	0	0
Feb		87	190	-103	-259	0	-259	-259	0	0
Mar		96	176	-80	-199	0	-199	-199	0	0
Apr		93	116	-23	-57	0	-57	-57	0	0
May		96	105	-8	-21	0	-21	-21	0	0

From calculations in tables above for optimised drainfield area, using Appendix G AS1547-1994

**Porosity in disposal area**

**40%**

**Variables Table**

**Runoff Coeff =**

**0.25**

percentage runoff

**Summer Crop Factor =**

**0.85**

crop transpiration rate Oct-Mar

**Winter Crop Factor =**

**0.6**

crop transpiration rate -Apr-Sep

Change as required

**LTAR =**

**4**

L/m2/day

**FLOWs=**

**450**

L/day

**Estimated area of effluent drainfield =**

**145**

square metres

**Maximum depth of stored effluent =**

**0**

mm depth

Water Balance Model for 2 bedroom dwelling

(prepared by R.A. Patterson, Lanfax Labs. Armidale April 2007)



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**Job:** Proposed Residence  
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Toorloo Arm

**Client:** Stroud Homes

**Checked:**

**Date:** 22 June 2022

**Designed:** SJA

**Job No.:** 427918

**Page No.:** 10 of 14

## APPENDIX B

### Lakes Entrance 084083

#### Mean

Source: AS1547-1994 - Table G1

Evap.data

### Orbost 084030

average Pan evaporation

(Prepared by R.A. Patterson, Lanfax Labs. Armidale updated April 2006)

1	2	3	4	5	6	7	8	9		
Month	Days	daily pan	Pan Eo	Et	Rainfall	Retained	LTAR*N	Disposal	Effluent	Size of
	per	Eo		+C*Eo	P	Rainfall		rate/month	applied	area
	month	(B.Met)				Re=(1-r)P	4	(Et-Re)+	per month	(8)/(7)
								LTAR*N	600	
		mm	mm	mm	mm	mm	mm	mm	L	m2
Jan	31	5.0	155.0	132	55.9	41.9	124	213.8	18600	87
Feb	28	4.6	128.8	109	41.5	31.1	112	190.4	16800	88
Mar	31	3.5	108.5	92	53.7	40.3	124	176.0	18600	106
Apr	30	2.4	72.0	43	62.8	47.1	120	116.1	18000	155
May	31	1.6	49.6	30	65.6	49.2	124	104.6	18600	178
Jun	30	1.2	36.0	22	61.9	46.4	120	95.2	18000	189
Jul	31	1.3	40.3	24	54.2	40.7	124	107.5	18600	173
Aug	31	2.0	62.0	37	50.3	37.7	124	123.5	18600	151
Sep	30	2.6	78.0	47	59.2	44.4	120	122.4	18000	147
Oct	31	3.4	105.4	90	63	47.3	124	166.3	18600	112
Nov	30	4.1	123.0	105	71	53.3	120	171.3	18000	105
Dec	31	4.6	142.6	121	70.8	53.1	124	192.1	18600	97
Totals			1101.2	852	709.9	532.4				

**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 area (m2)	application rate (8)/(2) (mm)	Disposal rate (above) (mm)	(3)-(4) (mm)	Increase depth of stored effluent (5)/porosity (mm)	Starting depth effluent for month (mm)	increase depth effluent (6) (mm)	computed depth effluent (X) (mm)	reset if Et deficit <0 (mm)	equivalent storage 10 x area (L)
Dec								0.0	0	
Jan	190	98	214	-116	-290	0	-290	-290	0	0
Feb		88	190	-102	-255	0	-255	-255	0	0
Mar		98	176	-78	-195	0	-195	-195	0	0
Apr		95	116	-21	-53	0	-53	-53	0	0
May		98	105	-7	-17	0	-17	-17	0	0
Jun		95	95	0	-1	0	-1	-1	0	0
Jul		98	108	-10	-24	0	-24	-24	0	0
Aug		98	123	-26	-64	0	-64	-64	0	0
Sep		95	122	-28	-69	0	-69	-69	0	0
Oct		98	166	-68	-171	0	-171	-171	0	0
Nov		95	171	-77	-191	0	-191	-191	0	0
Dec		98	192	-94	-236	0	-236	-236	0	0
Jan		98	214	-116	-290	0	-290	-290	0	0
Feb		88	190	-102	-255	0	-255	-255	0	0
Mar		98	176	-78	-195	0	-195	-195	0	0
Apr		95	116	-21	-53	0	-53	-53	0	0
May		98	105	-7	-17	0	-17	-17	0	0

From calculations in tables above for optimised drainfield area, using Appendix G AS1547-1994

**Variables Table**

Porosity in disposal area = **40%**

Runoff Coeff = **0.25** percentage runoff

Summer Crop Factor = **0.85** crop transpiration rate Oct-Mar

Winter Crop Factor = **0.6** crop transpiration rate -Apr-Sep

Change as required

LTAR = **4** L/m2/day

FLows = **600** L/day

Estimated area of effluent drainfield = **190** square metres

Maximum depth of stored effluent = **0** mm depth

Water Balance Model for 3 bedroom dwelling  
(prepared by R.A. Patterson, Lanfax Labs. Armidale April 2007)

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**Job:** Proposed Residence  
127 Mill Point Rd  
Toorloo Arm

**Client:** Stroud Homes

**Checked:**

**Date:** 22 June 2022  
**Designed:** SJA  
**Job No.:** 427918

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## APPENDIX B

### Lakes Entrance 084083

Evap.data

### Orbost 084030

#### Mean

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		
Month	Days	daily pan	Pan Eo	Et	Rainfall	Retained	LTAR*N	Disposal	Effluent	Size of
	per	Eo		+Cf*Eo	P	Rainfall		rate/month	applied	area
	month	(B.Met)				Re=(1-r)P	4	(Et-Re)+	per month	(8)/(7)
								LTAR*N	750	
		mm	mm	mm	mm	mm	mm	mm	L	m2
Jan	31	5.0	155.0	132	55.9	41.9	124	213.8	23250	109
Feb	28	4.6	128.8	109	41.5	31.1	112	190.4	21000	110
Mar	31	3.5	108.5	92	53.7	40.3	124	176.0	23250	132
Apr	30	2.4	72.0	43	62.8	47.1	120	116.1	22500	194
May	31	1.6	49.6	30	65.6	49.2	124	104.6	23250	222
Jun	30	1.2	36.0	22	61.9	46.4	120	95.2	22500	236
Jul	31	1.3	40.3	24	54.2	40.7	124	107.5	23250	216
Aug	31	2.0	62.0	37	50.3	37.7	124	123.5	23250	188
Sep	30	2.6	78.0	47	59.2	44.4	120	122.4	22500	184
Oct	31	3.4	105.4	90	63	47.3	124	166.3	23250	140
Nov	30	4.1	123.0	105	71	53.3	120	171.3	22500	131
Dec	31	4.6	142.6	121	70.8	53.1	124	192.1	23250	121
Totals			1101.2	852	709.9	532.4				

**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 area (m2)	application rate (8)/(2) (mm)	Disposal rate per month (above) (mm)	(3)-(4) (mm)	Increase depth of stored effluent (5)/porosity	Starting depth effluent for month	increase depth effluent +(6)	computed depth effluent (X) (mm)	reset if Et deficit <0 (mm)	equivalent storage 10 x area (L)
Dec								0.0	0	
Jan	240	97	214	-117	-292	0	-292	-292	0	0
Feb		88	190	-103	-257	0	-257	-257	0	0
Mar		97	176	-79	-198	0	-198	-198	0	0
Apr		94	116	-22	-56	0	-56	-56	0	0
May		97	105	-8	-19	0	-19	-19	0	0
Jun		94	95	-1	-4	0	-4	-4	0	0
Jul		97	108	-11	-27	0	-27	-27	0	0
Aug		97	123	-27	-67	0	-67	-67	0	0
Sep		94	122	-29	-72	0	-72	-72	0	0
Oct		97	166	-69	-174	0	-174	-174	0	0
Nov		94	171	-78	-194	0	-194	-194	0	0
Dec		97	192	-95	-238	0	-238	-238	0	0
Jan		97	214	-117	-292	0	-292	-292	0	0
Feb		88	190	-103	-257	0	-257	-257	0	0
Mar		97	176	-79	-198	0	-198	-198	0	0
Apr		94	116	-22	-56	0	-56	-56	0	0
May		97	105	-8	-19	0	-19	-19	0	0

From calculations in tables above for optimised drainfield area, using Appendix G AS1547-1994

**Porosity in disposal area** **40%**

#### Variables Table

**Runoff Coeff = 0.25** percentage runoff

**Summer Crop Factor = 0.85** crop transpiration rate Oct-Mar

**Winter Crop Factor = 0.6** crop transpiration rate -Apr-Sep

Change as required

**LTAR = 4** L/m2/day

**FLows = 750** L/day

**Estimated area of effluent drainfield = 240** square metres

**Maximum depth of stored effluent = 0** mm depth

Water Balance Model for 4 bedroom dwelling  
(prepared by R.A. Patterson, Lanfax Labs. Armidale April 2007)



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**Job:** Proposed Residence  
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Toorloo Arm

**Client:** Stroud Homes

**Checked:**

**Date:** 22 June 2022

**Designed:** SAA

**Job No.:** 427918

**Page No.:** 12 of 14

## APPENDIX B

### Lakes Entrance 084083

#### Mean

Source: AS1547-1994 - Table G1

Evap.data

### Orbost 084030

average Pan evaporation

(Prepared by R.A. Patterson, Lanfax Labs. Armidale updated April 2006)

1	2	3	4	5	6	7	8	9		
Month	Days	daily pan	Pan Eo	Et	Rainfall	Retained	LTAR*N	Disposal	Effluent	Size of
	per	Eo		+Ct*Eo	P	Rainfall		rate/month	applied	area
	month	(B.Met)				Re=(1-r)P	4	(Et-Re)+	per month	(8)/(7)
								LTAR*N	900	
		mm	mm	mm	mm	mm	mm	mm	L	m2
Jan	31	5.0	155.0	132	55.9	41.9	124	213.8	27900	130
Feb	28	4.6	128.8	109	41.5	31.1	112	190.4	25200	132
Mar	31	3.5	108.5	92	53.7	40.3	124	176.0	27900	159
Apr	30	2.4	72.0	43	62.8	47.1	120	116.1	27000	233
May	31	1.6	49.6	30	65.6	49.2	124	104.6	27900	267
Jun	30	1.2	36.0	22	61.9	46.4	120	95.2	27000	284
Jul	31	1.3	40.3	24	54.2	40.7	124	107.5	27900	259
Aug	31	2.0	62.0	37	50.3	37.7	124	123.5	27900	226
Sep	30	2.6	78.0	47	59.2	44.4	120	122.4	27000	221
Oct	31	3.4	105.4	90	63	47.3	124	166.3	27900	168
Nov	30	4.1	123.0	105	71	53.3	120	171.3	27000	158
Dec	31	4.6	142.6	121	70.8	53.1	124	192.1	27900	145
Totals			1101.2	852	709.9	532.4				

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
	(m2)	(8)/(2)	per month		stored	effluent	effluent	effluent	<0	10 x area
		(above)			effluent	for		(X)		
		(mm)	(mm)	(mm)	(5)/porosity	month	+(6)	(mm)	(mm)	(L)
Dec								0.0	0	
Jan	290	96	214	-118	-294	0	-294	-294	0	0
Feb		87	190	-103	-259	0	-259	-259	0	0
Mar		96	176	-80	-199	0	-199	-199	0	0
Apr		93	116	-23	-57	0	-57	-57	0	0
May		96	105	-8	-21	0	-21	-21	0	0
Jun		93	95	-2	-5	0	-5	-5	0	0
Jul		96	108	-11	-28	0	-28	-28	0	0
Aug		96	123	-27	-68	0	-68	-68	0	0
Sep		93	122	-29	-73	0	-73	-73	0	0
Oct		96	166	-70	-175	0	-175	-175	0	0
Nov		93	171	-78	-195	0	-195	-195	0	0
Dec		96	192	-96	-240	0	-240	-240	0	0
Jan		96	214	-118	-294	0	-294	-294	0	0
Feb		87	190	-103	-259	0	-259	-259	0	0
Mar		96	176	-80	-199	0	-199	-199	0	0
Apr		93	116	-23	-57	0	-57	-57	0	0
May		96	105	-8	-21	0	-21	-21	0	0

From calculations in tables above for optimised drainfield area, using Appendix G AS1547-1994

Variables Table		Porosity in disposal area	40%
	Runoff Coeff =	0.25	percentage runoff
	Summer Crop Factor =	0.85	crop transpiration rate Oct-Mar
	Winter Crop Factor =	0.6	crop transpiration rate -Apr-Sep
Change as required	LTAR =	4	L/m2/day
	FLows =	900	L/day
Estimated area of effluent drainfield =		290	square metres
Maximum depth of stored effluent =		0	mm depth

Water Balance Model for 5 bedroom dwelling  
(prepared by R.A. Patterson, Lanfax Labs. Armidale April 2007)



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	<b>Client: Stroud Homes</b>	<b>Job No.: 427918</b>
	<b>Checked:</b>	<b>Page No.: 13 of 14</b>

### APPENDIX C


RECORD OF FIELD TEXTURE DETERMINATION						
Soil	Grittiness	Stickiness	Plasticity	Stain	Ribbon (mm)	Grade
A1	Moderate	None	None	Slight	25	SL
A2	Moderate	None	None	Slight	15	FSL
B1	None	Extremely	Extremely	Extremely	75+	HC

NONE                      SLIGHT                      MODERATE                      VERY                      EXTREMELY

### APPENDIX D

Soil Category	Field Texture Grade		Behaviour of moist blobs	Ribbon length (mm)	Approx clay content %
1	S	Sand	coherence nil to very slight, cannot be moulded; sand grains of medium size; single sand grains stick to fingers	nil	< 5%
2	LS	Loamy sand	slight coherence; sand grains of medium size; can be sheared between thumb and forefinger to give minimal ribbon of about 5mm	about 5	about 5%
	CS	Clayey sand	slight coherence; sand grains of medium size; sticky when wet; many sand grains stick to fingers; discolours fingers with clay stain	5 - 15	5% to 10%
	SL	Sandy loam	bolus coherent but very sandy to touch; will form ribbon; dominant sand grains of medium size and readily visible	15 - 25	10% to 20%
3	FSL	Fine sandy loam	as for sandy loams, except that individual sand grains are not visible, although they can be heard and felt	15 - 25	10% to 20%
	L	Loam	bolus coherent and rather spongy; smooth feel when manipulated but with no obvious sandiness or "silkeness"; may be somewhat greasy to touch if much organic material present	25	about 25%
	ZL	Silty loam	coherent bolus, very smooth to silky when manipulated, will form a very thin ribbon and dries out rapidly	25	10% to 25%
4	SCL	Sandy clay loam	strongly coherent bolus, sandy to touch; medium size sand grains visible in finer matrix	25 - 40	20% to 30%
	FSCl	Fine sandy clay loam	as for sandy clay loam, except that individual sand grains are not visible although they can be heard and felt.	40 - 50	20% to 30%
	CL	Clay loam	coherent plastic bolus, smooth to manipulate	40 - 50	30% to 35%
	ZCL	Silty clay loam	as for clay loams but not spongy; very smooth and silky; dries out rapidly	40 - 50	30% to 35%
	SC	Sandy clay	plastic bolus; fine to medium sand can be seen, felt or heard in clayey matrix	50 - 75	35% to 40%
5	SiC	Silty clay	plastic bolus; smooth and silky to manipulate; long but very fragmentary ribbon; dries out rapidly	50 - 75	30% to 40%
	LC	Light clay	plastic bolus; smooth to touch; slight resistance to shearing between thumb and forefinger	50 - 75	35% to 40%
	LMC	Light medium clay	plastic bolus; smooth to touch; slight to moderate resistance to ribboning shear	75	40% to 45%
6	MC	Medium clay	smooth plastic bolus; handles like plasticine and can be moulded into rods without fracture; has moderate resistance to ribboning shear	> 75	45% to 55%
	HC	Heavy clay	smooth plastic bolus; handles like stiff plasticine; can be moulded into rods without fracture; has firm resistance to ribboning shear	> 75	50% +

Soil Texture Grade Table (International System, soil sieved < 2mm) &  
Table E1 (Assessment of Soil Textures) pg 106 of AS/NZS 1547:2012

 <b>Simon Anderson</b> Consultants CIVIL   STRUCTURAL   PROJECT ENGINEERS P.O. Box 1700 111 Main St Bairnsdale, Vic, 3875 ACN 073 392 266 P.O. Box 566 191-193 Raymond St Sale, Vic, 3850 ACN 145 437 065	<b>Job:</b> Proposed Residence 127 Mill Point Rd Toorloo Arm	<b>Date:</b> 22 June 2022 <b>Designed:</b> SJA
	<b>Client:</b> Stroud Homes <b>Checked:</b>	<b>Job No.:</b> 427918 <b>Page No.:</b> 14 of 14

## 9.0 REFERENCES

Environment Protection Authority (July 2016). Publication No. 891.4, *Code of Practice – Onsite Wastewater Management*.

Environment Protection Authority (Mar 2013). Publication No. 746.1, *Land Capability Assessment For On-Site Wastewater Management*.

Environment Protection Authority (1991). Publication 168, *Guidelines for Wastewater Irrigation*.

McDonald, R.C., Isbell, R.F., Spreight, J.G., Walker, J and Hopkins, M.S. (1990). *Australian Soil and Land Survey: Field Handbook. Second Addition*. Inkata Press, Melbourne.

Standards Australia / Standards New Zealand (2012). AS/NZS 1547:2012 *On-Site Domestic Wastewater Management*.

Victorian Resources Online; <http://vro.depi.vic.gov.au/dpi/vro/vrosite.nsf/pages/vrohome>

Munsell Soil-Color Charts (2009 Year Revised / 2012 Production)

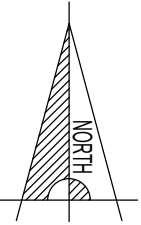


NOTES:  
DENOTES NATURAL SURFACE LEVEL 10.23  
CONTOUR INTERVAL IS 0.20m  
LEVELS ARE TO ARBITRARY DATUM

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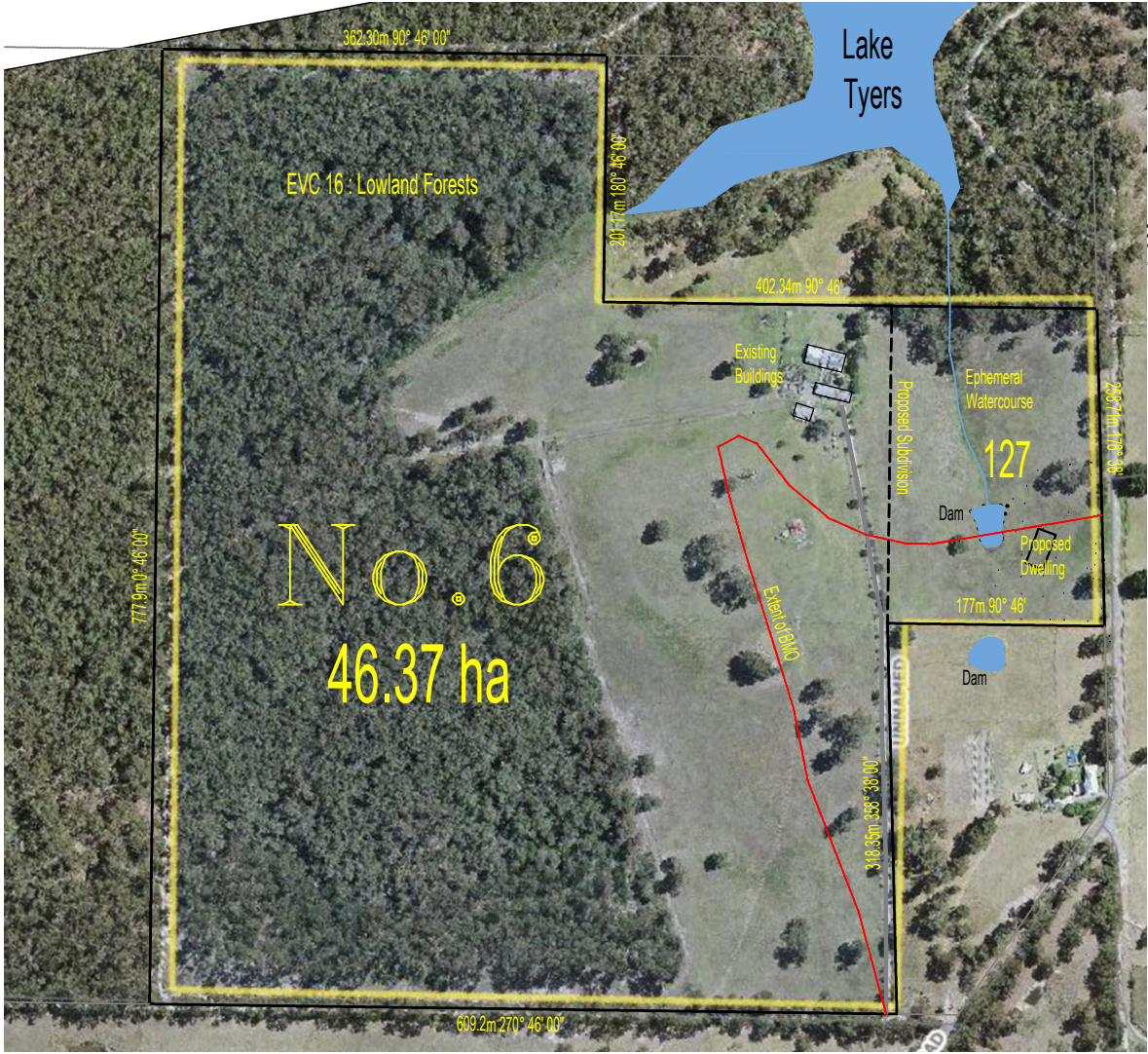


**DIAL 1100**  
BEFORE YOU DIG

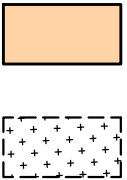


PLEASE NOTE:  
TITLES BOUNDARIES SHOWN MAY NOT REPRESENT EXACT TITLE POSITION.  
FOR EXACT TITLE POSITION IT IS RECOMMENDED THAT A TITLE RE ESTABLISHMENT SURVEY BE CARRIED OUT BY A LICENCED SURVEYOR

PLEASE NOTE:  
THE CLIENT IS ALLOWED FLEXIBILITY IN SELECTING THE FINAL LOCATION AND CONFIGURATION OF THE IRRIGATION SYSTEM, PROVIDED IT REMAINS WITHIN THE LAND APPLICATION AREA (LAA)

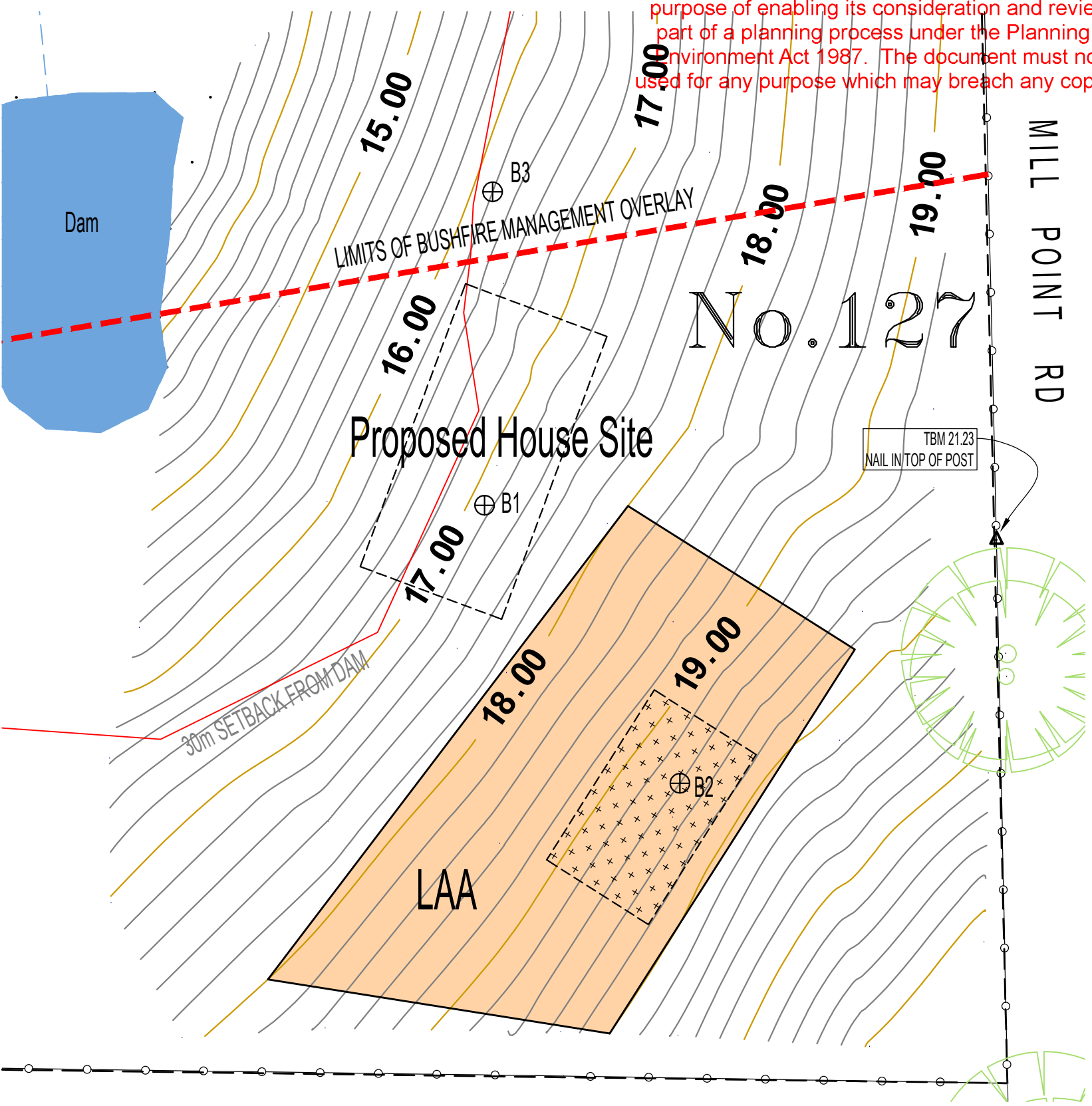


KENTS ROAD  
**LOCALITY PLAN**  
SCALE 1:6000



SUITABLE LAND APPLICATION AREA  
(LAA - 1500m<sup>2</sup> available)

IRRIGATION AREA - 240 m<sup>2</sup> required (for a 4 bedroom dwelling)



**SITE FEATURES PLAN**  
SCALE 1:500

PLEASE NOTE:  
SHALLOW TABLE OR CUT-OFF DRAIN TO BE CONSTRUCTED ALONG THE HIGH SIDES OF THE EFFLUENT DISPOSAL AREA, EXTENDING TO BELOW THE DISPOSAL FIELD.

REV	DESCRIPTION	CHKD	DATE
-	-	-	-

Design:	Project:
Drawn: JDP	<b>SITE ANALYSIS</b>
Checked: SJA	127 Mill Point Rd, Toorloo Arm
Date: 22 June 2022	Client: Stroud Homes

Job No:	427918
Drawing No:	LC1
Revision No:	-



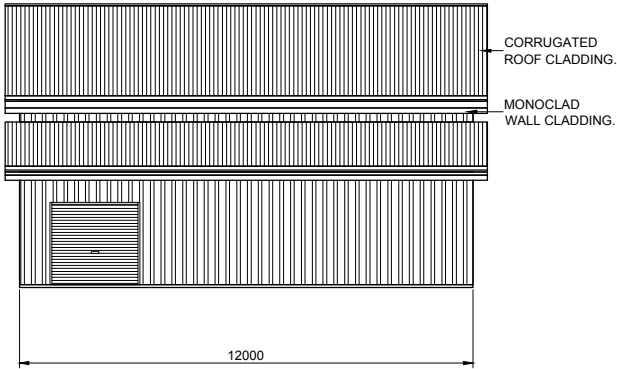
**Simon Anderson Consultants**  
CIVIL | STRUCTURAL | PROJECT ENGINEERS

P.O. Box 1700 111 Main St, Bairnsdale  
T: 03 5153 1500  
ACN 073 392 266  
bairnsdale@simonandersonconsultants.com.au

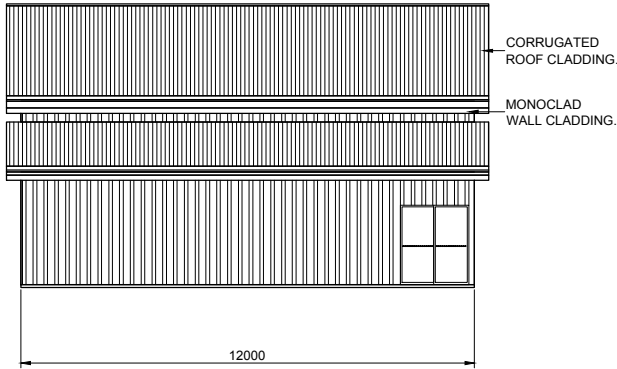


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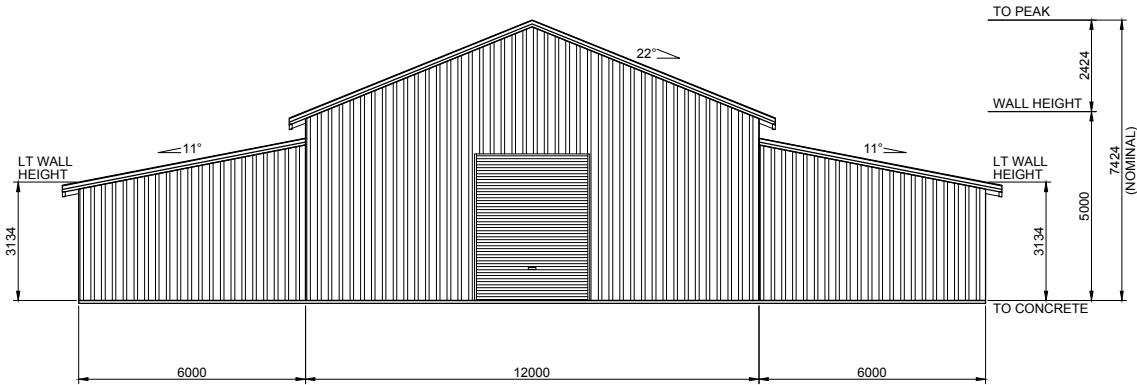
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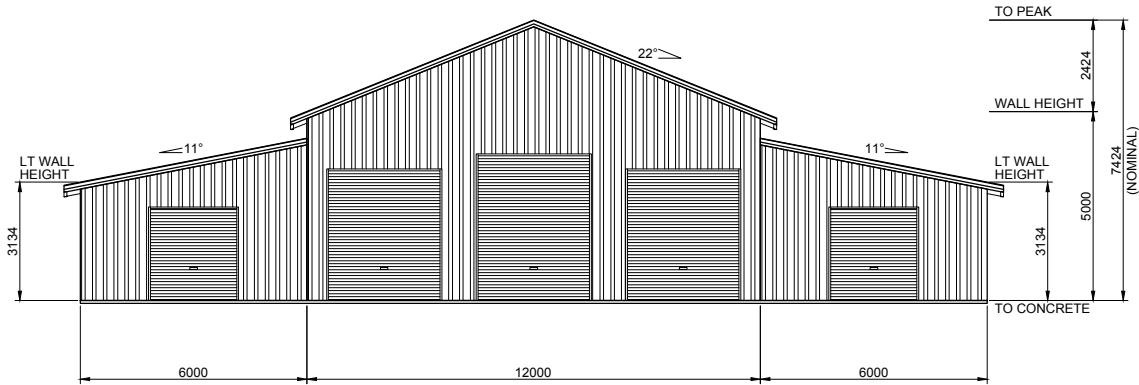
1 SIDEWALL EXTERIOR ELEVATION  
8 SCALE: 1 = 200



2 SIDEWALL EXTERIOR ELEVATION  
8 SCALE: 1 = 200



4 ENDWALL EXTERIOR ELEVATION  
8 SCALE: 1 = 200



3 ENDWALL EXTERIOR ELEVATION  
8 SCALE: 1 = 200

BUILDING COLOURS

WALL	DOVER WHITE
ROOF	DOVER WHITE
ROLLER DOOR	DOVER WHITE
GLASS SLIDING DOOR	DOVER WHITE
DOWNPIPE	DOVER WHITE
GUTTER	DOVER WHITE
CORNER FLASHING	DOVER WHITE
BARGE FLASHING	DOVER WHITE
OPENING FLASHING	DOVER WHITE

8 OF 8

SHEET

JOB NO.  
FD8D100059

DATE  
23/11/2023

CHECKED  
TM

DRAWN  
FDB

STEEL BUILDING BY  
**FAIR DINKUM BUILDS RIVIERA BARNS AND GARAGES**

(CONTACT)  
FOR  
**BRENT RICHARDSON**  
AT  
127 MILL POINT ROAD  
TOORLOO ARM

03 5153 1455

Civil & Structural Engineers  
50 Punari Street  
Currajong, Qld 4812  
Fax: 07 4725 5850  
Email: design@nceng.com.au  
ABN 341 008 173 56

Registered Chartered Professional Engineer  
Registered Professional Engineer (Civil & Structural) QLD  
Registered Certifying Engineer (Structural) N.T.  
Registered Engineer - (Civil) VIC  
Registered Engineer - (Civil) TAS

Regn. No. 2558980  
Regn. No. 9985  
Regn. No. 116373ES  
Regn. No. PE0002216  
Regn. No. CC5648M

Mr Timothy Roy Messer BE MIEAust RPEQ  
Signature  
Date 23/11/2023  
Registered on the NPQR in the areas of practice  
of Civil & Structural National Professional  
Engineers Register

General Notes for Residential Works  
General Notes (NCC 2019 BCA Vol 2)

- All materials and work practices shall comply with, but not limited to the Building Regulations 2018, National Construction Code Series 2019 Building Code of Australia Vol 2-Amendment and all relevant current Australian Standards (as amended) referred to therein.
- Unless otherwise specified, the term BCA shall refer to National Construction Code Series 2019 Building Code of Australia Volume 2.
- All materials and construction practice shall meet the Performance Requirements of the BCA. Where a performance solution is proposed then, prior to implementation or installation, it first must be assessed and approved by the Relevant Building Surveyor as meeting the Performance Requirements of the BCA.
- Glazing, including safety glazing, shall be installed to a size, type and thickness so as to comply with:
  - BCA Part 3.6 for Class 1 and 10 Buildings within a design wind speed of not more than N3; and
  - BCA Vol 1 Part B1.4 for Class 2 and 9 Buildings.
- Waterproofing of wet areas, being bathrooms, showers, shower rooms, laundries, sanitary compartments and the like shall be provided in accordance with AS 3740-2010: *Waterproofing of Domestic Wet Areas*.
- These Drawings shall be read in conjunction with any House Energy Rating (HERS) report and shall be constructed in accordance with the stamped plans endorsed by the accredited Thermal Performance Assessor without alteration.
- Step sizes (other than for spiral stairs) to be:
  - Risers (R) 190mm maximum and 115mm minimum
  - Going (G) 355mm maximum and 240mm minimum
  - 2R + 1G = 700mm maximum and 550mm minimum
  - with less than 125mm gap between open treads.
- All treads, landings and the like to have a slip-resistance classification of P3 or R10 for dry surface conditions and P4 or R11 for wet surface conditions, or a nosing strip with a slip-resistance classification of P3 for dry surface conditions and P4 for wet surface conditions.
- Provide barriers where change in level exceeds 1000mm above the surface beneath landings, ramps and/or treads. Barriers (other than tensioned wire barriers) to be:
  - 1000mm min. above finished surface level of balconies, landings or the like, and
  - 865mm min. above finished surface level of stair nosing or ramp, and
  - vertical with less than 125mm gap between, and
  - any horizontal element within the barrier between 150mm and 760mm above the floor must not facilitate climbing where changes in level exceeds 4000mm above the surface beneath landings, ramps and/or treads.
- Wire barrier construction to comply with NCC 2019 BCA Part 3.9.2.3 for Class 1 and 10 Buildings and NCC 2019 BCA Volume 1 Part D2.16 for other Classes of Buildings.
- Top of hand rails to be minimum 865mm vertically above stair nosing and floor surface of ramps.
- Window sizes nominated are nominal only. Actual size may vary according to manufacturer. Windows to be flashed all around. Where the building (excludes a detached Class 10) is located in a termite prone area the building is to be provided with a termite management system.
- Concrete stumps:
  - up to 1400mm long to be 100mm x 100mm (1 No. H.D. Wire)
  - 1401mm to 1800mm long to be 100mm x 100mm (2 No. H.D. Wires)
  - 1801mm to 3000mm long to be 125mm x 125mm (2 No. H.D. Wires)
  - 100mm x 100mm stumps exceeding 1200mm above ground level to be braced where no perimeter base brickwork

provided.

- Buildings in marine or other exposure environments shall have masonry units, mortar and all built in components and the like complying with the durability requirements of Table 4.1 of AS 4773.1-2010 'Masonry in small buildings' Part 1: Design.
- All stormwater to be taken to the legal point of discharge to the Relevant Authorities approval.
- These drawings shall be read in conjunction with all relevant structural and all other consultants'drawings/ details and with any other written instructions issued in the course of the contract.
- Site plan measurements in metres - all other measurements in millimetres unless noted otherwise.
- Figured dimensions take precedence over scaled dimensions.
- The Builder shall take all steps necessary to ensure the stability and general water tightness of all new and/or existing structures during all works.
- The Builder and Subcontractors shall check and verify all dimensions, setbacks, levels and specifications and all other relevant documentation prior to the commencement of any works. Report all discrepancies to this office for clarification.
- Installation of all services shall comply with the respective supply authority requirements.
- The Builder and Subcontractor shall ensure that all stormwater drains, sewer pipes and the like are located at a sufficient distance from any buildings footing and/ or slab edge beams so as to prevent general moisture penetration, dampness, weakening and undermining of any building and its footing system.
- These plans have been prepared for the exclusive use by the Client of Atelier 1:7 Pty Ltd('The Designer') for the purpose expressly notified to the Designer. Any other person who uses or relies on these plans without the Designer's written consent does so at their own risk and no responsibility is accepted by the Designer for such use and/or reliance.
- A building Permit is required prior to the commencement of these works. The release of these documents is conditional to the Owner obtaining the required Building Permit.
- The Client and/or the Client's Builder shall not modify or amend the plans without the knowledge and consent of Buildingdesigned except where a Registered Building Surveyor makes minor necessary changes to facilitate the Building Permit application and that such changes are promptly reported back to Buildingdesigned.
- The approval by this office of a substitute material, work practice, variation or the like is not an authorisation for its use or a contract variation. All variations must be accepted by all parties to the agreement and where applicable the Relevant Building Surveyor prior to implementing any variation.
- (soil classification relocated)

STORMWATER

100mm DIA. Class 6 UPVC stormwater line laid to a minimum grade of 1:100 and connected to the legal point of stormwater discharge.

- Provide inspection openings at 9000mm C/C and at each change of direction.
- The cover to underground stormwater drains shall be not less than
- 100mm under soil
  - 50mm under paved or concrete areas
  - 100mm under unreinforced concrete or paved driveways
  - 75mm under reinforced concrete driveways

SITE ENVIRONMENT DESIGN INFORMATION

Site Bushfire Attack Assessment (simplified method)

Reference document 'AS 3959-2009 construction of buildings in bush fire prone areas'  
Determination of Bushfire Attack Level (BAL): 12.5

Site Classification

Site classification as Class: M  
Refer to soil report Job No: 427918  
By: Simon Anderson Consulting

Design Gust Wind Speed / Wind Classification

Building tie-downs to be provided in accordance with AS1684-2010 for an assumed design gust wind speed  
/ wind classification of N3 (subject to confirmation on site by Relevant Building Surveyor at first inspection) refer to AS1684 for construction requirements.

Climate Zone

Climate zone for thermal design / thermal performance assessment : Zone 6

Corrosion protection of built-in structural members

Provide corrosion protection of built-in structural steel members such as steel lintels, shelf angles, connectors, accessories (other than wall ties) in accordance with Table 4.1 of AS4773.1-2010 *Masonry in Small Buildings, Part 1: Design* suitable for an Environment Classification of LOW

Corrosion protection for sheet roofing

Provide corrosion protection for sheet roofing in accordance with BCA Table 3.5.1.1a suitable for an Environment Classification of LOW.

ENGINEER & BUILDER ADVICE

THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE PROJECT SPECIFICATIONS, ENGINEERS DESIGNS, COMPUTATIONS AND GEOTECHNICAL REPORTS. WRITTEN SPECIFICATION TAKE PRECEDENCE OVER THESE DRAWINGS.  
LOCAL AUTHORITIES TO ADVISE REQUIREMENTS FOR

- LOCATION OF LPOD
- SEWER POINT LOCATION
- AUTHORITIES ASSET LOCATIONS
- SNOW LOAD REQUIREMENTS
- FLOOD INUNDATION
- BUSHFIRE PROTECTION
- TERMITE TREATMENT
- WIND SPEED

CALL 1100 DIAL BEFORE YOU DIG

FOR ENERGY RATING (INSULATION AND GLAZING TYPE) REFER TO ENERGY REPORT

FOR WASTEWATER MANAGEMENT REFER TO LCA

BUSHFIRE ATTACK LEVEL (BAL) 12.5 SUMMARY

EXTERNAL WALLS

WEEP HOLES TO ENTIRE HOUSE TO BE SCREENED WITH A 2MM APERTURE ALUMINIUM MESH.  
ALL GAPS GREATER THAN 3MM IN EXTERNAL CLADDING TO BE SEALED.  
EXTERNAL CLADDING LESS THAN 400MM FROM GROUND, PORCH, ALFRESCO OR BALCONY FLOORS & ROOFS WITH A PITCH OF LESS 18 DEGREES TO BE NONCOMBUSTIBLE  
OR 6MM FIBRE-CEMENT.

WINDOWS

WINDOW LESS THAN 400MM FROM GROUND, PORCH, ALFRESCO OR BALCONY FLOORS & ROOFS WITH A PITCH OF LESS 18 DEGREES TO BE METAL OR COMPLIANT BAL 12.5 TIMBERS. GLAZING TO THESE WINDOWS TO BE 4MM SAFETY GLASS. ALUMINIUM FRAMED FLY SCREENS WITH A 2MM APERTURE ALUMINIUM MESH TO ALL OPENING SASHES.

DOORS

EXTERNAL FRAMES TO BE METAL OR COMPLIANT BAL 12.5 TIMBERS.  
EXTERNAL TIMBER DOORS TO BE NON-COMBUSTIBLE OR 35MM THICK SOLID CORE DOOR OR SCREENED AS PER OPENABLE GARAGE ROLLER/PANEL LIFT DOOR TO BE PROTECTED WITHIN 400mm OF GROUND WITH ONE OF THE FOLLOWING MEASURES;  
NON COMBUSTIBLE MATERIAL  
GARAGE DOOR TO BE FITTED WITH WEATHER STRIPS, DRAUGHT EXCLUDERS/SEALS OR GUIDE TRACKS WITH MAX. 3mm GAP.  
ROLLER  
DOOR SHALL HAVE A NYLON BRUSH WHICH IS IN CONTACT WITH THE DOOR.  
GLAZING TO DOORS LESS THAN 400MM FROM GROUND, PORCH, ALFRESCO OR BALCONY FLOORS & ROOFS WITH A PITCH OF LESS 18 DEGREES TO BE 4MM SAFETY GLASS.  
TIMBER FRENCH OR BI-FOLD DOORS ARE SUBJECT TO COMPLIANCE TESTING AS PER SECTION 3.8, AS3959, 2009.  
PROVIDE WEATHER STRIPS TO PERIMETER OF SECTIONAL/PANEL LIFT GARAGE DOORS OR NYLON BRUSH TO GUIDE TRACK OF ROLLER GARAGE DOOR TO ENSURE NO GAPS GREATER THAN 3MM.  
WEATHERSTRIPS TO BE INSTALLED AT THE BASE OF ALL SIDE HUNG EXTERNAL DOORS.

ROOFING

SARKING TO ENTIRE ROOF EXTENDING INTO GUTTER AND VALLEYS, STORM SEAL TO VALLEYS.  
ROOF VENTS, "WHIRLY BIRDS", TO BE INSTALLED TO VENT ROOF SPACE AND TO HAVE A 2MM APERTURE ALUMINIUM MESH EMBER GUARD INSTALLED.  
ALL ROOF PENETRATIONS TO HAVE 2MM APERTURE ALUMINIUM MESH EMBER GUARDS INSTALLED AND SEALED WITH A NON COMBUSTIBLE SEALANT.  
SHEET ROOFING WITH GAPS GREATER THAN 3MM TO BE SEALED AT THE FASCIA OR WALL LINE & AT THE VALLEYS, HIPS AND RIDGES WITH A 2MM APERTURE ALUMINIUM MESH OR MINERAL WOOL.  
EVAPORATIVE COOLING UNITS, WHERE INSTALLED, TO BE FITTED WITH BUTTERFLY CLOSERS AS CLOSE AS PRACTICABLE TO THE ROOF LEVEL.  
ROOF FLASHINGS TO BE NON-COMBUSTIBLE.

DECKING

DECKING SHALL BE EITHER SPACED OR CONTINUOUS  
DECKING LESS THAN 300 MM (MEASURED HORIZONTALLY AT DECK LEVEL) FROM GLAZED ELEMENTS THAT ARE LESS THAN 400 MM (MEASURED VERTICALLY) FROM THE SURFACE OF THE DECK, SHALL BE MADE FROM NON-COMBUSTIBLE MATERIAL OR BUSHFIRE-RESISTING TIMBER OR PVC-U OR COMBINATION OF ANY OF ITEMS (A), (B),(C) OR (D) ABOVE.

GENERAL

ALL GAPS GREATER THAN 3MM TO ANY EXTERNAL ELEMENT TO BE SEALED.  
WATER AND GAS SUPPLY PIPES TO BE METAL IF ABOVE GROUND.  
**PLEASE NOTE THAT THIS IS A CONDENSED VERSION OF THE AS 3959 BAL REQUIREMENTS FOR RESIDENTIAL CONSTRUCTION AND SHOULD ONLY BE USED AS A GUIDE**

A	Town Planning Issue	14/08/23
REV	DESCRIPTION	DATE

PROJECT: P22010: TOORLOO ARM
127 Millpoint Road, Toorloo Arm

CLIENT: BRENT & KELLY RICHARDSON		
SCALE AT A3: 1 : 100	CHK: SM	APP: SM
	DES: SM	DRW: SM

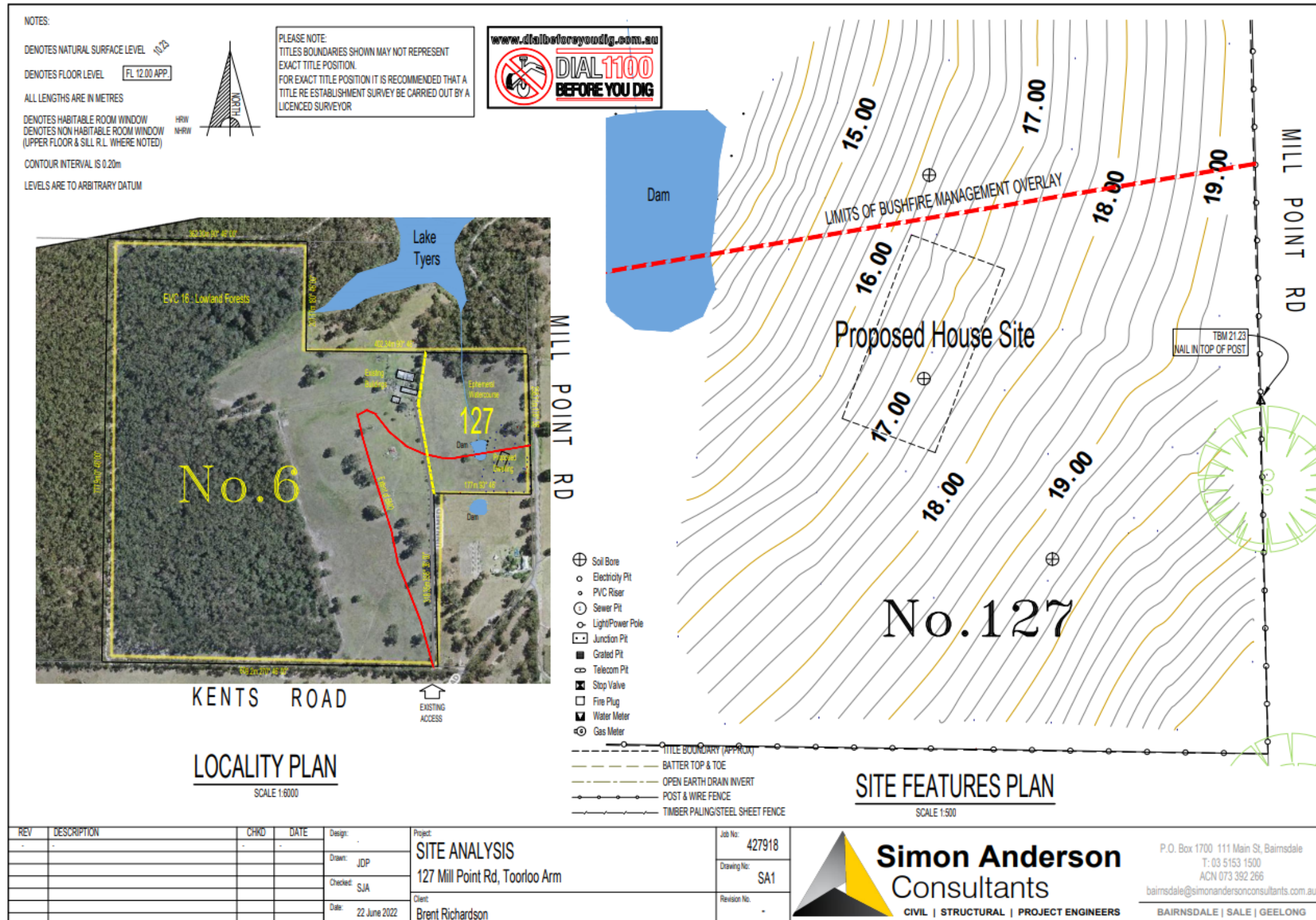
<b>DRAWING TITLE:</b> COVER SHEET	
<b>DRAWING NUMBER:</b>	P22010-01
<b>STATUS:</b> TOWN PLANNING	<b>REV:</b> A



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ALL MATERIALS AND FITTINGS TO BE FIXED IN STRICT ACCORDANCE WITH THE MANUFACTURERS SPECIFICATION.

**Atelier 17**

A	Town Planning Issue	14/08/23
REV	DESCRIPTION	DATE

**PROJECT:**

P22010: TOORLOO ARM

127 Millpoint Road,  
Toorloo Arm

**CLIENT:**

BRENT & KELLY RICHARDSON

SCALE AT A3:

NTS

CHK: SM

DES: other

APP: TY

DRW: other

**DRAWING TITLE:**

SITE SURVEY

**DRAWING NUMBER:** P22010-03

**STATUS:**  
TOWN PLANNING

**REV:**  
A

Printed 8/12/2023

Page 52 of 57



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## SITE CUT NOTES

THE SITE CUT INDICATED IS APPROXIMATE ONLY. THE BUILDER SHALL ASSESS AND ADJUST THE CUTS AS NECESSARY TO ACCOMMODATE CONSTRUCTION VARIABLES SUCH AS:

- SITE DRAINAGE (TO COMPLY WITH AS 3500 & NCC 3.1.2)
- SLAB FORMING/BOXING SYSTEM
- TERMITE TREATMENT/CONTROL SYSTEM
- PROPOSED LANDSCAPE FEATURES

INCLUDING FINISHED LEVELS, BACKFILLING, PAVEMENT DEPTHS, CROSS FALLS

FOR DRAINAGE ETC...

GRADE SURFACE AWAY FROM HOUSE FOOTINGS

(MINIMUM 1:20)

THE HEIGHT OF THE SLAB-ON-GROUND ABOVE

EXTERNAL

FINISHED SURFACES MUST BE NOT LESS THAN 100mm

ABOVE THE FINISHED GROUND LEVEL IN LOW

RAINFALL

INTENSITY AREAS OR SANDY, WELL-DRAINED AREAS

OR

50mm ABOVE IMPERMEABLE (PAVED OR CONCRETED

AREAS) THAT SLOPE AWAY FROM THE BUILDING OR

150mm

IN ANY OTHER CASE. (TO COMPLY WITH NCC 3.1.2.2)

SITE CUTS SHOULD ALLOW FOR 100mm TOP SOIL BACK

FILL TO LANDSCAPE AREAS UNLESS NOTED

OTHERWISE.

HOWEVER, CUTS ARE TO BE MINIMISED TO LIMIT THE

NEED FOR EXCESSIVE BACKFILL.

ON SITES WHERE LANDSCAPED AREAS REQUIRE IN

EXCESS OF 100mm BACK FILL CLEAN EXCAVATED

MATERIAL MAY BE USED IN 150mm COMPACTED

LAYERS

TO WITHIN 100mm OF F.G.L

BACKFILL UNDER SLABS SHALL BE TO ENGINEER

DESIGN/DETAILS.

ALL SITE CUTS ARE TO HAVE CROSS FALL TO PROVIDE

POSITIVE DRAINAGE. THE TOE OF EVERY CUT BATTER

TO

BE PROVIDED WITH 90mm uPVC SLOTTED AGGI DRAIN

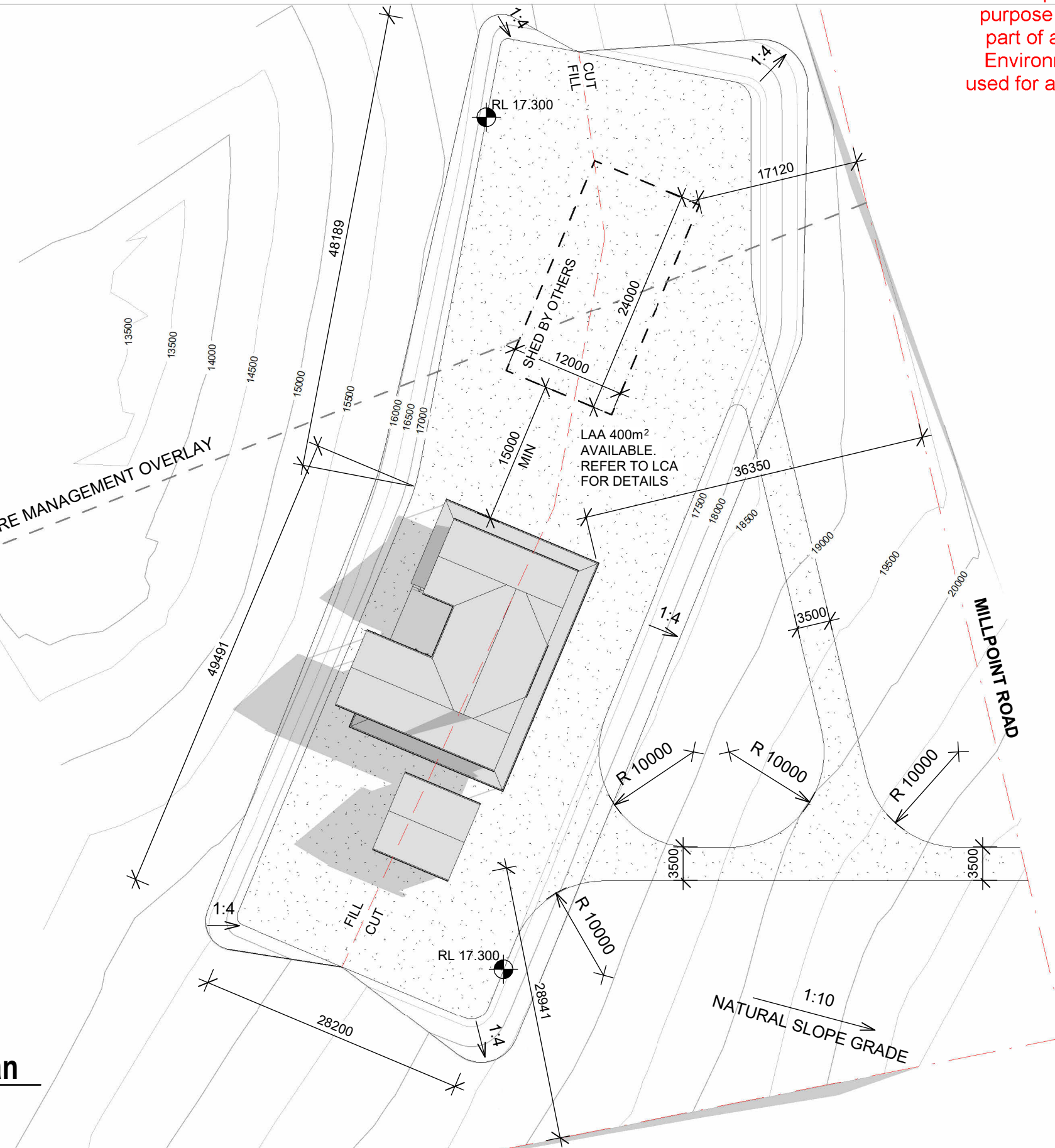
CONNECTED TO STORMWATER SYSTEM VIA A SILT PIT

PROTECTED BY GRAVEL FILTERS.

LIMITS OF BUSHFIRE MANAGEMENT OVERLAY

## 1 | 04 Site Plan

SCALE: 1 : 500



### NOTES:

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**Atelier** 17

REV	DESCRIPTION	DATE
A	Town Planning Issue	14/08/23

### PROJECT:

P22010: TOORLOO ARM

127 Millpoint Road,  
Toorloo Arm

### CLIENT:

BRENT & KELLY RICHARDSON

### SCALE AT A3:

As indicated

0 500 1000 2500

SCALE: 1:100

CHK: SM

DES: SM

APP: HW

DRW: SM

N

### DRAWING TITLE:

SITE PLAN

### DRAWING NUMBER:

P22010-04

### STATUS:

TOWN PLANNING

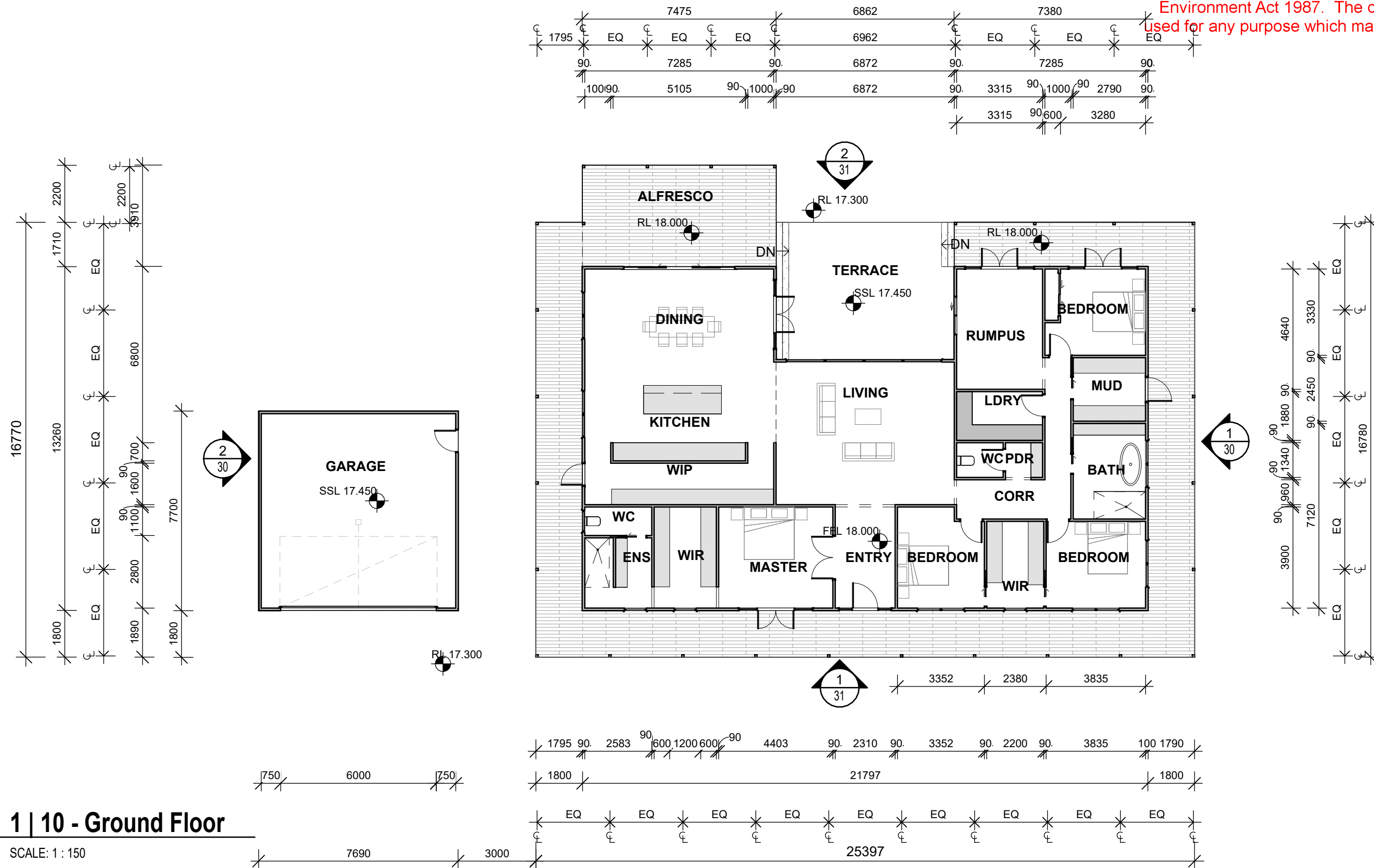
### REV:

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ALL MATERIALS AND FITTINGS TO BE FIXED IN STRICT ACCORDANCE WITH THE MANUFACTURERS SPECIFICATION.

# Atelier 17

A	Town Planning Issue	14/08/23
REV	DESCRIPTION	DATE

**PROJECT:**

P22010: TOORLOO ARM

127 Millpoint Road,  
Toorloo Arm**CLIENT:**

BRENT &amp; KELLY RICHARDSON

**SCALE AT A3:**

1 : 150

CHK: SM

DES: SM

APP: HW

DRW: SM

0 500 1000 2500

SCALE: 1:100

**DRAWING TITLE:**

PLANS

**DRAWING NUMBER:**

P22010-10

**STATUS:**

TOWN PLANNING

**REV:**

A

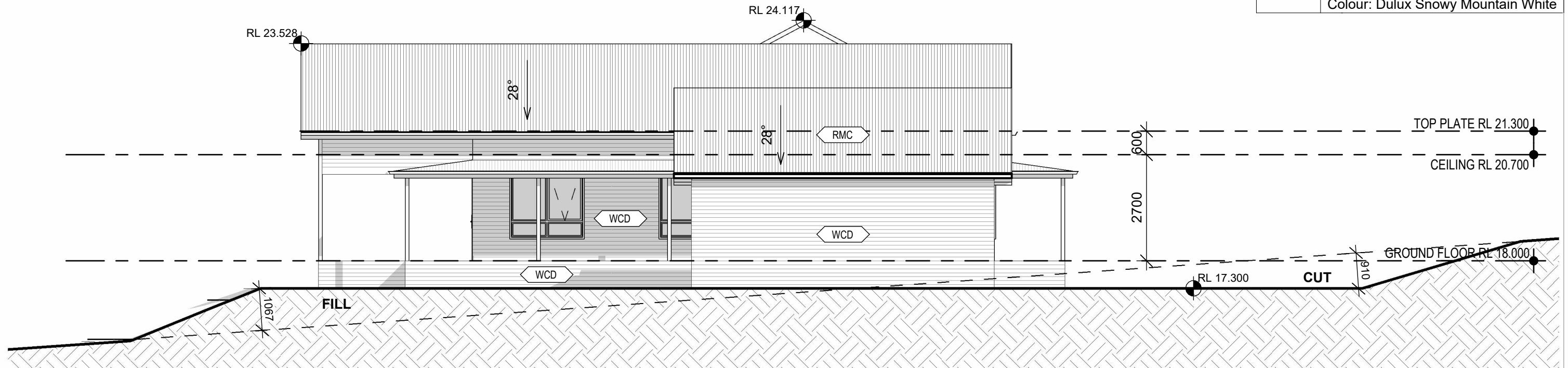
Printed 8/12/2023

Page 54 of 57



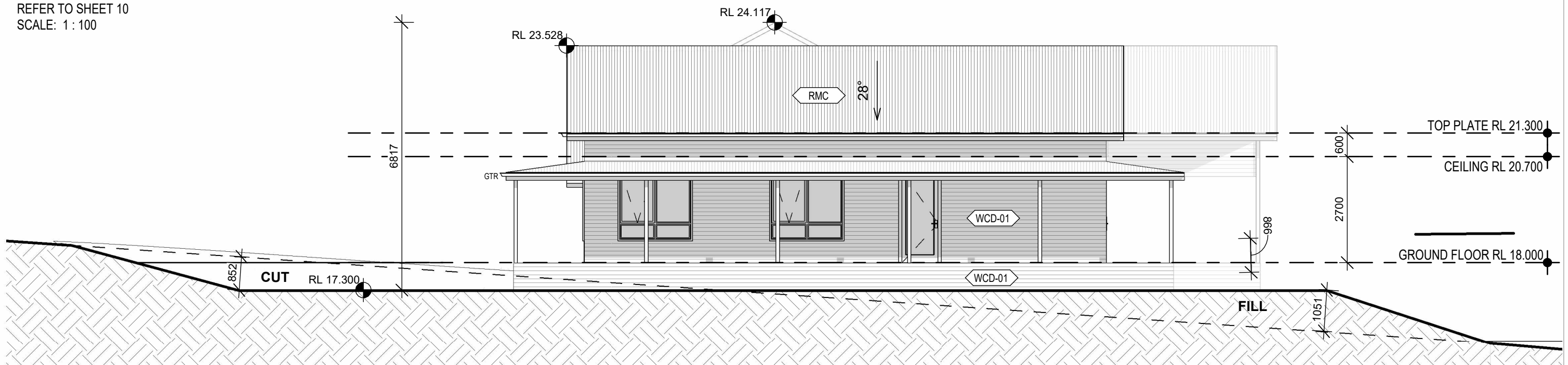
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CODE	DESCRIPTION
GTR	Gutter (Dover White)
RMC	Colour Bond Metal Roof (Dover White)
WCD	Weatherboard EG Wall Cladding Colour: Dulux Snowy Mountain White



## 2 | SOUTH ELEVATION

REFER TO SHEET 10  
SCALE: 1 : 100



## 1 | NORTH ELEVATION

REFER TO SHEET 10  
SCALE: 1 : 100

### NOTES:

THE FOLLOWING NOTES SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL DRAWINGS AND SPECIFICATION RELATING TO THIS PROJECT.  
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**Atelier** 17

REV	DESCRIPTION	DATE
A	Town Planning Issue	14/08/23

### PROJECT:

P22010: TOORLOO ARM

127 Millpoint Road,  
Toorloo Arm

### CLIENT:

BRENT & KELLY RICHARDSON

### SCALE AT A3:

1 : 100

0 500 1000 2500

SCALE: 1:100

CHK: SM

DES: SH

APP: TY

DRW: SM



### DRAWING TITLE:

ELEVATIONS, 1 OF 2

### DRAWING NUMBER:

P22010-30

### STATUS:

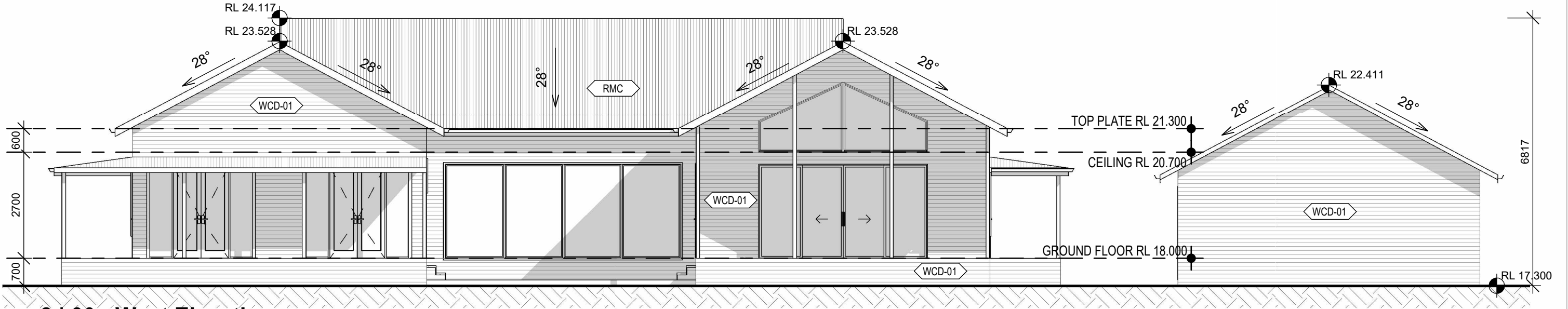
TOWN PLANNING

### REV:

A

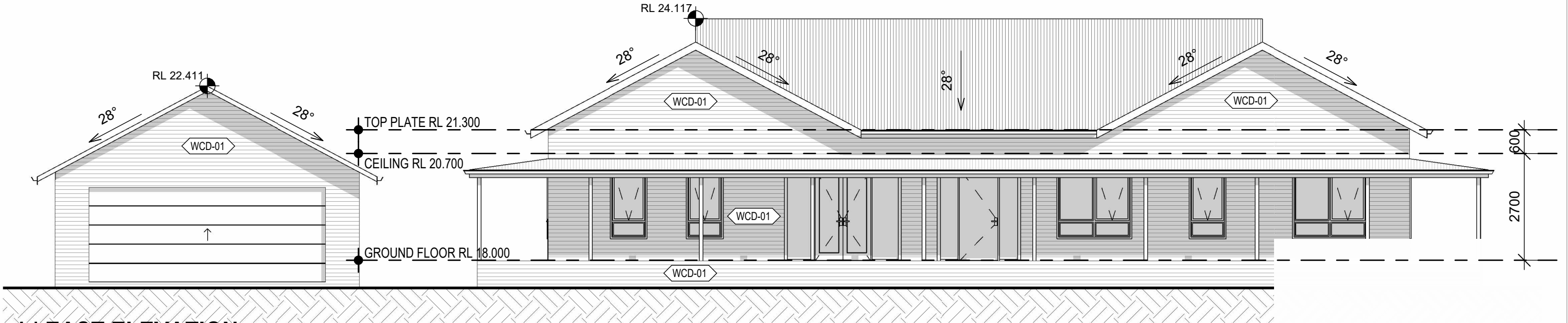
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CODE	DESCRIPTION
GTR	Gutter (Dover White)
RMC	Colour Bond Metal Roof (Dover White)
WCD	Weatherboard (Fletcher Cladding) Colour: Dulux Snowy Mountain White



## 2 | 30 - West Elevation

REFER TO SHEET 10  
SCALE: 1 : 100



## 1 | EAST ELEVATION

REFER TO SHEET 10  
SCALE: 1 : 100

**NOTES:**  
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REV	DESCRIPTION	DATE
A	Town Planning Issue	14/08/23

**PROJECT:**  
P22010: TOORLOO ARM

127 Millpoint Road,  
Toorloo Arm

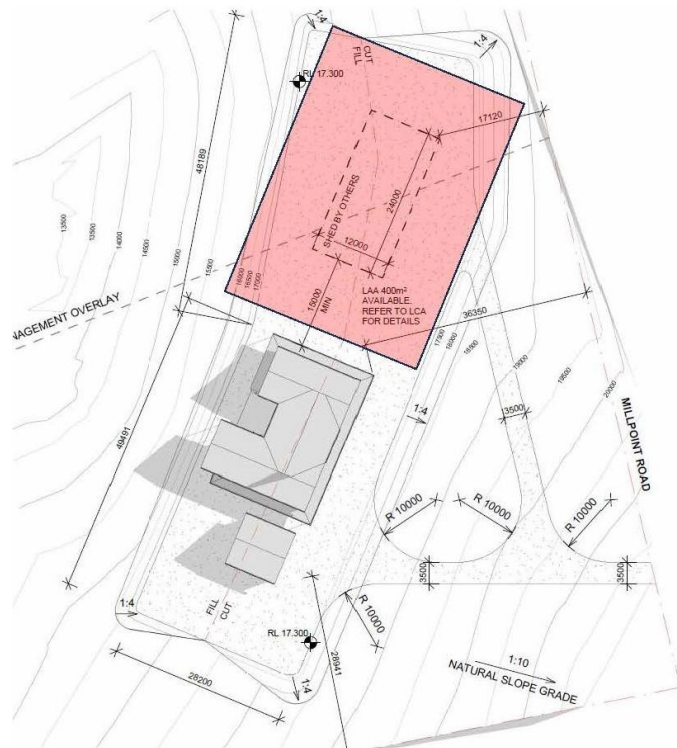
<b>CLIENT:</b> BRENT & KELLY RICHARDSON		
<b>SCALE AT A3:</b> 1 : 100	<b>CHK:</b> SM <b>DES:</b> SH	<b>APP:</b> TY <b>DRW:</b> SM
0 500 1000 2500 SCALE: 1:100		

<b>DRAWING TITLE:</b> ELEVATIONS, 2 OF 2	
<b>DRAWING NUMBER:</b>	P22010-31
<b>STATUS:</b> TOWN PLANNING	<b>REV:</b> A



# Outbuildings Bushfire Management Plan – 127 Mill Point Road, Toorlool Arm

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Prepared By: Courtney Campbell

Version: V.1.

Date: 27/09/2023

## Mandatory Condition

The bushfire protection 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 on a continuing basis. This condition continues to have force and effect after the development authorised by this permit has been completed

## Bushfire Protection Measures

### a) Defendable Space

Defendable space for a distance of 10 metres around the proposed building or to the property boundary, whichever is the lesser is provided and is managed in accordance to the following requirements:

- Grass must be short cropped and maintained during the declared fire danger period.
- All leaves and vegetation debris must be removed at regular intervals during the declared fire danger period.
- Within 10 metres of a building, flammable objects must not be located close to the vulnerable parts of the building.
- Plants greater than 10 centimetres in height must not be placed within 3 metres of a window or glass feature of the building.
- Shrubs must not be located under the canopy of trees.
- Individual and clumps of shrubs must not exceed 5 square metres in area and must be separated by at least 5 metres.
- Trees must not overhang or touch any elements of the building.
- The canopy of trees must be separated by at least 2 metres.
- There must be a clearance of at least 2 metres between the lowest tree branches and ground level.

### b) Construction Requirement

- ☒ Non habitable outbuilding ancillary to a dwelling **is more** than 10 metres from a dwelling has **no** construction requirements.
- ☐ Non habitable outbuilding ancillary to a dwelling **is less** than 10 metres from a dwelling must meet the construction requirements of Table 7 to Clause 52.47

Table 7 Outbuilding construction requirement

#### Building construction condition

The proposed outbuilding is separated from the adjacent building by a wall that extends to the underside of a non-combustible roof covering and:

- has a FRL of not less than 60/60/60 for loadbearing walls and -/60/60 for non-load bearing walls when tested from the attached structure side, or
- is of masonry, earth wall or masonry-veneer construction with the masonry leaf of not less than 90 millimetres in thickness.

Any openings in the wall shall be protected in accordance with the following:

- Doorways – by FRL -/60/30 self-closing fire doors
- Windows – by FRL -/60/- fire windows permanently fixed in the closed position
- Other openings – by construction with a FRL of not less than -/60/-

Note: Control and construction joints, subfloor vents, weepholes and penetrations for pipes and conduits need not comply with Item iii.