



Application for a **Planning Permit**

(i) Privacy Statement

Any material submitted with this application, including plans and personal information, may be made available for public viewing, including electronically, and copies may be made for interested parties for the purpose of enabling consideration and review as part of a planning process under the *Planning and Environment Act 1987*. You must not submit any personal information or copyright material of third parties without their informed consent.

Central Goldfields Shire Council (CGSC) cannot publish your personal information (apart from the relevant address) on its internet site unless you consent to this. Do you consent to your personal information (such as your name and contact details) being made available to members of the public?



No.

Yes. (Name only?)

(i) Questions marked with must be completed.

More information about the planning permit application process is found [here](#).

Please submit your application to planning@cgoldshire.vic.gov.au.

Application type

Is this a [VicSmart](#) application?



No

Yes. Please specify which classes:

Pre-application meeting

Has there been a pre-application meeting with a Council planning officer?

No



Yes. Name and date:

Phone meetings with Penny 1/4/25 and 7/4/25

Applicant details

Name: Dr Wendy van Dok

Organisation (if applicable): N/A

Address:

Phone:

Email:

Preferred contact (if different to applicant):

Name:

Organisation (if applicable):

Address:

Phone number:

Email:

Land details

Address:

185 Lillicur Road Amherst VIC 3371

Formal land description:

Lot: on Lodged Plan/Title Plan/Plan of Subdivision:

OR

Crown Allotment: 11 Section: W

Parish/Township of: Parish of Lillicur

Land owner: Wendy van Dok

Current land use and development description:

Regenerative farm producing native food, foliage, timber and grass seeds,

Proposal

Description of the use, development or other matter proposed:

I seek a permit to replace a decades old dwelling with a new dwelling of similar size and on . Prior to me purchasing the property in 2012, the dwelling was used by shearers and so it has been in continuous use as a dwelling for decades. It has become integral to the operation of the farm. Please see document titled Supporting Information for more details, photos and plans. In addition there is an LCA, BMS and Land Title documents that will be emailed separately.

Estimated cost of development (if applicable): \$150,000-\$200,000

Applicant declaration

- ☒ I declare that all the information in this application is true and correct; and the owner (if not myself) has been notified of the permit application.

Signature: See attached copy of this page with signature, CAN'T paste or insert.

Date: 8th August 2025

Application checklist

- ✓ Correctly filled and signed planning permit application form.
- ✓ Full and current copy of title documents: Register Search Statement, Title Plan and any restrictive covenants (generated within 3 months) – can be purchased from [Landata](#).
- ✓ Plans drawn to scale and dimensioned which show:
 - Site shape, size, dimensions and orientation.
 - The siting and use of existing and proposed buildings.
 - Adjacent buildings and uses.
 - The building form and scale.
 - Setbacks to property boundaries.
- ✓ Information required by the planning scheme.

Bushfire Management Plan – 185 Lillicur Road Amherst VIC 3371



Bushfire Protection Measures

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

a) Defendable Space

- Defendable space is provided for a distance of 30 metres around the building or to the property boundary whichever is the lesser and managed in accordance with the following:
- 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 3m 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 sq. 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 5 metres.
 - There must be a clearance of at least 2 metres between the lowest tree branches and ground level.

b) Construction Standard

The building must comply to a minimum Bushfire Attack Level of BAL – 19 ☒

c) Water Supply

The following requirements apply:

- An effective capacity of 10,000 litres. ☒
- Be stored in an above ground water tank constructed of concrete or metal.
- Have all fixed above ground water pipes and fittings required for firefighting purposes made of corrosive resistant metal.
- Include a separate outlet for occupant use.

Where a 10,000 litre water supply is required, the following fire authority fittings and access must be provided:

- Be readily identifiable from the building or appropriate identification signage to the satisfaction of the relevant fire authority.
- Be located within 60 metres of the outer edge of the approved building.
- The outlet/s of the water tank must be within 4 metres of the accessway and unobstructed.
- Incorporate a separate ball or gate valve (British Standard Pipe (BSP 65 millimetre) and coupling (64 millimetre CFA 3 thread per inch male fitting).
- Any pipework and fittings must be a minimum of 65 millimetres (excluding the CFA coupling).

d) Access

Access Required: No ☐

Yes ☒ The following design and construction requirements apply:

- All-weather construction.
- A load limit of at least 15 tonnes.
- Provide a minimum trafficable width of 3.5 metres.
- Be clear of encroachments for at least 0.5 metres on each side and at least 4 metres vertically.
- Curves must have a minimum inner radius of 10 metres.
- The average grade must be no more than 1 in 7 (14.4%) (8.1°) with a maximum grade of no more than 1 in 5 (20%) (11.3°) for no more than 50 metres.
- Dips must have no more than a 1 in 8 (12.5%) (7.1°) entry and exit angle.

Length of access is greater 100 metres: Yes ☐ No ☒

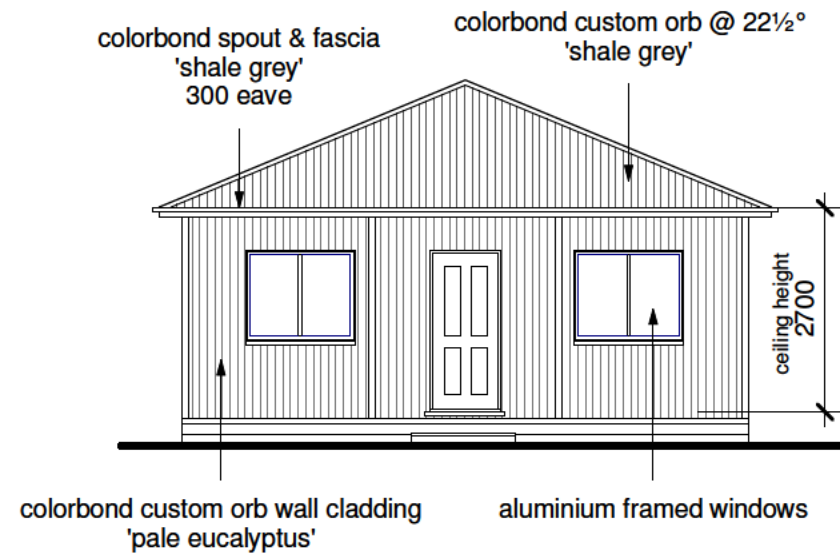
Where length of access is greater than 100 metres the following design and construction requirements apply:

- A turning circle with a minimum radius of eight metres, or
- A driveway encircling the building, or
- The provision of other vehicle turning heads – such as a T or Y Head – which meet the specification of Austroad Design for an 8.8 metre service vehicle.

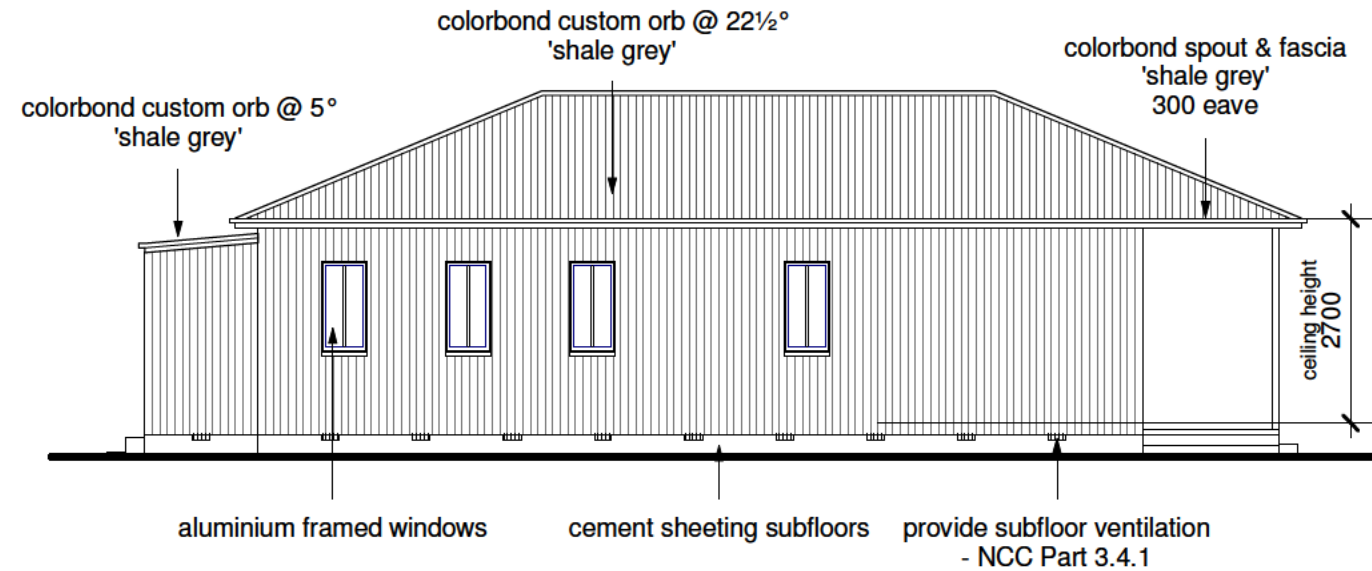
Length of driveway is greater than 200 metres: Yes ☐ No ☒

Where length of access is greater than 200 metres the following design and construction requirement applies:

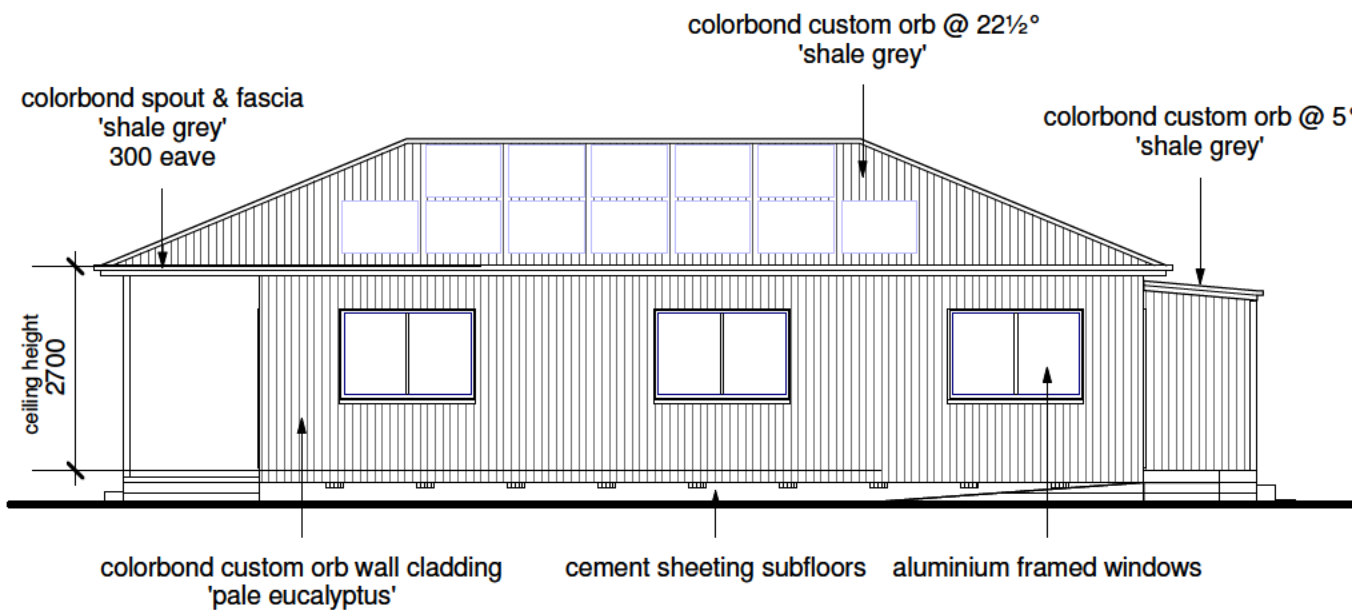
- Passing bays are required at least every 200 metres that are a minimum 20 metres long and a minimum trafficable width of 6 metres.



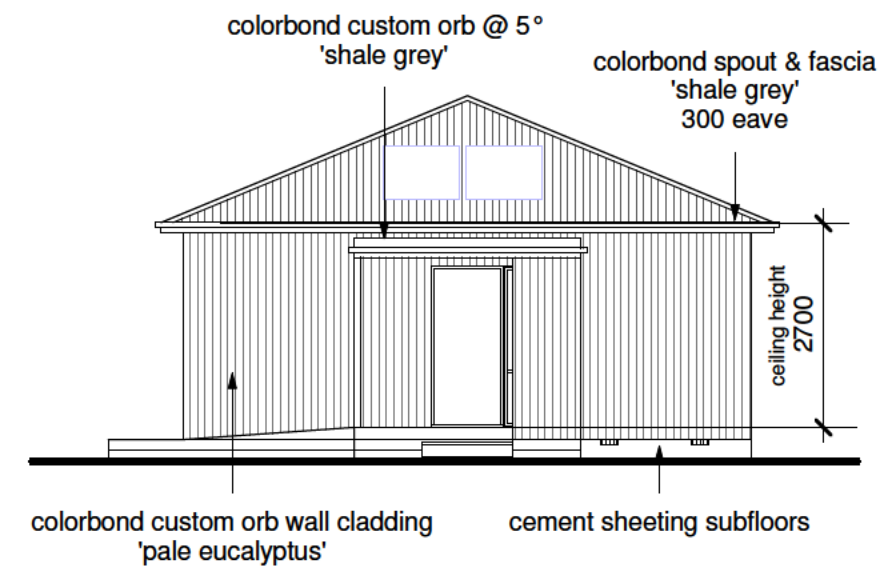
east elevation



south elevation



north elevation



west elevation

Amendments:

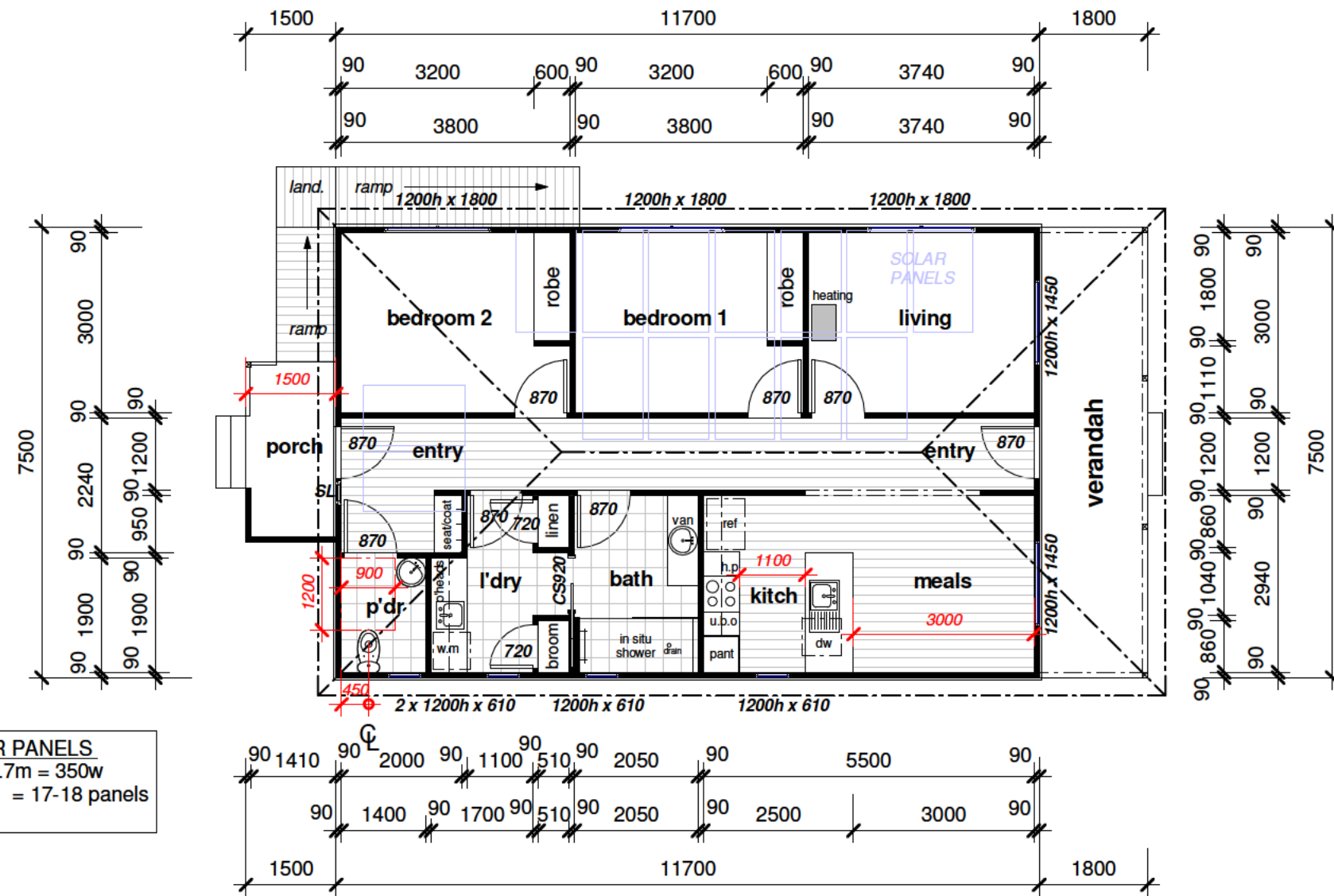
Tony De Jong Drafting P/L

D.P. AD 244
A.B.N: 38 233 853 783
Phones: 0419 538 580
Email: dejongdrafting66@gmail.com

project name:
client:
address:

PROPOSED DWELLING
W. VAN DOK
185 LILICUR ROAD,
AMHERST

scale: 1 : 100 A3
date: 17 / 10 / 2025
sheet no: 03
drg no: 25309



floor plan

* All walls dimensioned to stud framing.
 Colorbond custom orb attached to 45mm battens.

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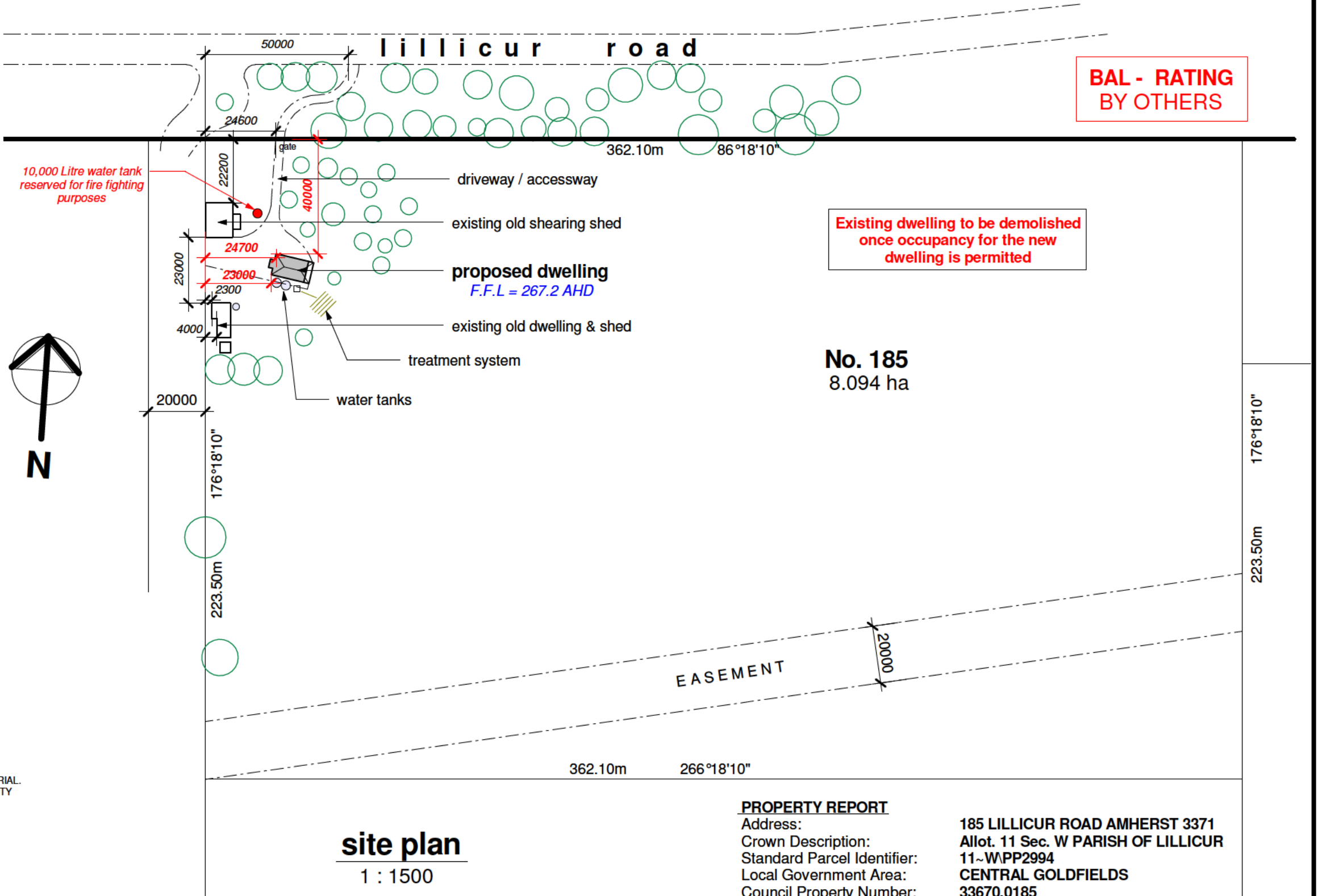
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Notes:

1. ALL WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS.
2. ALL DIMENSIONS AND LEVELS ARE TO BE CONFIRMED PRIOR TO THE COMMENCEMENT OF ANY WORKS.
3. DIMENSIONED SIZES OF MATERIALS ARE NOMINAL ONLY AND MAY DIFFER SLIGHTLY TO ON-SITE MEASUREMENTS DUE TO VARIANCES IN MANUFACTURING PROCESSES.
4. ALL MATERIALS AND BUILDING WORKS ARE TO BE STRICTLY IN ACCORDANCE WITH NCC 2022, VOLUME 2, ABCB - HOUSING PROVISION AND REFERENCED STANDARDS.
5. ALL TIMBER AND FRAMING TO BE IN ACCORDANCE WITH AS 1684.2 - NATIONAL TIMBER FRAMING CODE AND ATTACHED ENGINEERS DESIGN.
6. ALL WET AREAS TO BE COVERED BY IMPERVIOUS FLOOR & WALL AS PER AS 3740 - WATERPROOFING OF DOMESTIC WET AREAS.
7. SMOKE DETECTION DEVICE TO BE INSTALLED ADJACENT TO BEDROOM AREAS IN STRICT ACCORDANCE WITH THE FOLLOWING -
 - (i) NCC 2022, VOLUME 2, PART H3 P3
 - (ii) PART 9.5 OF ABCB - HOUSING PROVISION BE INTERCONNECTED AND CONNECTED TO CONSUMER MAINS POWER, WHERE CONSUMER MAINS POWER IS SUPPLIED TO THE BUILDING. SMOKE ALARMS MUST COMPLY WITH AS 3786.
8. BUILDING SEALING AND PENETRATION SEALING TO COMPLY WITH PART 13.4 OF ABCB - HOUSING PROVISION.
9. ROOF CLADDING AND DETAILS -
CLADDING - COLORBOND CUSTOM ORB @ 22½° (DWELLING)
FRAMING - PRE-FAB ROOF TRUSSES @ 900 C/C
10. EXTERNAL WALL FINISH - COLORBOND CUSTOM ORB
11. 100 x 50 QUAD METAL DOWNPIPES TO BE PROVIDED AT LOCATIONS SHOWN ON ATTACHED PLANS. COLLECTED STORMWATER IS TO BE DISCHARGED TO STORMWATER LINES DIRECTED TO L.P.O.D REFER BUSHFIRE NOTES FOR ANY ADDITIONAL SPECIFICATIONS. DOWNPIPE LOCATIONS ARE INDICATIVE ONLY. INSTALLER TO DETERMINE ACTUAL LOCATIONS.
SPOUTING - 115mm COLORBOND 'QUAD' WITH OVERFLOW SLOTS.
MINIMUM FALL TO BE 1 : 500
SUPPORTS @ 1200 C.C. MAX.
12. ALL WINDOWS TO BE ALUMINIUM FRAMED WITH AWNING/SLIDING SASHES U.N.O.
ALL GLAZING TO BE IN ACCORDANCE WITH
 - (i) NCC VOLUME 2, PART H1 D8
 - (ii) PART 8.2, ABCB - HOUSING PROVISION.
 - (iii) CURRENT EDITIONS OF AS 1288 AND AS 2047.REFER TO WINDOW SCHEDULE AND 6 STAR ENERGY REPORT FOR SPECIFIC ALLOWANCE.
SLIDING DOORS AND FULL HEIGHT WINDOWS TO BE PROVIDED WITH 20mm WIDE CONTRAST STRIPS LOCATED BETWEEN 700 - 1200 ABOVE ADJACENT FINISHED FLOOR LEVEL.
ALL GLAZING IN KITCHENS, BATHROOMS, ENSUITES, SPA ROOMS OR THE LIKE INCLUDING SHOWER DOORS, SHOWER SCREENS, BATH ENCLOSURES AND ASSOCIATED WINDOWS AND DOORS (INCLUDING CABINET DOORS), WHERE THE LOWEST SIGHT LINE IS LESS THAN 2.0m ABOVE THE HIGHEST ABUTTING FINISHED LEVEL OF THE FLOOR, BOTTOM OF THE BATH, OR SHOWER BASE, MUST:
-FOR FRAMED PANELS, BE GLAZED WITH GRADE A SAFETY GLAZING MATERIAL.
-FOR PANELS OF DOORS WITH ANY EDGE EXPOSED, BE TOUGHENED SAFETY GLASS WITH A MINIMAL NOMINAL THICKNESS OF 6mm.
13. THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH:
 - (a) APPROVED PLANNING PERMIT AND STAMPED PLANS.
 - (b) ENGINEERS DESIGNS AND SPECIFICATIONS.
 - (c) BUILDING SPECIFICATIONS.
 - (d) ENERGY REPORT.
14. MONOLITHIC ANNEALED GLASS MAY BE USED FOR MIRRORS PROVIDED A FIXED VANITY OR BENCH WITH A HEIGHT OF NOT LESS THAN 760mm AND DEPTH OF NOT LESS THAN 300mm AND EXTENDS THE ENTIRE WIDTH OF THE MIRROR IN FRONT OF THE MIRROR. MONOLITHIC ANNEALED GLASS MAY BE USED FOR SPLASHBACKS PROVIDED IT IS FULLY BACKED BY AND CONTINUOUSLY ADHERED TO A SOLID WALL MATERIAL OR A FIXED CABINET OR BENCH THAT IS:
-A HEIGHT NOT LESS THAN 760mm; AND
-A DEPTH NOT LESS THAN 300mm; AND
-EXTENDING THE ENTIRE WIDTH OF THE SPLASHBACK AND
-LOCATED IN FRONT OF THE SPLASHBACK.



**BAL - RATING
BY OTHERS**

**Existing dwelling to be demolished
once occupancy for the new
dwelling is permitted**

**No. 185
8.094 ha**

site plan
1 : 1500

PROPERTY REPORT

Address: 185 LILLICUR ROAD AMHERST 3371
Crown Description: Allot. 11 Sec. W PARISH OF LILLICUR
Standard Parcel Identifier: 11~WPP2994
Local Government Area: CENTRAL GOLDFIELDS
Council Property Number: 33670.0185
Directory Reference: Vicroads 58 C4

PLANNING PROPERTY REPORT

Planning Zones: Farming Zone FZ
Planning Overlays: Bushfire Management Overlay BMO
Erosion Management Overlay EMO
Land Subject to Inundation LSIO *part
Salinity Management Overlay SMO
Designated Bushfire Prone Area

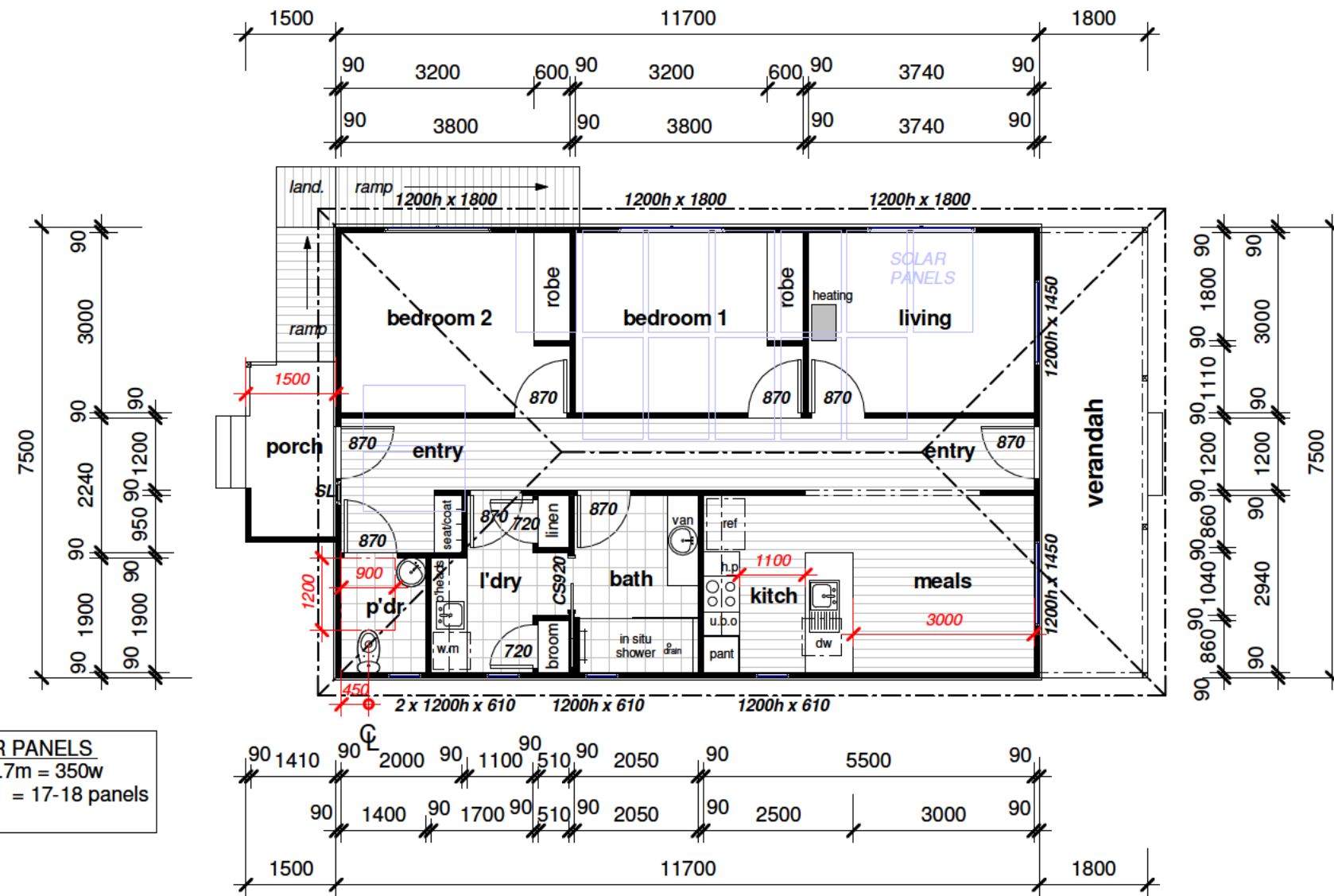
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address: **185 LILLICUR ROAD,
AMHERST**

scale: 1 : 1500 **A3**
date: 17 / 10 / 2025
sheet no: **01**
drg no: **25309**



floor plan

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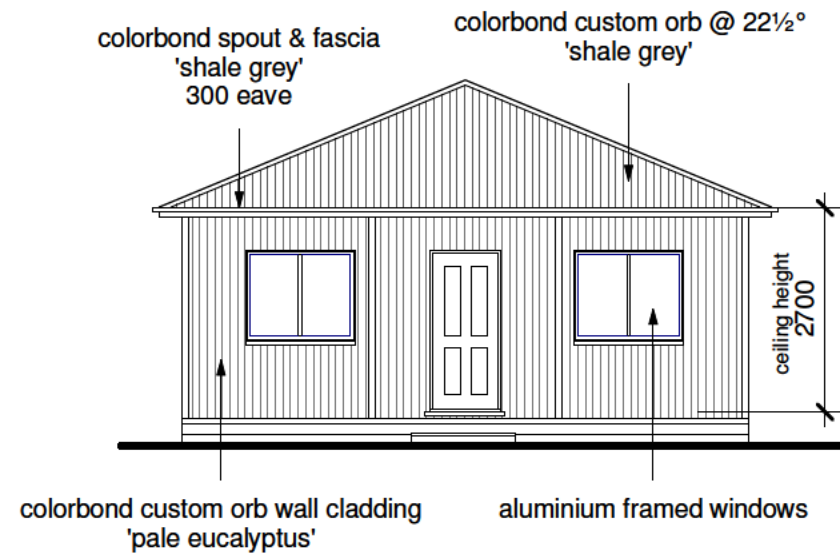
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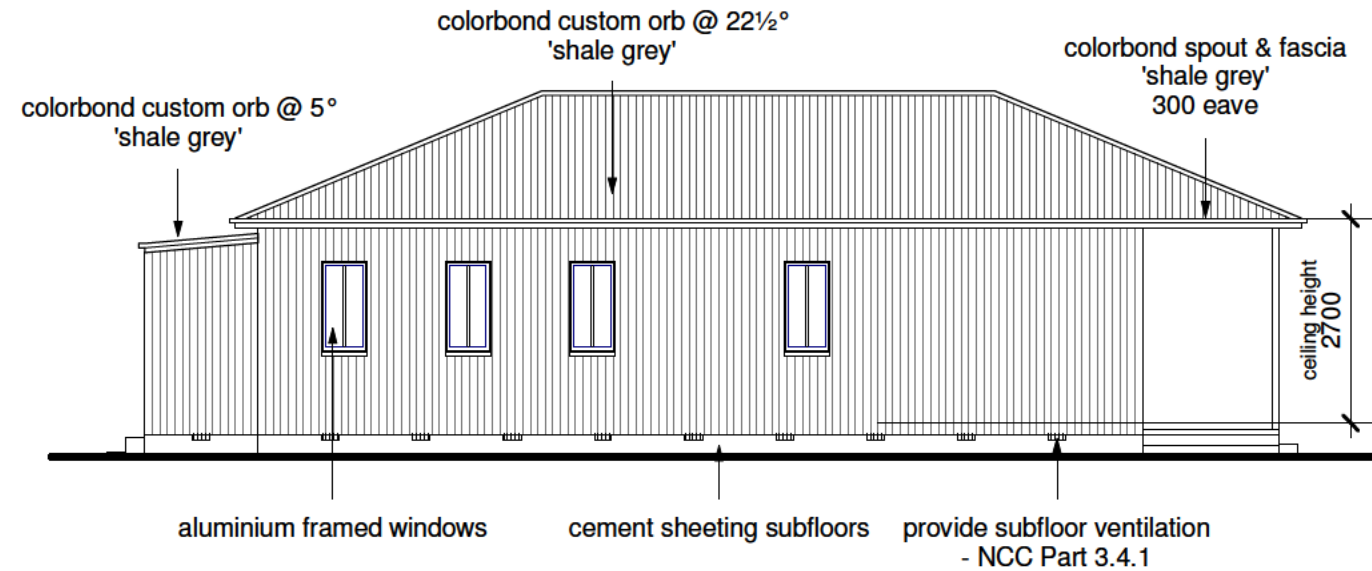
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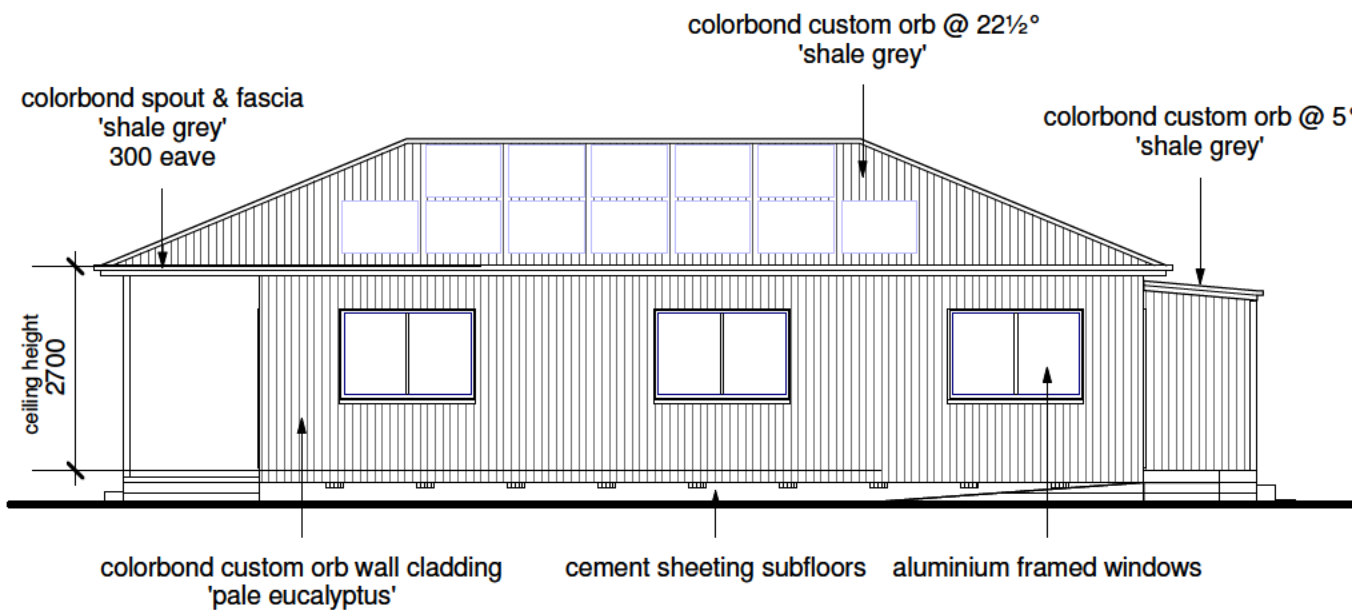
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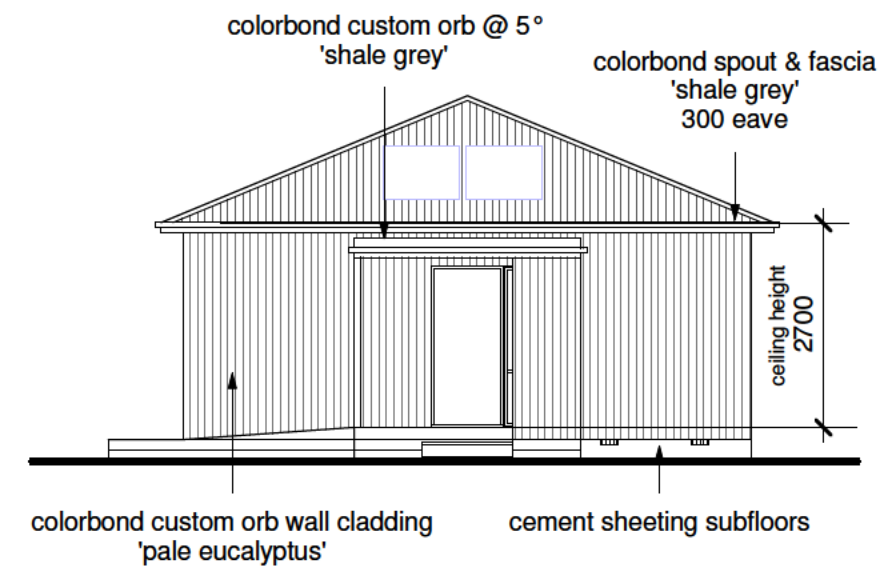
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north elevation



west elevation

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AMENDED SUPPORTING INFORMATION

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1 The Proposal

Why a planning permit is being sought

This application is for a planning permit to replace a decades old dwelling with a new, improved dwelling of a similar footprint and height in the same location. The property is 8 Ha, which is less than the preferred 40 Ha for a dwelling in a Farming Zone, but this application only wants to replace old for new as the existing dwelling is compromised by termite damage and weathering. It will be dismantled as soon as occupancy in the new dwelling is permitted. Figure 1 below shows the old dwelling in 2012 and 2025.



Figure 1 Left: Existing dwelling in 2012 when I purchased the property, facing SW **Right:** Existing dwelling as it is now in 2025.

The dwelling has been used by me for almost 14 years and previously, by shearers since it was built in the 1980s. While this does not constitute continuous use by the definition in Clause 63.11, the dwelling has been used periodically over the last 30-40 years for the purposes of housing people who are integral to farming operations. Currently, the dwelling is integral to the regenerative farming of native plants for food, foliage, timber and seeds. The reasons are outlined in the following paragraph and elaborated on in Section 3, Responses to Decision Guidelines 35.07-6.

Agricultural justification for the permit to use land for a dwelling

Despite the planning anomaly of there being a 20-acre Farming Zone allotment with a dwelling in the first place, such a small plot is unlikely to sustain any conventional stock or crop agriculture, at least not profitably. The fact that I bought it—when neighbours did not want it—and am applying regenerative farming practises means the land is much better off than it would have been under stock, or had it not been purchased and left as it was in 2012.

The property, now called Amherst Farm, is producing small quantities of food, foliage and seeds, but progress has been slow because of the need to commute to and from Melbourne so often. When I purchased the property, I was advised by the then CG Shire Planner that I was not permitted to use the dwelling as a permanent residence. Moreover, because the dwelling was so small and the farm so remote, there was nowhere for other workers to stay so I have had to do most of the work myself which is slow going. A new permitted house with a second bedroom will enable farm work to accelerate because I will be able to work onsite full-time and other workers can be accommodated.

With time-critical activities like watering seedlings, protecting plants from grazers and frosts, harvesting seeds and nuts and cutting foliage for floristry, several days absence can make all the difference between success and loss. Being on site all the time will also improve security, reduce theft and vandalism, increase bushfire hazard management and weed management. For the above reasons, replacing the old dwelling with a new one will improve, not diminish agricultural productivity and environmental outcomes.

The old shearing shed is still intact and being used as a storage area and workshop but will eventually be dismantled also. The corrugated roof and steel posts, facing South (Figure 2 Right), which were constructed not long before I purchased the property, are very sound and will be retained as a carport for machinery and vehicles (Figure 2). Both roofs will be needed initially to fill the 10kL tank for firefighting.



Figure 2 Left: Shearing shed in 2012 with the dwelling in the background facing SW **Right:** in 2025 where some walls have been removed to make way for a carport and work bench under the metal roof which was constructed not long before I purchased the property.

Description of the site

The property is rectangular being 362m by 224m and aligned on a slight NW-SE axis (Figure 3). The natural slope is less than 5% and runs NE (Figures 3 & 4).

The old dwelling and shearing shed are in the NW corner along the West boundary. There are no other buildings on the property. The new dwelling will be located about 15 m NE of the existing dwelling (Figure 5). Also see the Site Plan in Attachment 3 for more detail.

The new dwelling site was chosen because:

- It is at the highest part of the property and never gets boggy, even after heavy rain. >15m further SE, E or NE is lower and does get boggy. Moreover, further SE is too close to the cluster of mature gums south of the existing dwelling.
- It will have the least impact on vegetation. This is elaborated on in Section 3 under Siting and Environmental Issues.
- There will be no net loss of agricultural land. The new dwelling will have a similar footprint to the existing dwelling which will eventually be demolished and removed.
- It's close to the all-weather crossover from Lillicur Rd and driveway and can make use of the existing car port for vehicle parking.
- It is well away from the gas pipeline easement.
- It is further away from the dust generated by the neighbour driving along the Government Road.



Figure 3 Aerial photo of the property (a) showing the boundary, natural drainage and existing buildings in the NW corner.

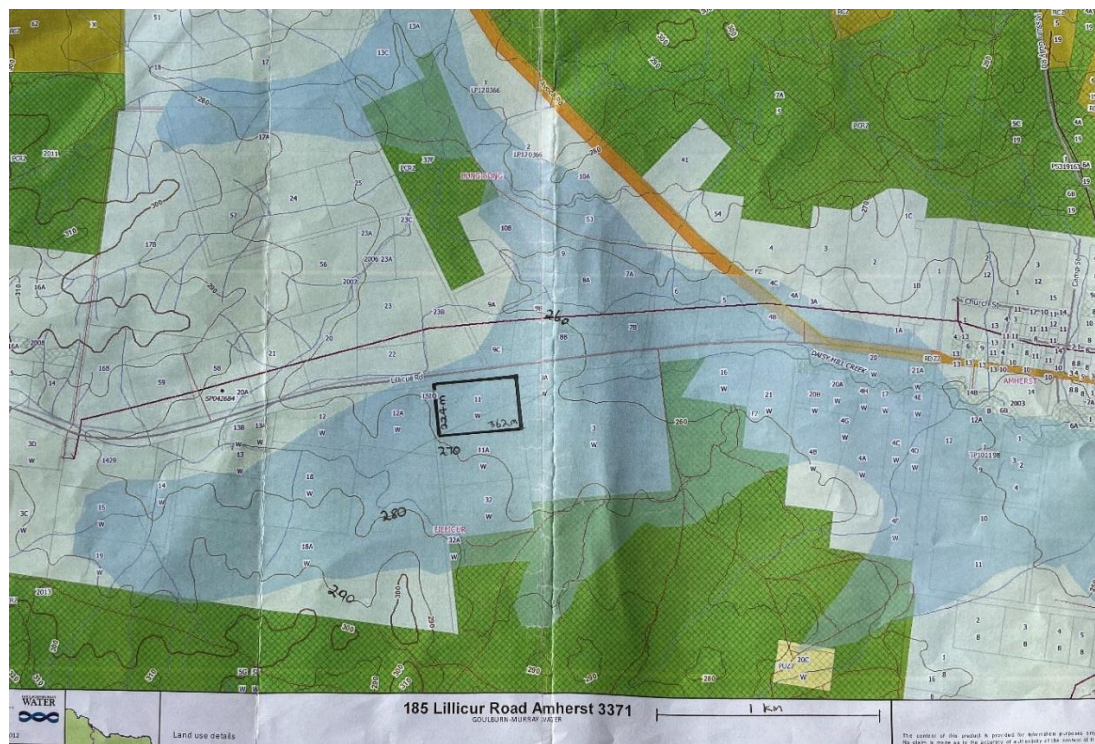


Figure 4 GMW Contour map of the catchment surrounding the property.



Figure 5 Site of the new dwelling **Left:** Aerial photo showing the old dwelling in the bottom left corner and the shearing shed in the top left. The new dwelling will be located about 15m NE of the old dwelling and is indicated by the hatched rectangle. **Right:** Site of the proposed new dwelling, taken from the driveway facing W-SW.

Addressing the LSIO

Advice from the North Central CMA (Attachment 4) indicates that in the event of a 1% AEP flood event it is likely that only a small portion of the property along the northern boundary will be subject to inundation. The location of the proposed dwelling, and by extension the absorption trenches, are not subject to flooding. The applicable 1% AEP flood level for the site of the proposed dwelling is 265.4 metres AHD, based on the Central Goldfields Regional Flood Mapping Study, 2024. LIDAR information available to the North Central CMA indicates that the approximate land level in this location is in the order of 266.7 metres AHD, i.e. 1.3 metres above the estimated flood level.

Description proposed new dwelling

The proposed dwelling will be a simple rectangular shape, single storey, with a timber frame construction, hip roof, plaster interior cladding and corrugated iron external cladding and roofing. The ceiling height will be 2.7m and the final floor level will be 267.2 AHD. See Attachments 3, 5 & 6. The dwelling will be raised on concrete stumps to address the LSIO but the open area underneath the building will be covered to comply with the BMO. The dwelling will be constructed to BAL 19 standard.

External walls will be Colorbond custom orb 'pale eucalyptus'. The roof will be Colorbond custom orb 'shale grey'. The base boards covering the stumps will be a painted light shale grey colour and made of fibro-cement. All windows will be sliding aluminium. Stormwater movement will be facilitated around the building with swales. There will be a small 1.8 m wide veranda and decking on the east side to provide shade in summer and a small porch at the back to protect the back entrance from wind and rain. Access by ramp will be at the West. The dwelling will be surrounded by 1m wide paving.

There will be 12-14 solar panels 1m x 1.7m on the roof which will generate 4-5Kw.

2 Existing Conditions

Current use

The property, now known as Amherst Farm, is currently a regenerative native plant farm that produces food, foliage for floristry, timber and native grass seeds.

When I purchased the property in 2012, it was cleared, weedy, heavily compacted from over-grazing, polluted with agricultural chemicals and had poor quality exposed soil (Figure 6). There are only 4 very old-growth trees on the property, and all are along the boundary fences, well away from the dwelling, 2 are Yellow Gum and 2 are Grey Box.

The property now has more vegetative cover, fewer weeds, less erosion and is far more productive (Figure 7). There is a mixture of grasses covering the whole property, and so far about 30% of the farm has been planted out with shrubs and trees. The intent is to plant another 1,000 seedlings over the next 5 years, mainly Wattles, Sandalwood, White Pine and Box-ironbark Eucalypts (see Figure 8).



Figure 6 Photos of the property in 2012 when I purchased it **Left:** view from West boundary fence next to the dwelling and **Right:** view from the NW corner.



Figure 7 Same views as in Figure 6 but taken in 2024 to illustrate the increase in vegetation cover **Left:** view from West boundary fence next to the dwelling and **Right:** view from the NW corner.



Figure 8 Native grasses, Acacias, Sandalwood, Calitris and Eucalyptus trees being grown at Amherst Farm for edible seeds, nuts, foliage, high value timber and native grass seeds.

Access

There is an all-weather crossover from Lillicur Rd (Figure 9) and driveway into the property (Figure 10). Both are at a high point of the property and don't get boggy even after very heavy storms. There is also an unsealed Government road that runs along the West boundary in the neighbouring property (Figure 11) with an accessible gate to my property close to the gas pipe easement in the SW corner. There is plenty of room for vehicles to manoeuvre and turn once you pass through the gate.



Figure 9 Crossover from Lillicur Rd **Left:** facing west **Right:** facing east.



Figure 10 All-weather access driveway which will be layered with crushed gravel.



Figure 11 Unsealed Government Road which runs along my West boundary in the neighbour's property, access can be gained to my property through a gate at the SW corner.

Physical features and climate

There is no natural permanent or running water on the property. There is a small dam <1ML on the NE boundary, but it is always dry in Summer. It's not sealed properly.

Amherst climate ranges in extremes from severe 40°C heat and dry in summer to frosts as low as -5°C and heavy rain in winter. Talbot long-term data have a lot of gaps so the Maryborough weather station data, 15 km away has been used for the calculations in Table 1. Median annual rainfall at Maryborough is 535.6 mm. Winds dominate from the South and SW all year with hot North winds occurring frequently in Summer.

Power supply

There is no mains power, so the existing dwelling is completely off-grid. Current power comes from a combination of solar for electricity, gas cylinders for cooking and hot water, wood heating, petrol driven pumps and a petrol generator as back-up. This same mix of energy sources will be used for the new dwelling, but the solar panels will be increased to 12-14 solar panels 1m x 1.7m which will generate 4-5Kw.

Water

Table 1 below indicates that sufficient potable water can be harvested from the shed and dwelling roofs and be stored in tanks with a total capacity of 20 kL. In addition, there will be a 10kL tank dedicated to firefighting. The older roof of the shearing shed will be used to fill the firefighting tank before the shed is dismantled. Overflow from the other shed roof will keep the tank topped up. It will probably take at least a year to fill all the tanks.

Table 1 Estimated monthly harvestable rainwater supply

Month	Median Rainfall Maryborough	Total Roof Area House: 7.5x13.5 = 101 m ² Shed: 7.3x9.6 = 70 m ²	Harvestable Supply Median rainfall x 171 ²
	(m)	(m ²)	m ³ [kL]
Jan	.023	171	3.9
Feb	.022	171	3.8
Mar	.025	171	4.3
Apr	.032	171	5.5
May	.042	171	7.2
Jun	.054	171	9.2
Jul	.053	171	9.1
Aug	.053	171	9.1
Sep	.045	171	7.7
Oct	.048	171	8.2
Nov	.034	171	5.8
Dec	.029	171	5.0

Wastewater

In the absence of a sewerage system, mains water or mains power, a Land Capability Assessment (LCA) was undertaken by Western Victoria Soil Testing to assess the soil's suitability and capability to both treat and retain all generated effluent within the allotment's boundaries.

The Land Capability Class Rating (LCCR) of the site was determined to be a 5, primarily due to the risk of sodic/dispersive soil at the site. Therefore, wastewater will be managed as per the recommendations of the LCA. That is, a secondary wastewater treatment system connected to a conventional trench system with a minimum total trench length of 40m and where the trenches are 0.6m in width. The treatment system chosen will achieve a minimum 20/30/10 effluent quality (BOD < 20mg/L, TSS < 30mg/L and E. Coli < 10cfu/100mg).

The quality of grey and blackwater will be managed, as much as possible, at the source, by:

- using efficient appliances and being frugal with water use,
- not discharging bleach or caustic cleaning chemicals down the drains,
- using gentle liquid detergents for cleaning and where necessary an antimicrobial surface spray,
- filtering hair, lint and food at the drains,
- using only liquid, phosphorus free, and low sodium detergents, body wash, and shampoos,
- using buckets for cleaning and handwashing that can be emptied elsewhere,
- using buckets to collect clean water from the shower as the temperature warms,
- not pouring oils and fats down the drain, these will be soaked up by paper towel and burnt or composted.

3 Responses to Decision Guidelines of Clause 35.07-6

General Issues

- This application is for a planning permit to replace a decades old dwelling with a new, improved dwelling of a similar footprint and height in the same location. The property is 8 Ha, which is less than the preferred 40 Ha for a dwelling in a Farming Zone, but this application only wants to replace old for new.
- The dwelling has been used at different times over the last 30-40 years for the purposes of housing people who are integral to farming operations. Currently the dwelling is integral to the regenerative farming of native plants for food, foliage, timber and native grass seeds.
- The LCA attached to this application demonstrates that with appropriate construction and good management, the effluent can not only be treated and absorbed but be used productively.
- Being at the highest part of the property is important in the context of the LSIO. Advice from the North Central CMA indicates that in the event of a 1% AEP flood event it is likely that only a small portion of the property along the northern boundary will be subject to inundation. The location of the proposed dwelling, and by extension the absorption trenches, are not subject to flooding.
- The gas pipeline easement, about 200m further south of the dwelling will not be affected. There are no covenants or Section 173 agreement that relate to the property.
- The old dwelling will be demolished as soon as permission to move into the new dwelling is granted.

Agricultural Issues

- Siting the new dwelling next to the existing dwelling means that there will be no net loss of agricultural land because:
 - The old and new dwellings have a similar footprint and the old dwelling will be demolished along with the older half of the shearing shed.
 - The driveway and crossover existed when I bought the property although I have improved both. These will be retained and widened in some places.
- The property, now called Amherst Farm, is producing small quantities of food and foliage, but progress has been slow because of the need to commute to and from Melbourne so often. When I purchased the property, I was advised by the then CG Shire Planner, Norm Cameron, that I was not permitted to use the dwelling as a permanent residence, only a weekender. Moreover, because the dwelling was small and the farm remote, there was nowhere for other workers to stay. I have had to do most of the work myself which is slow going. A new permitted house with a second bedroom will enable farm work to accelerate because other workers can be accommodated and I can be on site full-time.
- With time-critical farming activities like watering seedlings, protecting plants from grazers and frosts, harvesting seeds and nuts and cutting foliage for floristry, several days absence can make all the difference between loss and success. One year I lost most of my wattle seeds to birds because I didn't realise the pods were opening early after a heat wave.
- Being on site all the time will not only improve agricultural outcomes, but it will improve security, reduce theft and vandalism, increase bushfire hazard management and weed management. For the above reasons, replacing the old dwelling with a new one, in this case at least, will improve, not diminish agricultural productivity.
- None of the neighbours wish to live on their properties and so there is no reason why this proposal to replace an existing dwelling should lead to the proliferation of other dwellings in the area.

- Both neighbouring farm owners had the opportunity to buy the land and expand their farms before I purchased it, but they chose not to. Therefore, replacing the old dwelling is not going to limit their operations.
- The land is not only capable of sustaining the existing agricultural use, it will benefit from it. Wildlife are returning, particularly insects, which benefit all farmers in the area. My farm is also a haven for kangaroos which I welcome, and this takes pressure of neighbouring sheep farms who regularly shoot wildlife.
- Over thirteen years, the following regenerative farming practices have improved the land significantly.
 - Excluding stock has been the single most effective way to improve the land.
 - Erosion of topsoil from the higher, more exposed parts of the property has been ameliorated by the roots of trees and shrubs, and by keeping grass cover all year.
 - Patches of soil that were rendered sterile by chemicals in the past have had green clippings piled on them for many years and are slowly recovering.
 - By pruning limbs and foliage and leaving them on the ground, carbon and other nutrients are being returned to the soil which not only improves fertility but also provides habitat, protects the soil in summer and helps slow stormwater flow and impedes erosion.
 - Acacias, which are legumes, are grown extensively but many are short lived so when they die and are cut down, the roots are left in the ground which helps to nitrify the soil.
 - The trees, by way of their deep roots and transpiration, are reversing the effects of previous land clearing by lowering the water table.
 - Soil biota and terrestrial wildlife have increased significantly. Insects in particular bees, are thriving which benefits all farms in the vicinity.
 - Finally, several weeds like thistles have been eradicated and others like cape tulip are now under control. This requires constant vigilance.

Dwelling Issues

- Based on my experience of staying at the property for almost 14 years, to date, no activities on neighbouring farms have adversely affected my farm except for road dust and a couple of times when the use of insecticides killed a lot of bees and other insects. However, since I spoke to my neighbour about the dead bees, he has not sprayed again.

Environmental Issues

- Now that trees are maturing and there is more habitat on the ground, the biodiversity is increasing. Birds, lizards, echidnas and particularly insects are proliferating. A particular problem species has been Antechinus as they love Sandalwood nuts and have destroyed hundreds of seedlings over the years. The solution is to stow anything important in metal or behind wire guards.
- I have planted over 350 native trees and shrubs, mostly indigenous Eucalypts and Wattles. Many additional Eucalypts have self-seeded along the North boundary and SW corner.

Impacts of Siting the Dwelling on Vegetation

- The high number of planted trees and shrubs already growing compensates for the small number that need to be removed to make way for the new dwelling. Only 3 trees need to be cut down and of those, one, a self-seeded Yellow Gum, is diseased with borer and needs to come down. Another, an Ironbark, also self-seeded, is too close to an older Ironbark next to it. The third, a Grey Box was planted by me. Of the shrubs that need to be removed, most are short-lived Wattles like *A. provincialis*, *A. acinacea* and *A. saligna*. All were planted by me for edible seeds. With regular water these shrubs can live for 15-20 years but there have been long dry spells since they were planted and many are unhealthy and need to be removed anyway. Fortunately,

A. provincialis which makes up most of the shrubs to be removed are now self-seeding further away from the proposed new dwelling.

- The new dwelling will be 30m away from a cluster of 4 mature Eucalypts immediately south of existing dwelling, where the canopies cannot be separated.
- The 4 very old trees dotted around the property will not be affected.
- It is important to take into account that the Eucalypt saplings which have self-seeded along the northern boundary are crowded together and need to be thinned out. Those with straight trunks will be harvested for high grade timber in 10 years and diseased trees will be removed and used for firewood. The aim is for one healthy mature tree every 15-20m between trunks. Long term this will help manage bushfire hazard as the canopies will be separated.

Other Siting Issues

- The site for the new dwelling was chosen for many reasons but primarily so that the least amount of significant vegetation will be adversely affected, see above.
- The site is close to the all-weather crossover from Lillicur Rd and driveway into the property and is close enough to the shearing shed so that good use can be made of the metal car port for vehicle storage. This will reduce the cost of gravel paving for the existing driveway.
- It's within a defensible space close to a tanked water supply where the roofs can be used to fill the tanks.
- The new dwelling is sited at the highest part of the property in a relatively flat area where the only earthworks required will be post hole digging and the associated trench works for effluent disposal.
- The closest waterway, Daisy Creek, is about 110m north and bends further away in a northerly direction. It is ephemeral.
- With regards to the BMO, the risk to life, property and community infrastructure has been reduced to a low level, as bushfire hazard can never be eliminated.

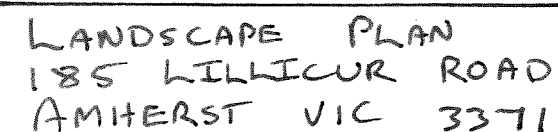
Design Issues

- By necessity the building will be off grid and use solar power for electricity.
- Tank Water will be used efficiently and care taken in terms of products used so that salt, phosphorus detergents and caustic chemicals are avoided.
- The external colours, eucalyptus green and slate grey will merge with the landscape and enhance the area once the old buildings are demolished.
- The footprint and profile are modest and will not stand out.
- Colorbond has become a quintessential Australian 'bush-look' cladding material.
- There will be no change to traffic except perhaps during the build.

In conclusion, replacing the existing dwelling with a new healthier, safer and resource-efficient dwelling will have many benefits. It will accelerate the farm's progress and profitability, improve agricultural productivity, improve the environmental benefits of regenerative farming and add to the amenity of the area by removing the dilapidated and unappealing infrastructure.

EC Eucalyptus crenulata
 E l Eucalyptus leucosylon
 E me Eucalyptus melidora
 E mi Eucalyptus microcarpa
 E po Eucalyptus polyanthema
 E s Eucalyptus sideroxylon
 S s (Sandalwood) Santalum spicatum

- 2^o Treatment System
- Rainwater tank
- Trees with species initials inside
- ~~Trees & shrubs to be removed~~
- ~~Diseased trees & shrubs that need to be removed~~



DRAWN BY
WENDY VAN DOK (PhD Bid)

SCALE 1:250 @ A3
1 CM = 2.5m

Bushfire Management Statement

185 Lillicur Road
Amherst, VIC

Phoenix Wildfire Management

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Bushfire Management Statement

For a Single Dwelling

185 Lillicur Road

Amherst, VIC



Version Control

Version	Name	Date Completed	Comments
1	Hamish MacCallum	23/06/2026	Version 1 (issued to client)
2	Hamish MacCallum	23/06/2026	Version 2 Updates to address typos.
3			

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1. Introduction

This Bushfire Management Report has been prepared on behalf of Wendy van Dok to demonstrate how the proposed development of a residential dwelling at 185 Lillicur Road, Amherst, can respond to the bushfire risk and comply with the Victorian planning and building controls that relate to bushfire, specifically the requirements of, Clause 44.06 Bushfire Management Overlay (BMO) and associated Clause 53.02 Bushfire Planning in the Central Goldfields Planning Scheme. The site is within the declared Bushfire Prone Area and is covered by the BMO.

The purpose of the Bushfire Management Overlay is:

- 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.

The Bushfire Management Statement contains three components:

A **bushfire hazard landscape assessment** including a plan that describes the bushfire hazard of the general locality more than 150 metres from the site.

A **bushfire hazard site assessment** including a plan that describes the bushfire hazard within 150 metres of the proposed development. The description of the hazard must be prepared in accordance with Section 2.2.3 to 2.2.5 of AS3959:2018 Construction of buildings in bushfire prone areas (Standards Australia) excluding paragraph (a) of section 2.2.3.2.

A **bushfire management statement** describing how the proposed development responds to the requirements of Clause 44.06 and 53.02.

This report also includes a **Bushfire Management Plan** (BMP) consistent with the CFA's standard permit conditions and BMP guidance (CFA, 2017).

1.1 Application Details

Municipality:	Central Goldfields
Title description:	Allot. 11 Sec. W PARISH OF LILLICUR
Overlays:	BMO
Zoning:	Farming Zone



2. Proposed Development

This application is for the proposed development of a single dwelling.

2.1 Site Description

Site shape:	Rectangular
Site Dimensions:	See Below
Site Area	See Below
Existing use and siting of buildings and works on and near the land:	The property presently has an existing dwelling that will be demolished, with ancillary shedding that will remain.
Existing vehicle arrangements:	Existing driveway access to the property is via Lillicur Road.
Location of nearest fire hydrant:	No hydrants are available.
Features of the site relevant to bushfire considerations:	The site is primarily grazing pasture, with some revegetation within the property to the north and extensive roadside vegetation along Lillicur Road.

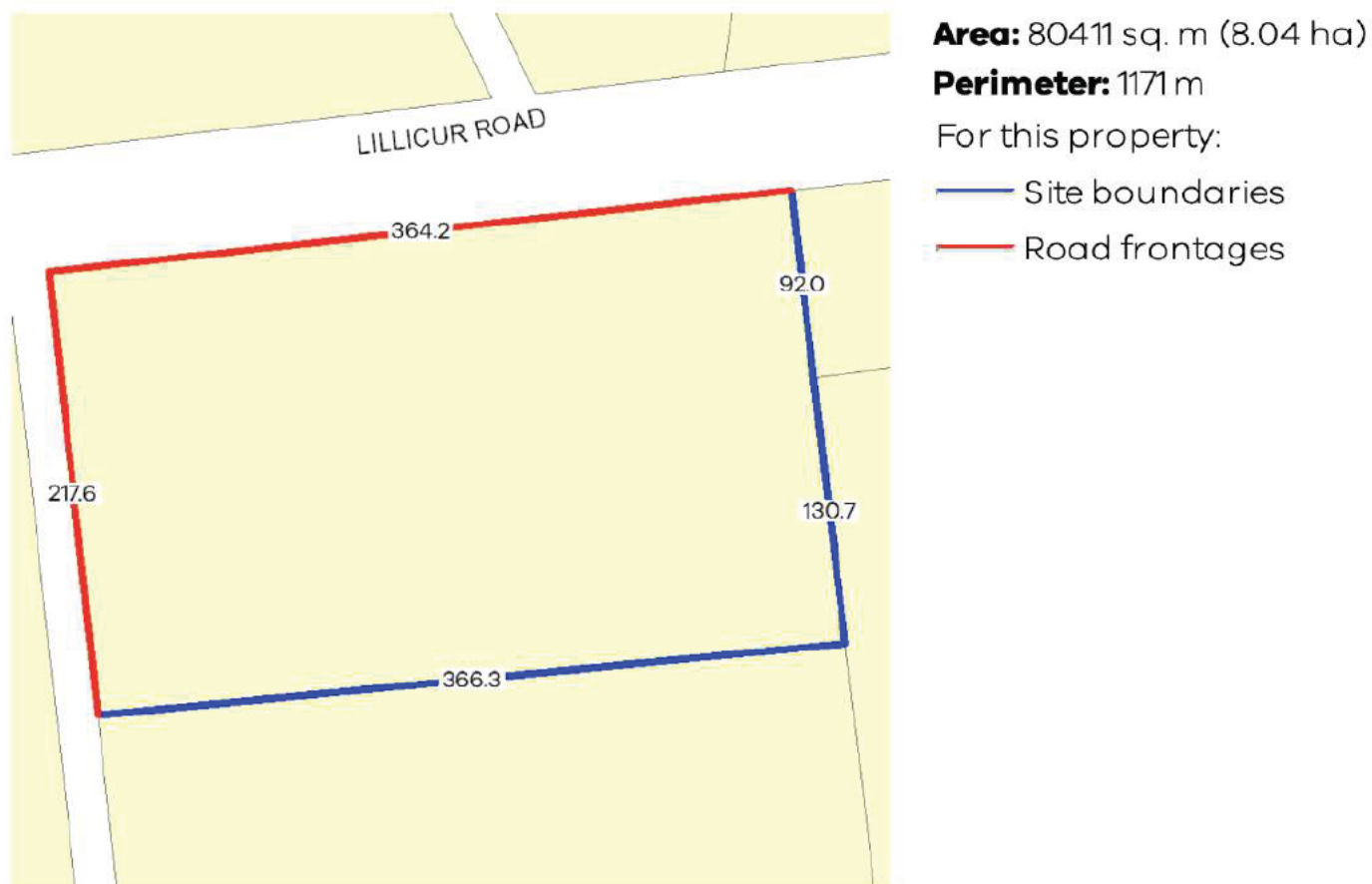


Fig.1 Site area and dimensions.



Fig.2 Site Concept plan detailing the proposed location for the new dwelling.



3. Bushfire Landscape Assessment

The landscape hazard identification is used to identify the hazards posed by surrounding vegetation, topographic and climatic conditions. It typically looks at the broader variations in the conditions (within 20km surrounding the site) and conditions more local to the site (within 150m). The table below (DELWP technical guide 'Planning Applications in the Bushfire Management Overlay' 2017) describes four broader landscape types representing different landscape risk levels that inform more consistent decision making based on the overall risk.

Landscape Risk Typologies

The landscape scenario that represents this is Broader Landscape **Type 3**. Bushfire can approach from multiple directions and may result in neighbourhood-scale destruction. Access to the nearest place of shelter is at Pioneer Reserve, Talbot. Access is not certain due to the drive being through 8 km of hazardous vegetation along mostly unsealed roads with significant roadside vegetation.

Broader Landscape Type 1	Broader Landscape Type 2	Broader Landscape Type 3	Broader Landscape Type 4
• There is little vegetation beyond 150 metres of the site (except grasslands and low-threat vegetation). • Extreme bushfire behaviour is not possible. • The type and extent of vegetation is unlikely to result in neighbourhood-scale destruction of property. • Immediate access is available to a place that provides shelter from bushfire.	• The type and extent of vegetation located more than 150 metres from the site may result in neighbourhood-scale destruction as it interacts with the bushfire hazard on and close to a site. • Bushfire can only approach from one aspect and the site is located in a suburban, township or urban area managed in a minimum fuel condition. • Access is readily available to a place that provides shelter from bushfire. This will often be the surrounding developed area.	• The type and extent of vegetation located more than 150 metres from the site may result in neighbourhood-scale destruction as it interacts with the bushfire hazard on and close to a site. • Bushfire can approach from more than one aspect. • The site is located in an area that is not managed in a minimum fuel condition. • Access to an appropriate place that provides shelter from bushfire is not certain.	• The broader landscape presents an extreme risk. • Fires have hours or days to grow and develop before impacting. • Evacuation options are limited or not available.

INCREASING RISK



3.1 Likely Fire Behaviour Affecting the Site

The subject land at 185 Lillicur Road, Amherst is situated within a predominantly agricultural landscape characterised by improved pasture and open grazing land, with more substantial areas of remnant native vegetation occurring at greater distances from the site. The surrounding terrain falls gently to the north and east, resulting in relatively benign topographic influences on fire spread. The most likely bushfire threat to the site would arise from rapidly moving grassfires under severe to catastrophic fire weather conditions. Such fires are typically characterised by high rates of spread, relatively low flame residence times and prolific ember generation, with fire behaviour strongly influenced by prevailing north-westerly and westerly winds.

While flame contact and radiant heat may affect the site where unmanaged pasture fuels are present, ember attack is expected to represent the predominant mechanism of house loss. The absence of extensive forest fuels in the immediate vicinity and the gentle topography are likely to limit the development of extreme fire intensities; however, grassfires can still produce dangerous conditions with little warning and may result in fast-moving fire fronts capable of impacting the site from multiple directions. Accordingly, future development should incorporate appropriate defensible space and construction standards to provide protection against radiant heat exposure and ember attack associated with the broader rural landscape.

As evident by the fire history for the site, large uncontrollable grassfire (1985) has directly impacted the district during drought years during extreme fire weather.

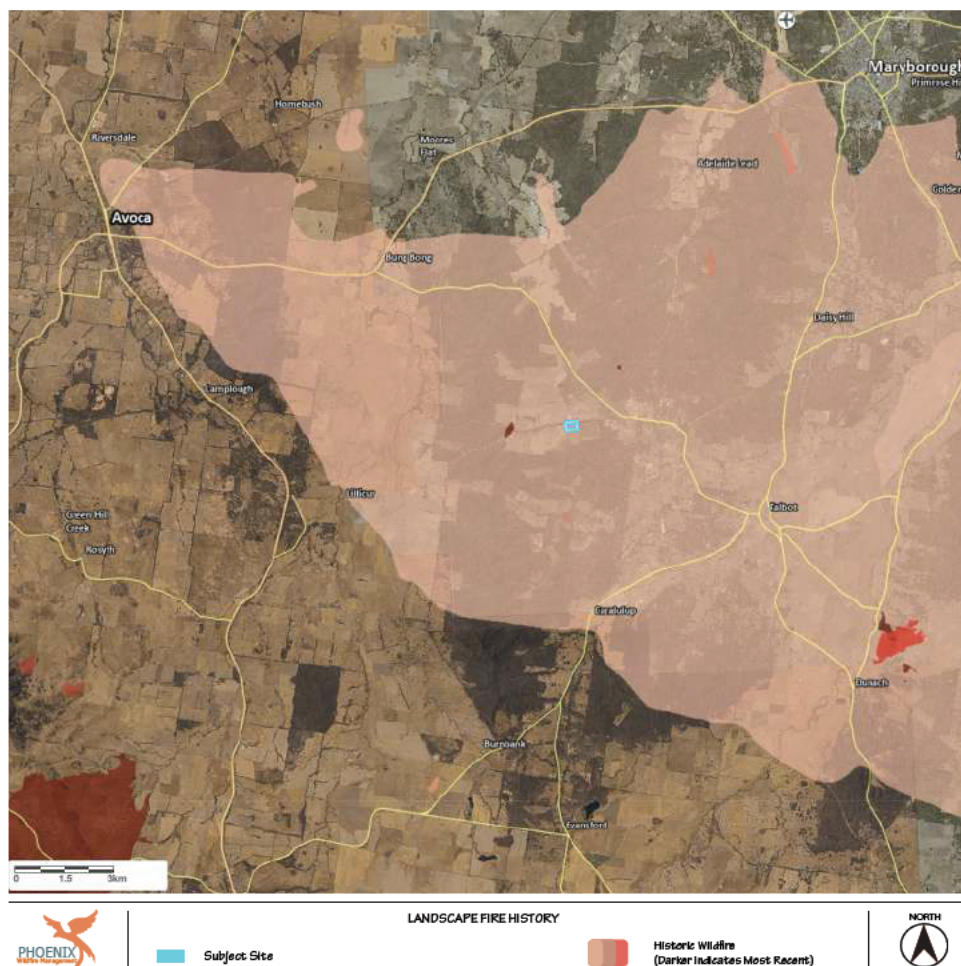
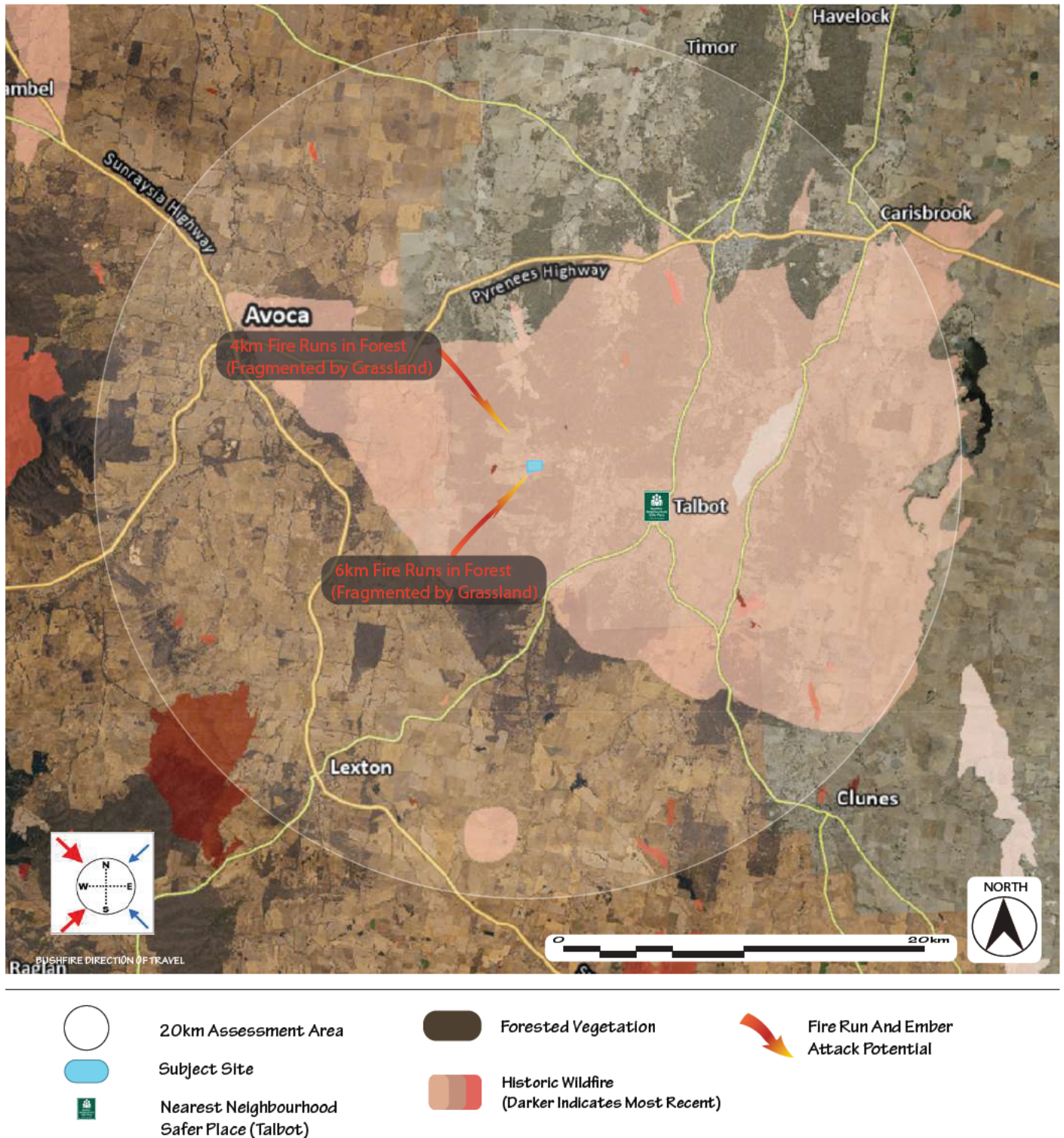


Fig.3 Fire history near the subject site (VICPLAN 2026).



3.2 Bushfire Landscape Assessment Plan

3.2.1 20km Assessment Plan





3.2.2 1km Assessment Plan

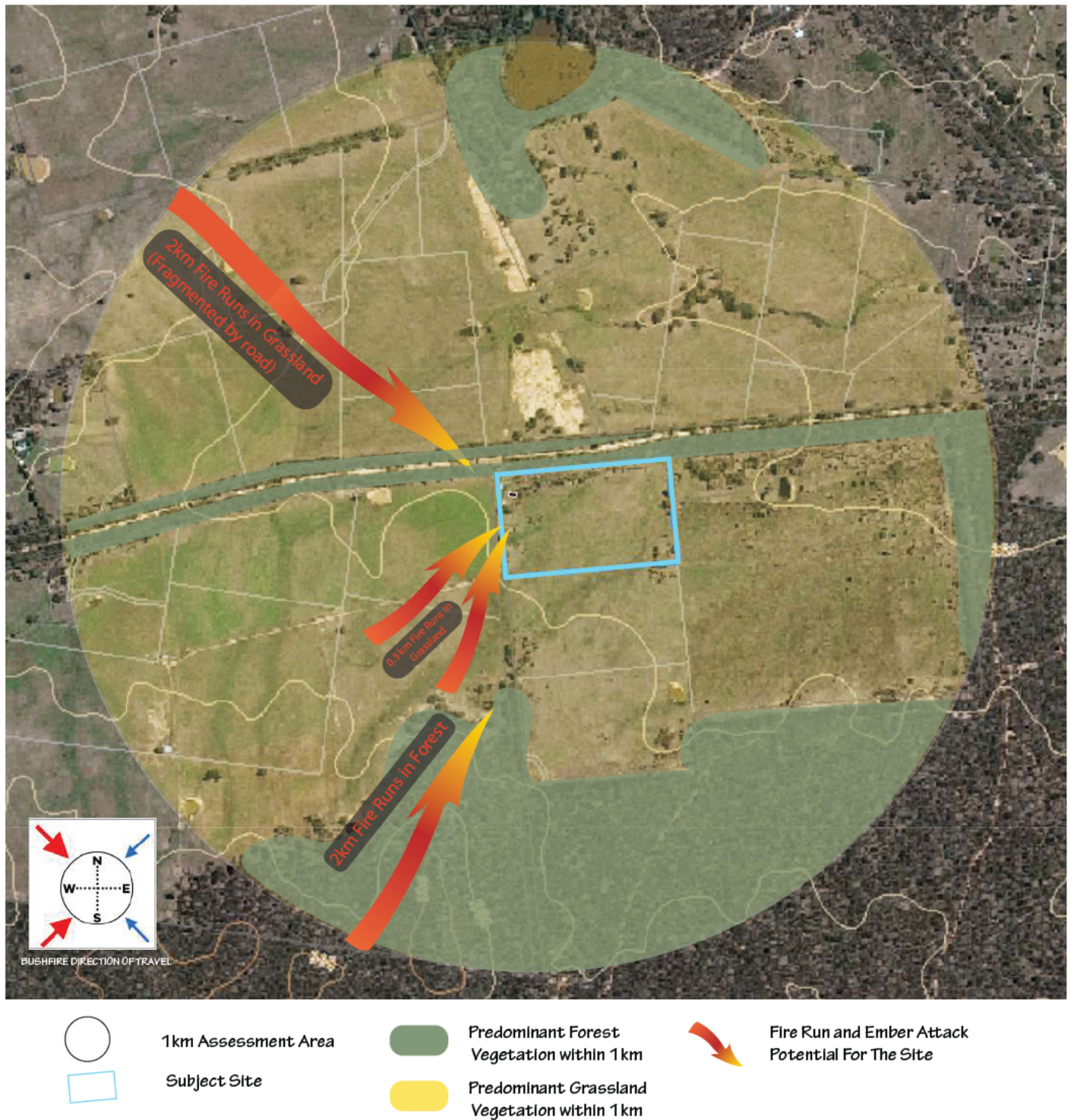


Fig.5 1km Broader landscape hazard assessment plan.



3.3 Bushfire Place of Last Resort

A 'Neighbourhood Safer Place' (also known as a 'Bushfire Place of Last Resort' or NSP-BPLR) is a place of last resort when all other bushfire plans have failed. BPLR's are:

- Locations that may provide some protection from direct flame and heat from a fire, but they do not guarantee safety.
- Not an alternative to planning to leave early or to stay and defend your property; they are a place of last resort if all other fire plans have failed.
- An existing location and not a purpose-built, fire-proof structure. It is important to know that many NSP-BPLRs are simply a clearing that provides separation distance from the bushfire hazard (e.g. forest).
- Not to be confused with Community Fire Refuges, Relief Centres, Recovery Centres or Assembly Areas, each of which have a different and specific purpose.
- Not an appropriate destination when leaving the area early.
- Not a place of shelter from other types of emergencies (e.g. to escape rising floodwaters or severe weather events).

Areas where human life can be better protected from a bushfire

Non-vegetated and low fuel areas that may provide shelter from the effects of bushfire. These areas will typically have low or no vegetation and can be considered as a last resort if a designated safer place is not available.

The nearest NSP is Pioneer Reserve, Talbot, Cnr. Fyfe Street and Scandinavian Crescent. The reserve is within a 10 minute drive of the site through hazardous vegetation. Safe access is not certain, unless leaving long before any impact from smoke or fire, preferably before 9am on extreme or catastrophic forecast fire danger days.

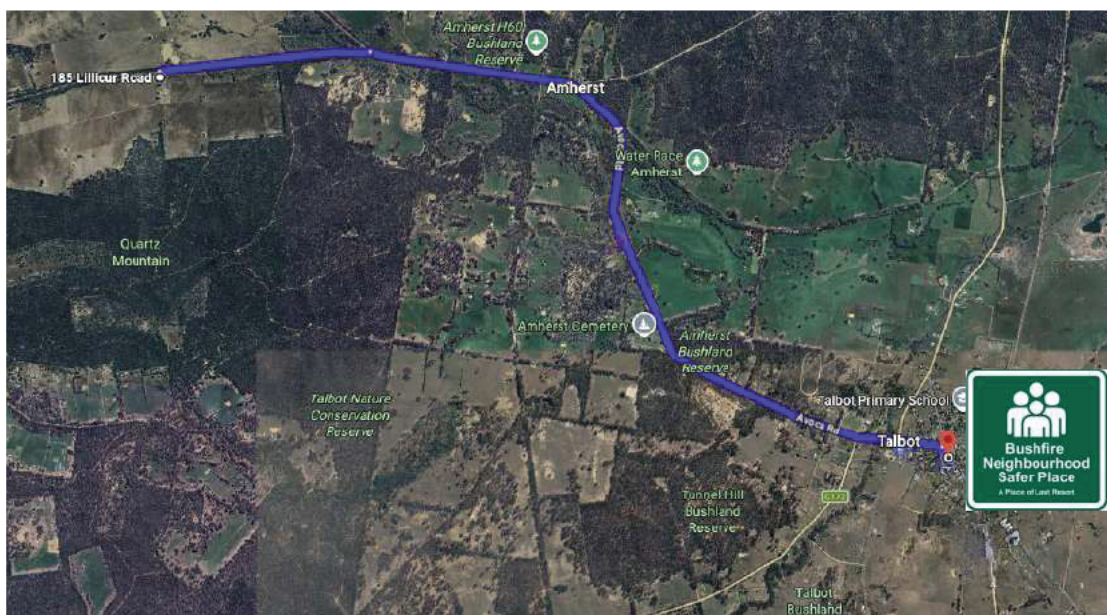


Fig.6 Route to nearest NSP, Pioneer Reserve, Talbot.



4. Bushfire Hazard Assessment

Classify the vegetation within 150 metres of the proposed development in accordance with AS3959:2018 Construction of buildings in bushfire prone areas.

Classified vegetation is the vegetation considered to be hazardous and prone to bushfire. The effective slope under the vegetation will increase fire severity and forward rate of spread, fire moving over flat land or downhill will generally burn and move with less intensity. Fire moving uphill (downslope from the site) will have significantly faster rate of spread and increased intensity increasing with the increase in slope.

4.1 Surrounding Vegetation

In accordance with AS 3959-2018 Construction of buildings in bushfire prone areas, the classifiable vegetation types identified on the site are as follows:

- **Grassland Vegetation:** All open grasslands or cropping and pasture where tree cover does not exceed 10% cover.

Grassland within 150 metres of the site is typical agricultural grassland.



Fig.7 Looking to the east through the tree plantings (modified vegetation) to the grassland vegetation beyond.

- **Modified vegetation:** is vegetation that doesn't fit into the vegetation classifications in AS3959:2018 Construction of Buildings in Bushfire Prone Areas (the standard) because it:
 - has been modified, altered or is managed due to urban development, or gardening,
 - has different fuel loads from those assumed in the standard,
 - has limited or no understorey vegetation, or
 - is not low-threat or low-risk vegetation as defined in the standard.

The recently planted trees to the north of the proposed dwelling site are managed and mown. Currently they have little fire hazard beyond the grassland vegetation beneath, however future growth will increase the fuel load, requiring management, especially within the defendable space area.



- **Forest Vegetation:** Characterised by tall Eucalyptus spp. with canopies exceeding 30% cover, moderate to high mid level understorey growth.

Vegetation along the roadside has been classified as forest due to the extent and contiguous connection to forest beyond the property. The unsealed road surface provides a mineral earth buffer that can slow the spread and reduce the intensity, however there remains some residual risk with radiant heat and ember attack from this vegetation.



Fig.8 Looking to the east along Lillicur Road, bounded by forest vegetation.



4.2 Bushfire Site Hazard Plan

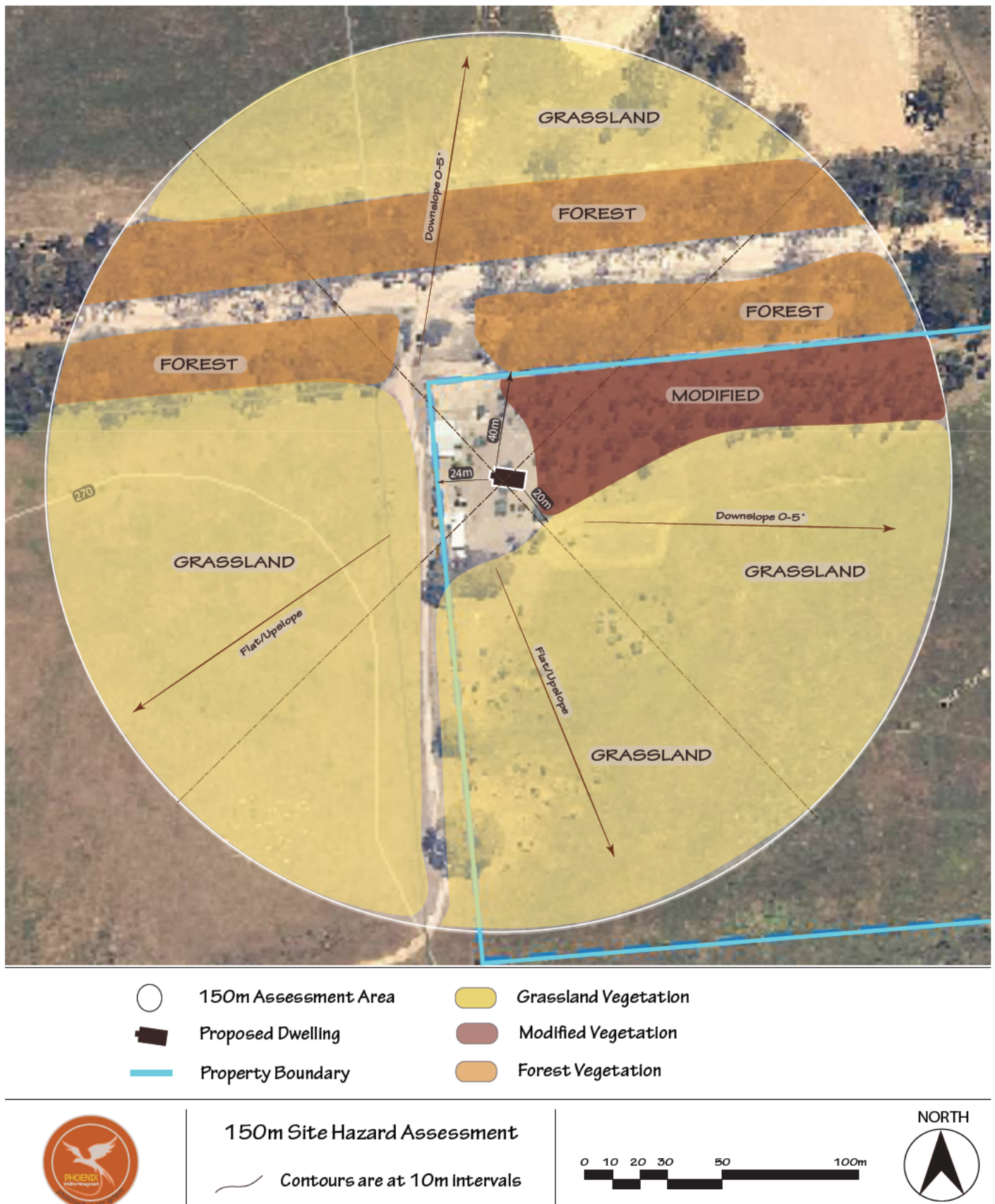


Fig.9 Site hazard assessment plan



5. Bushfire Management Statement

This section how the proposed development will respond to the identified bushfire risk in accordance with the requirements of Clause 44.06 and Clause 53.02 of the Central Goldfields Planning Scheme.

5.1 53.02-4.1 Landscape, Siting and design objectives

- Development is appropriate having regard to the nature of the bushfire risk arising from the surrounding landscape.
- Development is sited to minimise the risk from bushfire.
- Development is sited to provide safe access for vehicles, including emergency vehicles.
- Building design minimises vulnerability to bushfire attack.

5.1.1 Approved Measure (AM) 2.1 - Landscape

Requirement

The bushfire risk to the development from the landscape beyond the site can be mitigated to an acceptable level.

The broader landscape risk has been identified as Type 3. The extent and type of bushfire hazard (being grassland) combined with the relatively benign topography is not expected to increase the bushfire risk to the site from the broader landscape. Therefore, the landscape risk can be mitigated to an acceptable level by ensuring a minimum BAL-29 construction standard is applied, along with sufficient setbacks from the hazardous vegetation.

5.1.2 Approved Measure (AM) 2.2 - Siting

Requirement

A building is sited to ensure the site best achieves the following:

- **The maximum separation distance between the building and the bushfire hazard**

The proposed development site can provide sufficient setbacks from the identified bushfire hazards and provide defensible space within the property boundary. The site has been chosen to comply with and compromise with several overlays. It represents a high point that does not flood or get boggy in winter, which is better for wastewater management.

- **The building is in close proximity to a public road**

The proposed building is within 75 metres of Lillicur Road. This is deemed sufficiently close.



- Access can be provided to the building for emergency service vehicles

The existing driveway has an all-weather crossing from Lillicur Road. The driveway will be required to the requirements of AM 4.1 (see below). The current driveway access will need minor upgrading to meet the requirements.

5.1.3 Approved Measure (AM) 2.3 – Building Design

Requirement

A building is designed to be responsive to the landscape risk and reduce the impact of bushfire on the building.

The proposed building design is a simple rectangular structure with minimal re-entrant corners and a simple roofline, corrugated iron sheeting for external cladding and roofing. The house will be raised on concrete stumps to address the LSIO but the open area underneath the building will be covered to comply with the BMO with fibro cement planks. All windows will be sliding aluminium. There will be a small 1.8 m wide veranda and decking on the east side to provide shade in summer.

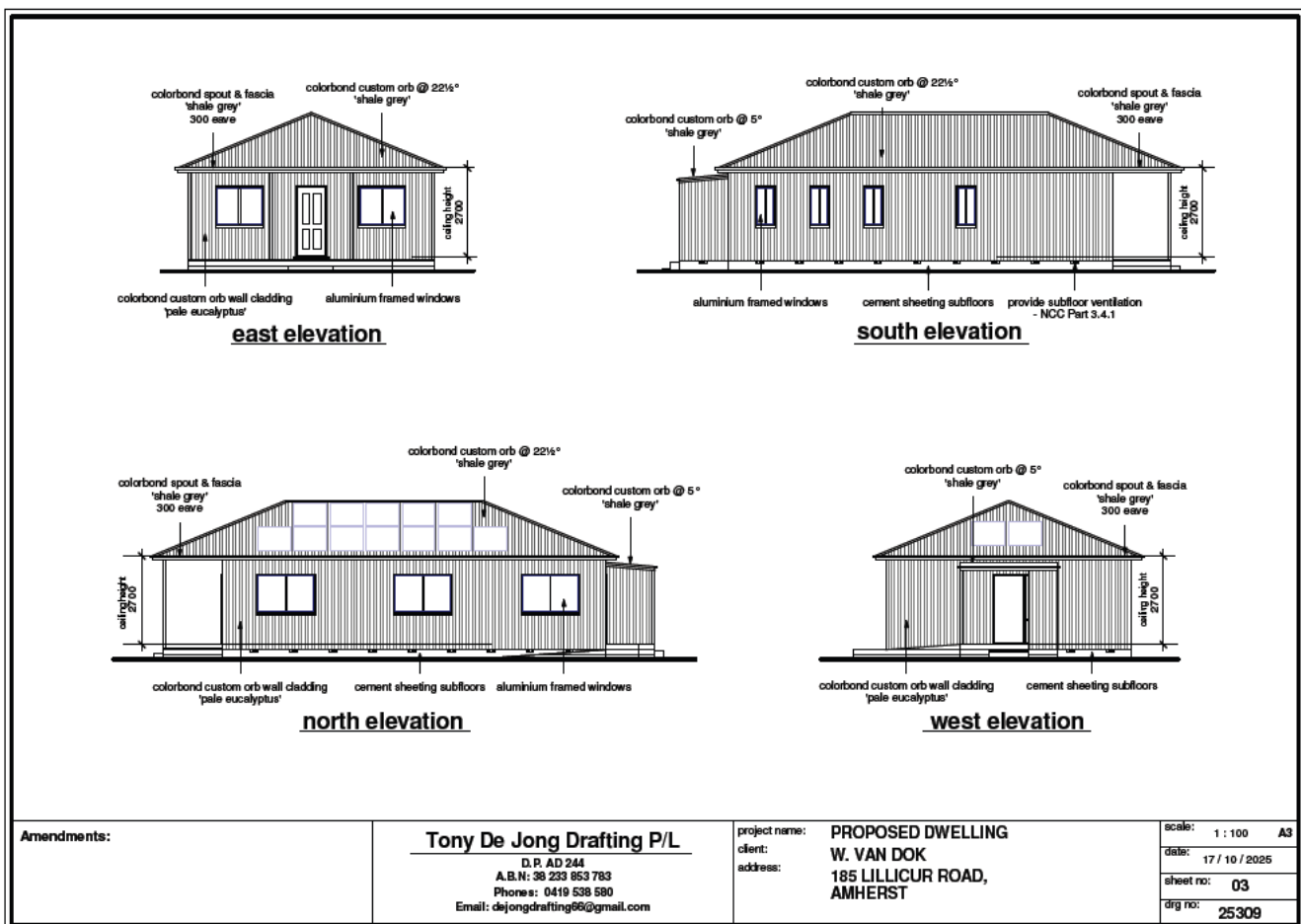


Fig.10 Concept elevation plans for the dwelling.

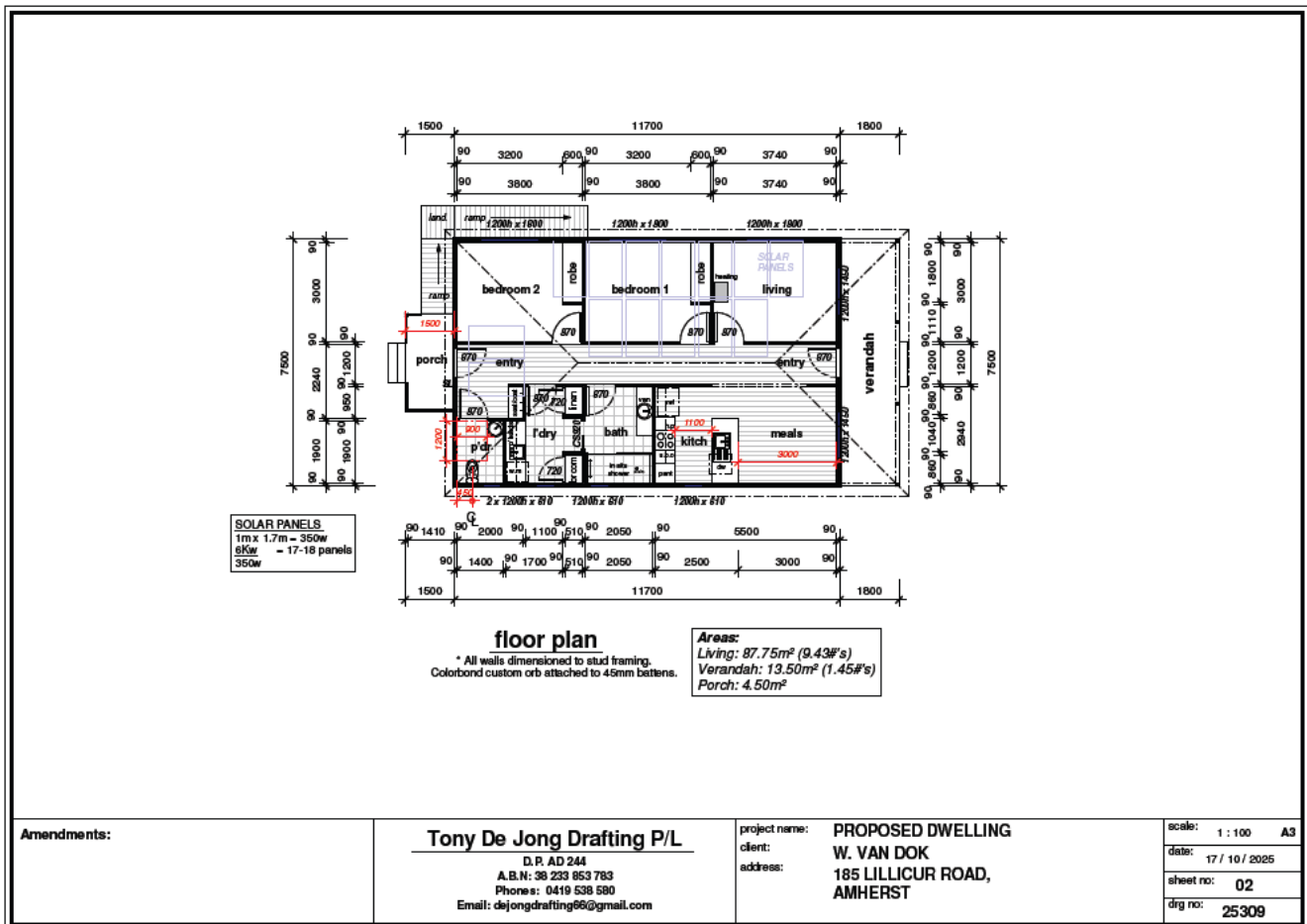


Fig.11 Concept floor plans for the dwelling.



6. 53.02-4.2 – Setbacks, Defendable Space and Construction Objective

The setbacks, defendable space and building construction mitigate the effect of flame contact, radiant heat and embers on the building.

In this section it will be demonstrated how the proposed development will respond to the identified bushfire risk.

6.1 Approved Measure (AM) 3.1 Defendable Space

Requirement:

A building is setback from the bushfire hazard in accordance with the vegetation type and slope set out in Table 1 to clause 53.02-5 and one of the following distances is met, for:

- *a dwelling (including an extension or alteration to a dwelling), small second dwelling, industry, office, retail premises or warehouse, either:*
 - *Columns A, B or C.*
 - *Column D if there are significant siting constraints.*
- *accommodation (other than a dwelling or small second dwelling), education centre, hospital, leisure and recreation or place of assembly, Column 0.*

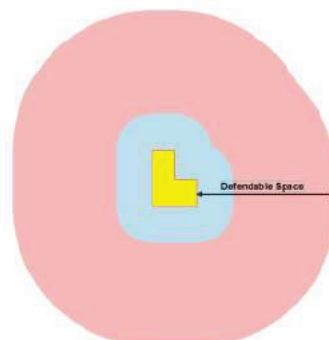
The setback is provided wholly within the title boundaries of the land.

What is defendable space?

Defendable space is an area of land around a building where vegetation (fuel) is modified and managed to reduce the effects of flame contact and radiant heat associated with a bushfire. Defendable space is one of the most effective ways of reducing the impact of bushfire on a building.



Cross section of defendable space



Within 10 metres avoid flammable objects near vulnerable parts of the building
Defendable Space as per Clause 53.02

Fig.12 Defendable space detail (CFA 2026)

**Bushfire Hazard Setbacks (from Table 1 to Clause 53.02-5)**

Vegetation	Direction	Slope	Setback	Column	Defendable space Requirement (m)
Forest	North	0-5°	40m	C	32m
Grassland	West	Upslope/Flat	23m	C	9m
Grassland	South	0-5°	20m	C	10m
Modified	East	Upslope/Flat	10m	C	50m (or to property boundary)

Defendable Space

The building will be provided with defendable space in accordance with **Column C (Forest vegetation)**. The defendable space distance required is **32 metres**.

6.1.1 AltM 3.4

Adjoining land may be included within the setback where there is a reasonable assurance that the land will remain or continue to be managed in accordance with the defendable space vegetation management requirements at Table 4 to clause 53.02-5.

The defendable space requirement of 32 metres falls over the property boundary to the west. This is deemed to be acceptable, as the primary bushfire hazard in this direction is grassland upslope from the site. The vegetation to the west of the boundary also is managed along the driveway, providing a mineral earth buffer and minimum-fuel corridor along the boundary. The building retains a minimum of 23 metres setback from the grassland vegetation to the west, providing ample setback within the property boundary. Therefore, defendable space will be 32 metres, or to the property boundary, whichever is the lesser.



Fig.13 The neighbouring property to the west is grassland paddocks, with a mineral earth driveway along the boundary. The fenceline vegetation is mown along the driveway.



6.1.2 Vegetation Management

Some vegetation removal may be required within the defendable space area, especially to the east of the proposed dwelling. The primary vegetation in this sector is relatively young revegetation tree planting. There is no likely impact to biodiversity through implementing the defendable space vegetation management requirements.

6.2 Approved Measure (AM) 3.3 Bushfire Construction (BAL)

The residential building standard for bushfire protection aims to improve the ability of a building to withstand a bushfire attack. This provides greater protection for the occupants who may be sheltering inside while the fire front passes.

The BAL takes into consideration a number of factors, including the Fire Danger Index, the slope of the land, types of surrounding vegetation and its proximity to any building. (VBA, 2023)

A building is constructed to the bushfire attack level that corresponds to the setback which satisfies AM 3.1.

If the setback of more than one column in Table 1 to clause 53.02-5 applies, a building is constructed to the highest of the corresponding bushfire attack levels.

If a higher bushfire attack level than specified above is required to respond to clause 53.02-4.1, a building is constructed to that higher bushfire attack level.

The building is constructed to the bushfire attack level:

- That corresponds to the defendable space provided in accordance with Table 1 to Clause 53.02-5. The building will be constructed to **BAL-29**.

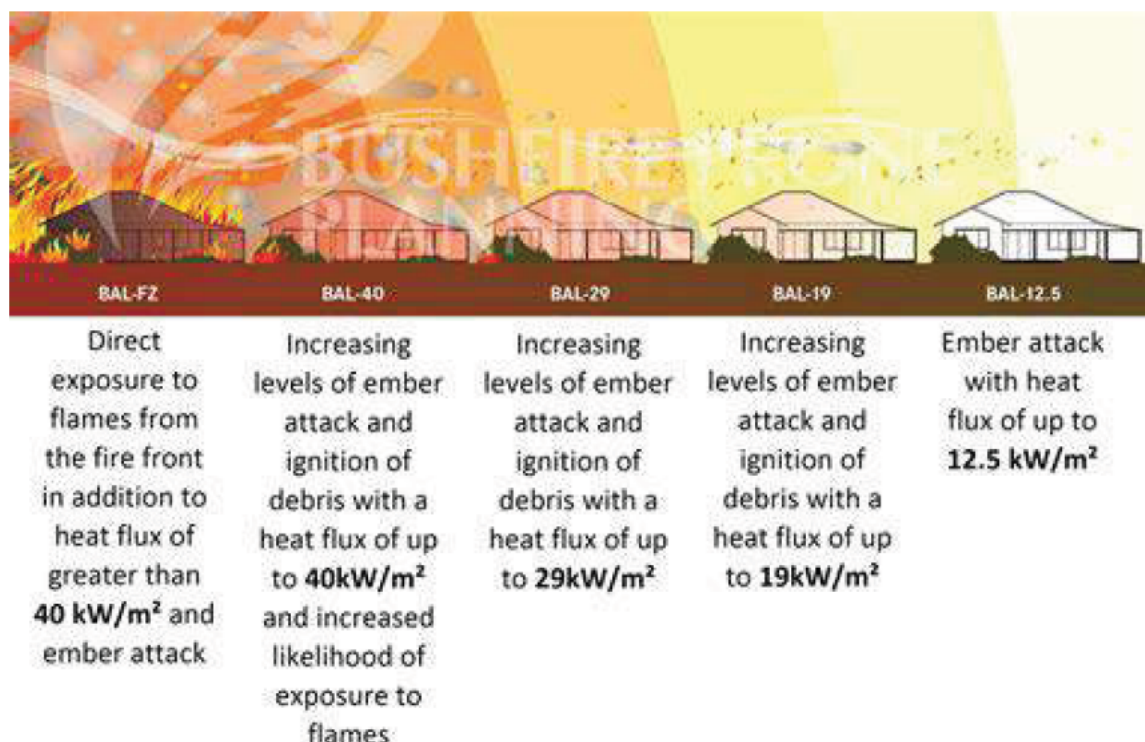
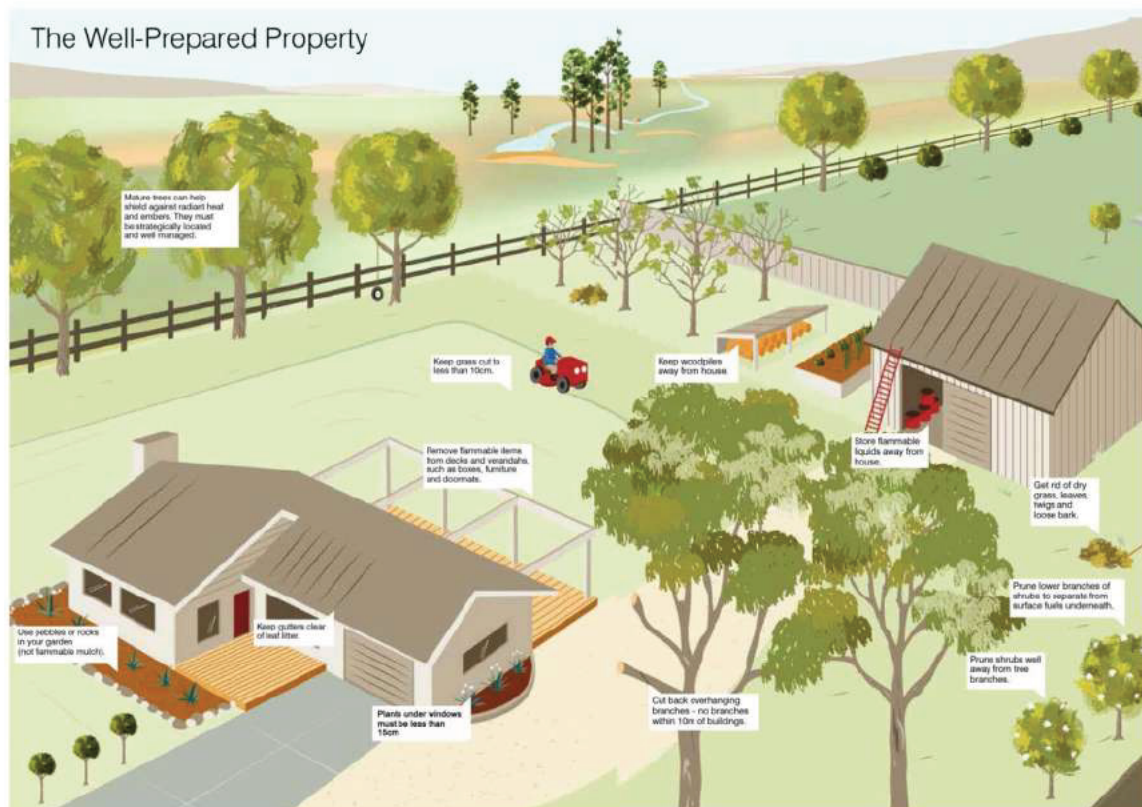


Fig.14 Chart showing radiant heat intensity in relation to BAL construction standards. (CFA 2026)



Table 6 of Clause 53.02-5 - Vegetation management requirement:

- 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 3m 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 sq. 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 5 metres.
- There must be a clearance of at least 2 metres between the lowest tree branches and ground level.





6.3 Defendable Space Plan



- | | | | |
|--|-------------------|--|---|
| | Proposed Dwelling | | Defendable Space Zone 32m (or to the property boundary) |
| | Driveway Access | | Water Supply (10,000lt.) |
| | Boundary | | |



BUSHFIRE MANAGEMENT PLAN

BAL-29



Fig.15 Defendable space plan.



7. 53.02-4.3 – Water Supply and Access Objectives

7.1 Approved Measure (AM) 4.1 – Water Supply and Access

7.1.1 Water Supply Requirement

A building used for a dwelling (including an extension or alteration to a dwelling), a dependant person's unit, industry, office, retail premises service station or warehouse is provided with a static water supply for fire fighting and property protection purposes as specified in Table 4 to Clause 53.02-5.

The water supply may be in the same tank as other water supplies provided that a separate outlet is reserved for fire fighting water supplies.

Lot Size (m ²)	Hydrant Available	Capacity (litres)	Fire Authority Fittings & Access Required	Response
Less than 500	Not Applicable	2,500	No	☐
500 – 1500	Yes	5,000	No	☐
500 – 1500	No	10,000	Yes	☐
1501 and above	Not Applicable	10,000	Yes	☒

Note: a hydrant is available if it is located within 120 metres of the rear of the building

Confirm Static Water Supply meets the following requirements	☒	Is stored in an above ground water tank constructed of concrete or metal
	☒	All fixed above ground water pipes and fittings for fire fighting purposes must be made of corrosive resistant metal.
	☒	Include a separate outlet for occupant use
	The following additional requirements apply when 10,000 litres of static water is required:	
	☒	Be readily identifiable from the building or appropriate identification signage to the satisfaction of CFA must be provided.
	☒	Be located within 60 metres of the outer edge of the approved building.
	☒	The outlet/s of the water tank must be within 4 metres of the accessway and unobstructed
	☒	Incorporate a ball or gate valve (British Standard Pipe (BSP 65mm) and coupling (64mm CFA 3 thread per inch male fitting)
	☒	Any pipework and fittings must be a minimum of 65mm (excluding the CFA coupling)

Water tank requirements

Table 4 of Clause 52.47 sets out the capacity, fittings and access requirements for water supply in the BMO.

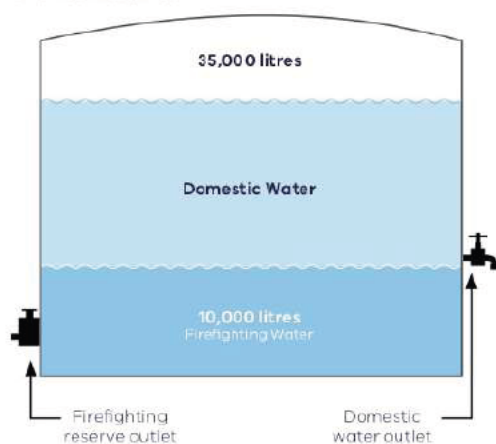
The water supply must:

- be stored in an above ground water tank constructed of concrete or metal
- have all fixed above ground water pipes and fittings required for firefighting purposes made of corrosive material, and
- include a separate outlet for occupant use.

Where a 10,000 litre water supply is required the following fire authority fittings apply:

- the water supply must be readily identifiable from the building or appropriate identification signage to the satisfaction of the relevant fire authority.
- the water supply must be located within 60 metres of the outer edge of the approved building.
- The outlet/s of the water tank must be within 4 metres of the accessway and unobstructed.
- the water supply must incorporate a separate ball or gate valve (British Standard Pipe (BSP 65 millimetre) and coupling (64 millimetre CFA 3 thread per inch male fitting).
- Any pipework and fittings must be a minimum of 65 millimetres (excluding the CFA coupling).

Shared water tank



Water supply identification

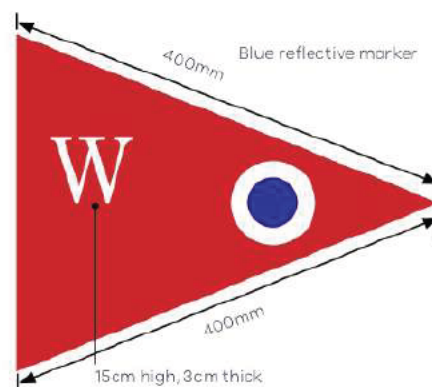


Fig.16 Water supply requirements (Technical Guide | Planning Permit Applications – Bushfire Management Overlay DELWP 2017).

7.1.2 Access Requirement

A building used for a dwelling (including an extension or alteration to a dwelling), a dependant person's unit, industry, office, retail premises, service station or warehouse is provided with vehicle access designed and constructed as specified in Table 5 to Clause 53.02-5.

The current access will comply with the construction specifications provided in Table 4 to Clause 53.02-5 (see below). The total length from the public road to the proposed dwelling is 75m



Column A	Column B
Length of access is less than 30 metres and no fire authority access is required at Table 2.	☐ There are no design and construction requirements if fire authority access to water supply is not required under AM 4.1
Length of access is less than 30 metres and fire authority access is required at Table 2. Length of access is greater than 30 metres	The following design and construction requirements apply: ☒ All weather construction ☒ A load limit of at least 15 tonnes ☒ Provide a minimum trafficable width of 3.5 metres ☒ Be clear of encroachments for at least 0.5 metres on each side and at least 4 metres vertically ☒ Curves must have a minimum inner radius of 10 metres ☒ The average grade must be no more than 1 in 7 (14.4%)(8.1°) with a maximum grade of no more than 1 in 5 (20%)(11.3°) for no more than 50 metres ☒ Dips must have no more than a 1 in 8 (12.5 per cent) (7.1 degrees) entry and exit angle.
Length of access is greater than 100 metres	A turning area for fire fighting vehicles must be provided close to the building by one of the following: ☐ A turning circle with a minimum radius of eight metres ☐ A driveway encircling the dwelling ☐ The provision of other vehicle turning heads such as a T head or Y Head – which meet the specification of Austroad Design for an 8.8 metre service vehicle.
Length of access is greater than 200 metres	☐ Passing bays must be provided at least every 200 metres. ☐ Passing bays must be a minimum of 20 metres long with a minimum trafficable width of six metres.



Access

Where the length of access is greater than 30 metres the following design and construction requirements apply:

- Curves must have a minimum inner radius of 10 metres.
- The average grade must be no more than 1 in 7 (14.4%) (8.1°) with a maximum of no more than 1 in 5 (20%) (11.3°) for no more than 50 metres.
- Dips must have no more than a 1 in 8 (12.5%) (7.1°) entry and exit angle.
- A load limit of at least 15 tonnes and be of all-weather construction.
- Provide a minimum trafficable width of 3.5 metres.
- Be clear of encroachments for at least 0.5 metres on each side and at least 4 metres vertically.
- A cleared area of 0.5 metres is required to allow for the opening of vehicle doors along driveways.
- Dips must have no more than a 1 in 8 (12.5 per cent) (7.1 degrees) entry and exit angle.

Width



Dips and gradients



Encroachments

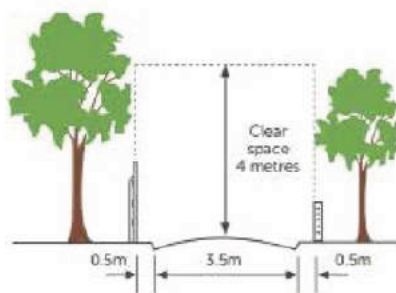


Fig.17 Access requirements (Technical Guide | Planning Permit Applications – Bushfire Management Overlay DELWP 2017).



8 Conclusion

The proposed dwelling has been assessed against the relevant bushfire policies contained in the planning scheme.

This report has concluded:

- The overall broader bushfire risk would not pose a significant threat to future development beyond the expected risks identified using the methodology of AS 3959-2018.
- Providing the proposed dwelling with BAL-29 construction standard and a defensible space of 32 metres (or to the property boundary, whichever is the lesser) can sufficiently mitigate the identified bushfire risk.
- Fuel loads should be kept in a minimum fuel condition by applying the appropriate bushfire protection measures, specifically defensible space vegetation management requirements of Table 6, Cl.53.02 to ensure setbacks from hazardous vegetation is maintained.



9. Attachment 1 – Site Photos



Fig.18 Looking east along the boundary with Lillicur Road.



Fig.19 View facing the proposed dwelling site from the southeast.



Fig.20 Facing the proposed dwelling on the driveway facing south.



Fig.21 Facing west from the west boundary.



Fig.22 The driveway entrance from Lillicur Road.



Fig.23 Looking west along Lillicur Road.



Bushfire Management Plan, 185 Lillicur Road, Amherst



Proposed Dwelling

Driveway Access

Boundary

Defendable Space Zone 32m (or to the property boundary)

Water Supply (10,000lt.)



BUSHFIRE MANAGEMENT PLAN

BAL-29



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.

a) Defendable space

Defendable space for a distance of 32 metres around the proposed building (or to the property boundary, whichever is the lesser distance) must be provided where vegetation (and other flammable materials) will be modified and managed in accordance with the following requirements:

- Grass must be short cropped and maintained during the 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 next to vulnerable parts of the building.
- Plants greater than 10 centimetres in height must not be placed within 3 metres of a window or glass features of the building.
- Shrubs must not be located under the canopy of trees.
- Individual and clumps of shrubs must not exceed 5 sq. metres in area and must be separated by at least 5 sq. metres.
- Trees must not touch or overhang any elements of the building.
- The canopy of trees must be separated by at least 5 metres.
- There must be clearance of at least 2 metres between the lowest tree branches and ground level.

b) Construction standard

Dwelling designed and constructed to a minimum Bushfire Attack Level of BAL- 29

c) Water Supply

The following requirements apply:

- An effective capacity of 10,000 lt.
- Be stored in an above ground water tank constructed of concrete or metal.
- Have all fixed above ground water pipes and fittings required for firefighting purposes made of corrosive resistant metal.
- Include a separate outlet for occupant use.

Where a 10,000 litre water supply is required, the following fire authority access and fittings must be provided:

- Be readily identifiable from the building or appropriate identification signage to the satisfaction of the relevant authority.
- Be located within 60 metres of the outer edge of the approved building.
- The outlet/s of the water tank must be within 4 metres of the accessway and unobstructed.
- Incorporate a separate ball or gate valve (British Standard Pipe, BSP 65mm) and coupling (64mm CFA 3 Thread per inch male fitting).
- Any pipework and fittings must be a minimum of 65mm (excluding the CFA coupling).

d) Access

Access required: Yes

The following design and construction requirements apply:

- All-weather construction
- A load limit of at least 15 tonnes
- Provide a minimum trafficable width of at least 3.5 metres
- Be clear of encroachments for at least 0.5 metres on each side and at least 4 metres vertically.
- Curves must have a minimum inner radius of 10 metres.
- The average grade must be no more than 1 in 7 (14.4%) (8.1°) with a maximum grade of no more than 1 in 5 (20%) (7.1°) entry and exit angle.

Length of access is greater than 100 metres: No



WESTERN VICTORIA

SOIL TESTING

**185 Lillicur Road
Amherst**

**Land Capability Assessment for
Wendy von Dok**

Report 250713-2
July 2025

Land Capability Assessment
for
185 Lillicur Road, Amherst
(Central Goldfields Shire Council)
for
Wendy von Dok

Report 250713-2

22/07/2025

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DISCLAIMER

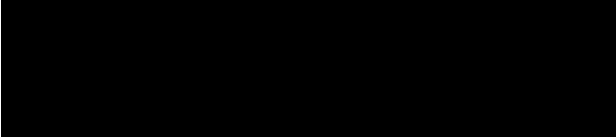
This investigation has been carried out in goodwill and under the instructions of Wendy von Dok. The investigation was undertaken with the care and skill of competent personnel as defined within the Western Victoria Soil Testing (WVST) quality system. WVST has the appropriate insurances required to undertake such work, which are available upon request.

This document provides both site and soil information and a conceptual design of the proposed development. The document also recommends monitoring and management options for the type of system(s) being recommended. This report should not be seen as a guarantee for the relevant permit to be issued by local council, as the report provides recommendations only for the Central Goldfields Shire Council to assess.

The results from this investigation relate to the specified sites labelled throughout this document and hence the information obtained may need to be extrapolated to the rest of the designated area. Whilst care has been taken throughout this investigation, soil conditions can vary between each individual test site and at depths greater than that drilled during this investigation. Hence, if variations from this report are found during future excavation/construction work, WVST should be notified so it can be assessed and the appropriate advice provided.

WVST's professional opinions contained in this document are subject to modification if additional information is obtained through further investigation, observation or analysis in accordance with future activities.

This document has been prepared for Wendy von Dok and hence no responsibility or liability is being accepted to any third party, where any part of the report is used in either isolation or without consideration of the whole document. This document is not appropriate where there has been a significant change in the project or to the specific needs of the reader.



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APPENDICES

Appendix A – Maps including Planning Property Reports & Groundwater Resource Report
Appendix B – Borehole logs
Appendix C – Site photographs
Appendix D – NATA accredited test reports
Appendix E – Water balance equation
Appendix F – Potential plants for the disposal field

REFERENCES IN THIS DOCUMENT

EPA Victoria <i>Guideline for onsite wastewater management (GOWM)</i> , May 2024
EPA Victoria <i>Guideline for onsite wastewater effluent dispersal and recycling systems (GEDS)</i> , May 2024
Joint Australian/New Zealand Standard AS1547 – 2012 <i>Onsite domestic wastewater management</i> , February 2012

1 SUMMARY

Wendy von Dok commissioned Western Victoria Soil Testing (WVST) to undertake a Land Capability Assessment (LCA) to assess the suitability and placement of a new wastewater treatment system at 185 Lillicur Road, Amherst. The property consists of a single land parcel (11~W\PP2994) of approximately 8.04ha in total. The development intent is understood to involve the establishment of a 2-bedroom residence and associated onsite wastewater treatment system.

With the allotment situated within a Farming Zone (FZ), the schedule to the overlay stipulates that all residential development should be connected to both reticulated water and sewerage, if available. In the absence of such a scheme, a 'Land Capability Assessment' (LCA) is required to indicate the soil's suitability and capability to both treat and retain all generated effluent within the allotment's boundaries.

This LCA will provide site and soil information as well as a schematic diagram showing the proposed building location and potential land application area for the disposal of suitably treated effluent at the site. The document will also recommend monitoring and management options for the type of wastewater system(s) being recommended.

The Land Capability Class Rating (LCCR) of the site was determined to be a 5, primarily due to the risk of sodic/dispersive soil at the site. Given the constraints to the site identified by the LCCR, the following systems are recommended:

- A secondary wastewater treatment system; or a dry composting toilet and a separate greywater treatment system connected to:
 - a conventional trench system with a minimum total trench length of 40m where the trenches are 0.6m in width

A minimum 20/30/10 effluent quality (BOD < 20mg/L, TSS < 30mg/L and E. Coli < 10cfu/100mg) should be maintained by the selected secondary treatment system. A manufacturer-accredited maintenance and service contract to ensure regular servicing of the system should be implemented. Where the dry composting system with a greywater system is selected, the effluent from the selected greywater system should meet Level 3 greywater quality (equivalent to secondary all-waste effluent standard) and be designed for the processing of kitchen wastewater.

It is noted that the proposed development will be "off-grid" and an unpowered system is desirable. A wormfarm system that is rated to secondary quality may be preferred.

Preparation of the receiving soil by the application of gypsum should be undertaken at 1kg/m².

The EPA provides a list of approved options for appropriate treatment systems, many of which can achieve the recommended level of performance. Details of the chosen system should be included on the Septic Tank Permit to Install application provide to the Central Goldfields Shire Council. It remains the responsibility of the property owner/plumber to make the final system selection and forward the type of system selected to the Central Goldfields Shire Council for approval prior to installation.

Regardless of the system selected, the disposal areas including the immediate surrounding area should be planted out with shallow rooted grasses and/or indigenous shrubs to help uptake the applied effluent via evaporation/transpiration techniques. While shallow diversion drains are required to redirect surface waters around all building & disposal localities, strict adherence to the maintenance and monitoring of the installed system is also an essential part of the ongoing treatment and disposal program.

2 PROPOSED DEVELOPMENT

Site Address:	185 Lillicur Road, Amherst
Allotment Size:	Single land parcel (11~W\PP2994) of approximately 8.04ha in total
Proposed development:	The establishment of a 2-bedroom residence and associated onsite wastewater treatment system
Council:	Central Goldfields Shire Council (Property No. 33670.0185)
Zones and Overlays:	Farming Zone (FZ) Designated Bushfire Prone Area Bushfire Management Overlay (BMO) Erosion Management Overlay (EMO) Land Subject to Inundation Overlay (LSIO) Salinity Management Overlay (SMO)
Catchment Area:	The site is within the Loddon River (Laanecoorie) proclaimed catchment area
Infrastructure:	Mains power is not available
Water Supply:	Mains water is not available
Sewer:	Reticulated sewerage is not available

3 LOCATION AND SITE FEATURES

The proposed development is the establishment of a new 2-bedroom residence and associated onsite wastewater treatment system.

A locality map within planning documents is provided in the Appendices to show the location of the site, with the proposed development area being in the northwestern corner of the property. An aerial photograph has also been provided to show the area under investigation.

Situated within the Farming Zone (FZ), the site is currently occupied by a shed and a 1-bedroom residence with an existing wastewater treatment system including a composting toilet. WVST understands the development intent is to replace the existing residence and wastewater treatment system.

The property generally consists of pasture with some scattered small to medium eucalyptus trees in the northwestern corner around the proposed development area. There are also medium to large eucalyptus trees in the road reserve to the north of the property. It is noted that some small trees that were planted in the last 5 to 10 years may require removal as part of the development.

The surface of the property is generally relatively flat with a gentle overall slope towards the east, with the proposed development area located on a local high point.

Daisy Hill Creek is located to the north of the site. While online mapping shows the path of the creek to follow Lillicur Road before turning sharply north, ground truthing and aerial photography shows that the

true path of the Creek is further north, lying diagonally across the neighbouring Lot, with the closest point being approximately 230 metres from the northern boundary of the property.

There is no farm dam at the property, while three dams were identified on surrounding lots to the north, east and west, with the closest being about 250 metres to the west and 250 metres to the north, though it is noted that the slope of the land means surface flow over the proposed development area would not be captured by these two dams. The closest downslope farm dam is located approximately 500 metres to the east.

No waterbores were identified within 500 metres of the proposed development area.

The Erosion Management Overlay (EMO), Land Subject to Inundation Overlay (LSIO) and Salinity Management Overlay (SMO) all provide additional planning controls to the site. It is noted that the proposed development site is located on a slightly elevated local topographic high with gentle slopes generally towards the east. No signs of high salinity (salt crust, tolerant vegetation or vegetation dieback) were noted during the investigation.

Climate:	On average, the Amherst region experiences warm summers and cool winters, with moderate winds all year round, tending to be from the south or west. The average rainfall may meet or exceed average evaporation for up to 4 months of the year, which normally coincides with May to August. The area has an average rainfall of approx. 540mm and an average evaporation of approx. 1,275mm (Talbot (Post Office) – 88056).
Exposure:	The site exhibits generally good sun and wind exposure with some shading from surrounding trees.
Vegetation:	The property is covered in maintained pasture/lawn with scattered small to medium eucalyptus trees.
Erosion:	There were no signs of erosion having occurred on site.
Groundwater:	During this investigation, 3 boreholes were drilled to depths of 2.5 to 3.0 metres with no groundwater seepage encountered. A Groundwater Report was obtained from the Victorian Department of Environment, Land, Water & Planning (DELWP) which indicated that the water level below ground level (BGL) is likely <5 metres in the proposed development area.
Bores:	A review of known bores around the locality was conducted using the online mapping tool <i>Visualising Victoria's Groundwater</i> . No waterbores were identified at or within 500 metres of the proposed development area.
Dam:	Observations during the field investigation and a review of aerial photography indicates there are no farm dams within 100 metres of the proposed development area.
Drainage:	Currently, there is no formal drainage implemented upon the allotment. Stormwater in the area of the dispersal field is seen to runoff the site's surface following the natural slope.

4 SOIL INFORMATION

The local geology of the property was determined using the Victorian Government Department of Environment, Land, Water & Planning (DELWP) *Geovic* online mapping tool, which showed the likely formations of the site:

- **‘Qc1’ unnamed colluvium** – Holocene; sheet and channel flow deposits; diamictite, gravel, sand and clay; variably sorted, generally unconsolidated; *overlying*
- **‘Ocl’ Castlemaine Group** – Ordovician; deep marine sediments; sandstone and siltstone; moderately to well sorted.

The soil investigation was carried out on the 10th June 2025 to ascertain the soil’s suitability for onsite wastewater disposal practices. The investigation was undertaken in conjunction with an investigation for the purposes of ascertaining building foundation parameters. Three boreholes were drilled for the purposes of this report (BH1, BH3 & BH4), while an additional borehole (BH2) was drilled solely for the purpose of the foundation investigation. The boreholes were drilled using a vehicle-mounted drill rig, with total borehole depths for the LCA investigation being between 2.6 to 3.0 metres.

The boreholes indicated that the soil profile across the site is relatively uniform and adheres to a surface layer of ‘Qc1’ alluvial deposits of 2.0 to 2.7 metres depth overlying the ‘Ocl’ sedimentary deposits as described above, with the soil profile generally consisting of sandy silty clays.

No outcropping rock was noted across the proposed development area. No groundwater infiltration was observed in any borehole.

There were some minor variations across the boreholes with regards to colour and encountered depth profiles, therefore reference should be made to the borehole logs within the Appendices for a full description of subsurface conditions at each location.

A composite sample of the receiving soil was taken for laboratory testing in BH3 & BH4. The sample comprised of the expected receiving soil material from below the topsoil, with the results summarised in *Table 1* & *Table 2* below. The laboratory reports with full results are available in the Appendices.

Soil property	BH3/BH4
Overall soil depth (mm)	>3000
Water table depth (mm)	>3000
Plasticity (Liquid limit %) ¹	39
Plasticity Index (%) ¹	26
Shrinkage (%) ¹	11.5
Emerson Class	2
Salinity (dS/m)	0.180
pH	5.3

Table 1 – Summary of results on receiving soil, determined from the investigation. These properties were determined using Australian Standard (AS) test methods.

¹ Plasticity and shrinkage is a characteristic of the clay fraction of the soil

Soil property	BH3/BH4
% Gravel	4
% Coarse Sand	2
% Medium Sand	2
% Fine Sand	8
% Silt	48
% Clay	36

Table 2 – Summary of soil fractions determined from the investigation.

These properties were determined using Australian Standard (AS) test methods.

From the soil fraction properties and material assessment during the investigation, the receiving soil profile underlying the topsoil at the site is deemed to be a **Soil Category 4 weakly to moderately structured clay loam** (GOWM / AS1547 – 2012).

Therefore, the following design loading rates and design irrigation rates (*Table 3*) are deemed to be applicable for the suitable disposal of effluent at the site onto the receiving Category 4 soils:

Application (disposal) method	DLR/DIR (mm/day)
Conventional trenches (primary treatment)	6
Conventional trenches (secondary treatment)	20
Evapotranspiration (ETA) beds and trenches (secondary only)	8
Drip irrigation (secondary treated only)	3.5
Low pressure effluent distribution (LPED) subsurface irrigation	3
Mounds	8

Table 3 – Design load rates (DLR) and design irrigation rates (DIR) for dispersal methods, from *Table L1*, *Table M1* and *Table N1* of AS1547 – 2012 and *Table 4-8* of EPA Code of Practice 891.4 for weakly to moderately structured Category 4 soils.

5 LAND CAPABILITY CLASS RATING (LCCR)

Land Features	Land Capability Class Rating					Individual Rating
	1	2	3	4	5	
General Characteristics						
Site drainage	Very slow	Slow	Moderate	Rapid	Very rapid	2
Runoff ¹	None	Low	Moderate	High	Very high	2
Flooding (years)	Never	–	<1 in 100	<1 in 30	<1 in 20	3
Proximity to watercourses	>100m	–	–	–	<100m	1
Slope ¹ (%)	0 – 2	2 – 8	8 – 12	12 – 20	>20	1
Landslip	No present or past failures	–	–	–	Present or past failures	1
Water table (m)	>5	5 – 2.5	2.5 – 2.0	2.0 – 1.5	<1.5	2
Rock outcrop ¹ (>200mm)	None	<10%	10 – 20%	20 – 50%	>50%	1
Erosion Potential ¹	None	Minor	Moderate	High	Severe	1-2
Exposure	High sun and wind	–	Moderate	Low sun and wind	–	1-3
Landform ¹	Hill crest, convex side	–	Concave side slopes	–	Floodplain	1-5
Vegetation	Turf / pasture	–	–	–	Dense forest, little understorey	1
Rainfall (mm/year)	<450	450 – 650	650 – 750	750 – 1000	>1000	2
Pan evaporation (mm/year)	>1500	1250 – 1500	1000 – 1250	–	<1000	2
Fill ¹	No fill	–	Fill present	–	–	1

Table 4 – Land capability class rating; general characteristics.

¹ Relevant to the site in the proposed dispersal areas.

Land Features	Land Capability Class Rating					Individual Rating
	1	2	3	4	5	
Soil Profile Characteristics						
Profile depth (m)	> 2.0	1.5 – 2.0	–	1.0 – 1.5	< 1.0	1
Soil structure ¹	High	Moderate	Weak	Massive	Single grain	2-3
Mottling	None	–	–	–	Extensive	3
Shrinkage ^{1,2} (%)	<4	4 – 12	12 – 20	>20	–	2
Emerson Class ^{1, 2}	4, 6, 8	5	7	2, 3	1	4
EC (dS/m) ¹	<0.3	0.3 – 0.8	0.8 – 2.0	2.0 – 4.0	>4.0	1
pH	6 – 8	–	4.5 – 6.0	–	<4.5 or >8.0	3
Sodic soil ³	Low	–	Moderate	–	High	3-5
Gravel Fraction ¹ (%)	<10	10 – 20	20 – 40	–	>40	2-3
				Overall Site Rating		5

Table 5 – Land capability class rating: receiving soil characteristics.

¹ Relevant to soil layer(s) at disposal location.

² Sand material with little to no clays has equivalent Emerson Class of 8 (no slaking, no swelling) and minimal shrinkage.

³ Sodic soil risk is determined through geological maps, soil structure, dispersion, Emerson Class, pH and EC data.

The Land Capability Class Rating (LCCR) of the site has been determined to be a 5, primarily due to the risk of sodic/dispersive soil at the site and, to a lesser extent, risk of flooding, though it is noted that the proposed development site is located on a slightly elevated local topographic high.

The Emerson Class, soil pH and risk mapping of the receiving soil indicates that sodic sub-soil may be a risk at the site. From *Table K2 of AS1547 – 2012*, all land application systems are potentially useable with sodic/dispersive soils, though systems that apply effluent within the topsoil (drip and LPED systems) may be preferred. Where effluent is applied directly to the at-risk soils (eg. conventional trenches) a reduced DLR should be designed for.

Gypsum should be applied to the underlying receiving soil at a minimum rate of 1kg/m².

Where soil salinisation is a risk at a site, the land application system should ensure sufficient separation between the base of the application trenches and the top of the water table. As the site investigation showed the water table is more than 3 metres depth at the site, all systems are potentially usable.

6 ONSITE WASTEWATER DISPOSAL

This LCA has been prepared to accompany a permit application to the Central Goldfields Shire Council in review of an onsite wastewater treatment system for a 2-bedroom residence.

Given the constraints to the site identified by the LCCR and indicated preferences from the client, the following systems are recommended:

- A secondary wastewater treatment system connected to a conventional trench system; *or*
- A dry composting toilet and a separate greywater treatment system connected to a conventional trench system.

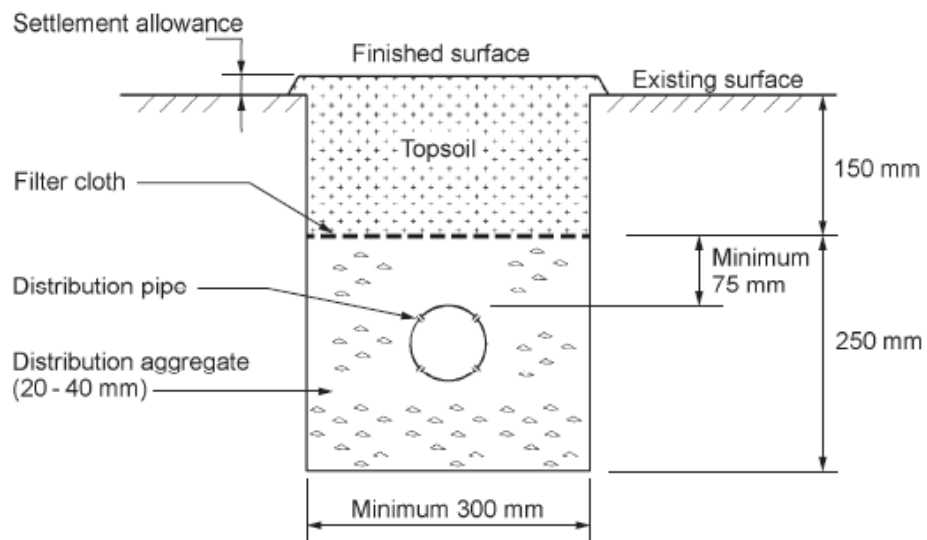
A minimum 20/30/10 effluent quality (BOD < 20mg/L, TSS < 30mg/L and E. Coli < 10cfu/100mg) should be maintained by the selected secondary treatment system. A manufacturer-accredited maintenance and service contract to ensure regular servicing of the system should be implemented.

It is noted that the proposed development will be “off-grid” and an unpowered system is desirable. A wormfarm system that is rated to secondary quality may be preferred.

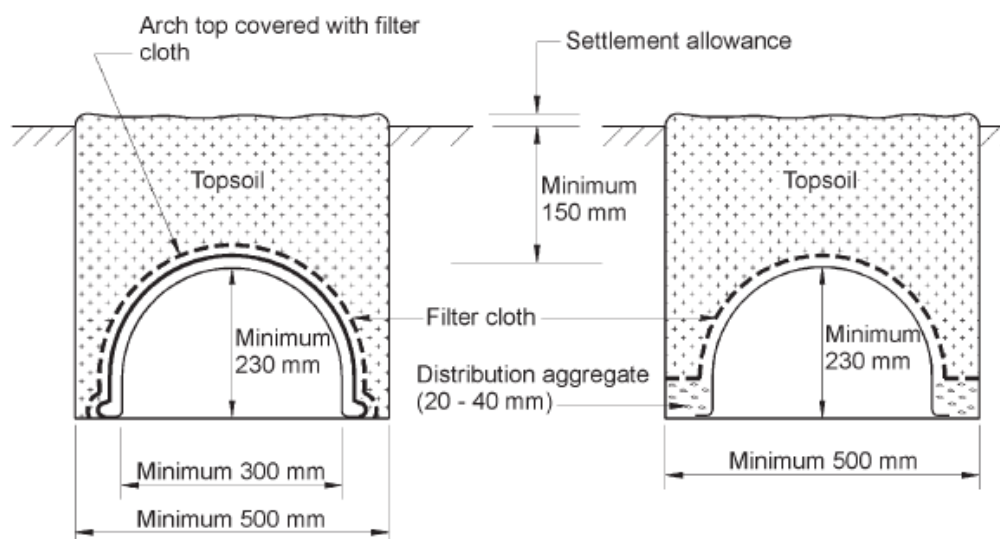
The client has indicated that the proposed development may utilise a dry composting toilet with a greywater system for all other water usage. The effluent from the selected greywater system should meet Level 3 greywater quality (equivalent to secondary all-waste effluent standard) and be designed for the processing of kitchen wastewater.

Preparation of the receiving soil by the application of gypsum should be undertaken at 1kg/m².

Trenches should have a maximum length of 20 metres per trench and be either gravity fed or have LPED lines to ensure even distribution of the effluent along the trench length.



Example conventional piped trench, from *Figure L1* of AS1547 – 2012.



Example self-supporting arch trench, from *Figure L2* of AS1547 – 2012.

7 SIZING OF THE WASTEWATER SYSTEM

The design capacity of the treatment system should cater for the expected peak daily load of the proposed development. As per *EPA GOWM*, the daily load is estimated based on the number of occupants (potential occupancy) and how efficiently water is used within the development (based on water fixtures). Subsequently, the daily wastewater volume generated has been determined using the 'Minimum Daily Wastewater Flow Rates & Organic Loading Rates' as listed within both *AS1547 – 2012* and *EPA GOWM*.

WVST has provided a system sizing as suited to a 2-bedroom residence which will be connected to tank water supplies. The potential wastewater volume generated has been based upon typical values of 120L/person/day and 60g BOD/person/day for a building fitted with full water reduction fixtures and fittings, with full water reduction being defined as minimum WELS rating of 3 stars for appliances and 4 stars for fixtures and fittings.

Following *EPA GOWM* and *AS1547 – 2012*, where the design occupancy is based on the number of bedrooms + 1, the development is therefore envisaged to generate maximum hydraulic loading of 360L/day and organic loadings of up to 180g BOD/day.

As per *AS1547 – 2012 Table J1*, the minimum operational capacity for a 2-bedroom residence is recommended as:

- 3,000L for an all-waste septic tank; or
- 1,800L for a greywater septic tank.

It is noted that the selected wastewater system should also have appropriate capacity for testing wastewater flow and sufficient storage for build-up of solids before removal. Systems are also required to:

- Hold normal flow of domestic wastes for a range of population equivalents.
- Allow for normal peak flows
- Allow for short-term surge flows (for unusual or excess wastewater production)
- Allow for sludge and scum build up.

EPA GOWM provides a number of potential strategies to reduce wastewater generation, including but not limited to:

- Installation of WELS rated water efficient fittings (minimum 3 stars for appliances, and 4 stars for all fittings and fixtures)
- Consider not installing high water use fixtures such as spas and baths.
- Consider the installation of a dry composting toilet.

8 SIZING AND LOCATION OF THE DISPOSAL FIELDS

There are multiple methodologies available to determine the size of the disposal fields required for the wastewater treatment system. In line with the development intention for the site, WVST has used conservative design calculations provided in *AS1547 – 2012* for the sizing of the conventional trenches. For completeness, a water balance analysis has also been provided.

AS1547 – 2012: CONVENTIONAL TRENCH SYSTEM

From *Table L1* of *AS1547 – 2012*, a maximum design loading rate (DLR) of 20mm/day for Category 4 soils can be used for conventional trench distribution systems with secondary treatment or Level 3 greywater. Due to the sodic soil risks at the site, a 25% reduction in the DLR to 15mm/day has been adopted. Following *Section L4.2* of *AS1547 – 2012*, the size of the trench system can be determined by:

$$L = \frac{Q}{DLR \times W}$$

Where: L = total trench length required (m)

Q = design daily flow rate (L/day) = 360L/day

DLR = design loading rate (mm/day) = 15mm/day

W = total width of trench & bed system (m) = 0.6m

$$L = \frac{360}{15 \times 0.6} = 40 \text{ metres}$$

Following *Section L6.1.1* of *AS1547 – 2012*, the maximum trench length should be 20 metres, so a system of two trenches nominally measuring 20 metres in length could be used.

For clay soils, a side wall to side wall minimum trench spacing of 1 metre should be adopted, and the trenches should be installed at least 3 metres from trees and/or outside tree protection zones (where applicable).

Based on these requirements, a system consisting of a series of 2 x 20 metre long trenches with a width of 0.6 metres width and 1.0 metre spacing would require a nominal area of approximately 44m².

WATER BALANCE : DRIP IRRIGATION

WVST used a water balance equation (provided in the Appendices) to determine the required distribution area for the LAA, in accordance with the area's climate statistics. Available climate data from the *Bureau of Meteorology* (station Talbot (Post Office) – 88056) shows that mean monthly rainfall for the region is likely to meet or exceed average evaporation about 4 months of the year (typically from May to August).

When using the water balance equation, the minimum disposal area required for zero winter storage (assuming a DIR of 15mm/day) is **27m²**.

LOCATION OF THE DISPOSAL FIELD

EPA GOWM provides a number of setback distances (buffers) for the disposal field to help reduce the risk of human contact, protect sensitive environmental areas and maintain public amenity.

For secondary treated sewerage systems or Level 3 greywater, these can be summarised as:

- 300 metres up-slope from dams, lakes or reservoirs within a water supply catchment
- 100 metres up-slope from potable waterways
- 30 metres upslope from non-potable waterways and domestic or stock dams.
- 7.5 metres from in-ground water tanks.
- 3 metres up-slope of a building and 1.5 metres down-slope of a building.
- 3 metres up-slope of an adjacent lot and 1.5 metres down-slope of an adjacent lot.
- 20 metres from groundwater bores.
- 1.5 metres from base of trench to seasonal high-water table.

Where a site is flat, down-slope setback distances may be used.

For this site, these EPA setbacks are achievable.

While a detailed design of the system is beyond the scope of this report, the schematic diagrams provided in the Appendices show the available area for the wastewater disposal field and potential conventional trench locations for the dispersal of secondary treated or level 3 greywater effluent at the site. The above setbacks should be adhered to during final positioning of the dispersal field.

9 MANAGEMENT AND MAINTENANCE PROTOCOLS

Maintenance and monitoring of the wastewater treatment system is to be carried out in accordance with the certificate of approval and Central Goldfields Shire Council's permit conditions. In addition, for the long-term benefit of any wastewater treatment system there are a number of requirements for the owner to follow, namely:

- Minimise domestic water use.
- Minimise the use of non-biodegradable detergents.
- Use biodegradable soaps and low-phosphorus detergents.
- Restrict the use of germicides, ie. disinfectants.
- Minimise the discharge of fats, grease or chemicals into the system.
- Monitor quality of groundwater (if applicable).
- No sanitary or other hygiene products should be put in the system.
- Follow any other specific instructions provided by the manufacturers of the tank.

The following should also be considered for any disposal area at this site:

- Should be well exposed to the sun and wind.
- Alternate dispersal between different parts of the disposal field.
- Should contain plant vegetation requiring high nutrient plants - a list of potential plants for the disposal field is provided in the Appendices.

- A dense cover of appropriate evergreen species will be required to assist with water and nutrient uptake, particularly in the wet periods.
- Regularly harvest (mow) vegetation/grasses to maximize their uptake of water and nutrients.
- In dry times, to ensure the viability of the vegetation on and around the disposal field, it may be necessary to water them occasionally.
- Areas along the perimeter and below the disposal field should be vegetated with trees and shrubs.
- There should be restricted access to the disposal fields for vehicles, visitors, pets and children, noting that a fully fenced off area may be required in some cases.
- No permanent structures are to be erected over the reserve disposal area (where required).
- Ensure the area is level by filling depressions with good topsoil (not clay).
- While the disposal areas can be positioned to fit in with a landscape type design, it is easier to manage if they are all in one allocated area.

10 OTHER ON-GOING MANAGEMENT, MAINTENANCE AND REPORTING PROTOCOLS

It is the responsibility of the landowner to manage and maintain the complete domestic wastewater system, including the disposal fields. It is important that the owner compiles all services and actions conducted on the selected system and the disposal field and makes them readily available to the Central Goldfields Shire Council, when requested.

If either the system or the disposal field fails, it is important that a qualified person, ie. plumber, be called out quickly to limit any damage. The Central Goldfields Shire Council should also be contacted at the earliest possible convenience to assess any potential health issues that may have occurred due to the failure.

If or where no mains water is available, provisions should still be made at the planning stage to collect as much water from roof catchments via water tanks as possible. Furthermore, all proposed buildings should have their structure designed to maximise their water catchment potential and typically have water tanks with a volume that can sustain the dwelling for the summer months. It is recommended that a separate tank be considered for non-potable requirements such as fire prevention and watering purposes during drier times.

11 CONCLUSION

The Land Capability Class Rating (LCCR) of the site was determined to be a 5, primarily due to the risk of sodic/dispersive soil at the site. Given the constraints to the site identified by the LCCR, the following systems are recommended:

- A secondary wastewater treatment system; or a dry composting toilet and a separate greywater treatment system connected to:
 - a conventional trench system with a minimum total trench length of 40m where the trenches are 0.6m in width.

A minimum 20/30/10 effluent quality (BOD < 20mg/L, TSS < 30mg/L and E. Coli < 10cfu/100mg) should be maintained by the selected secondary treatment system. A manufacturer-accredited maintenance and service contract to ensure regular servicing of the system should be implemented.

It is noted that the proposed development will be “off-grid” and an unpowered system is desirable. A wormfarm system that is rated to secondary quality may be preferred.

Where the dry composting system with a greywater system is selected, the effluent from the selected greywater system should meet Level 3 greywater quality (equivalent to secondary all-waste effluent standard) and be designed for the processing of kitchen wastewater.

Preparation of the receiving soil by the application of gypsum should be undertaken at 1kg/m².

Trenches should have a maximum length of 20 metres per trench and be either gravity fed or have LPED lines to ensure even distribution of the effluent along the trench length.

The EPA provides a list of approved options for appropriate treatment systems, many of which can achieve the recommended level of performance. Details of the chosen system should be included on the Septic Tank Permit to Install application provide to the Central Goldfields Shire Council.

It remains the responsibility of the property owner/plumber to make the final selection of the treatment systems and forward this information to Central Goldfields Shire Council for approval prior to installation.

Strict adherence to the maintenance and monitoring of the installed system is also an essential part of the ongoing wastewater treatment and disposal program.



Benj Beatty BA/BSc (Hons), MPA, MAusIMM, MAIG
Director / Geologist

DISTRIBUTION

Electronic copies

Wendy von Dok (Site owner) vandokwendy@gmail.com

Benj Beatty (Western Victoria Soil Testing) info@wvst.com.au

This document was prepared for the sole use of the Wendy von Dok and the regulatory agencies directly involved in this project. No third party should rely upon any of the information contained in this document without the prior consent of Western Victoria Soil Testing.

APPENDIX A – MAPS

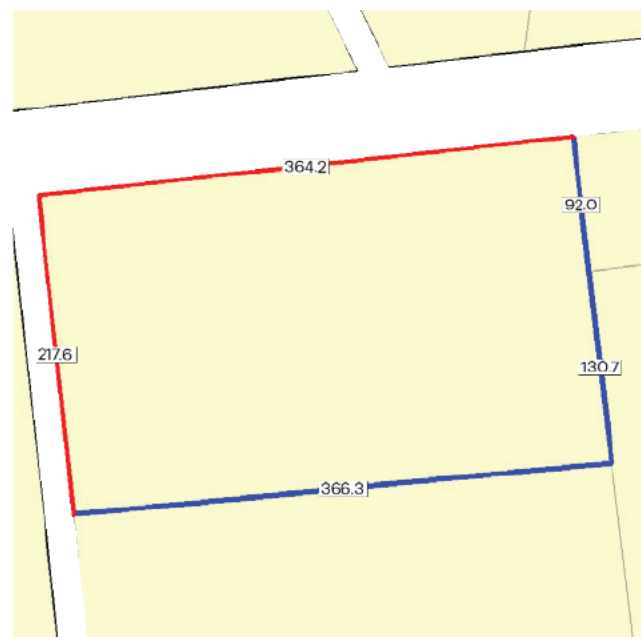
PROPERTY DETAILS

Address: **185 LILLICUR ROAD AMHERST 3371**
 Crown Description: **Allot. 11 Sec. W PARISH OF LILLICUR**
 Standard Parcel Identifier (SP): **11-W\PP2994**
 Local Government Area (Council): **CENTRAL GOLDFIELDS**
 Council Property Number: **33670.0185**
 Directory Reference: **Vicroads 58 C4**

www.centralgoldfields.vic.gov.au

SITE DIMENSIONS

All dimensions and areas are approximate. They may not agree with those shown on a title or plan.



Area: 80411 sq. m (8.04 ha)

Perimeter: 1171 m

For this property:

— Site boundaries

— Road frontages

Dimensions for individual parcels require a separate search, but dimensions for individual units are generally not available.

Calculating the area from the dimensions shown may give a different value to the area shown above

For more accurate dimensions get copy of plan at [Title and Property Certificates](#)

UTILITIES

Rural Water Corporation: **Goulburn-Murray Water**
 Urban Water Corporation: **Central Highlands Water**
 Melbourne Water: **Outside drainage boundary**
 Power Distributor: **POWERCOR**

STATE ELECTORATES

Legislative Council: **WESTERN VICTORIA**
 Legislative Assembly: **RIPON**

PLANNING INFORMATION

Property Planning details have been removed from the Property Reports to avoid duplication with the Planning Property Reports from the Department of Transport and Planning which are the authoritative source for all Property Planning information.

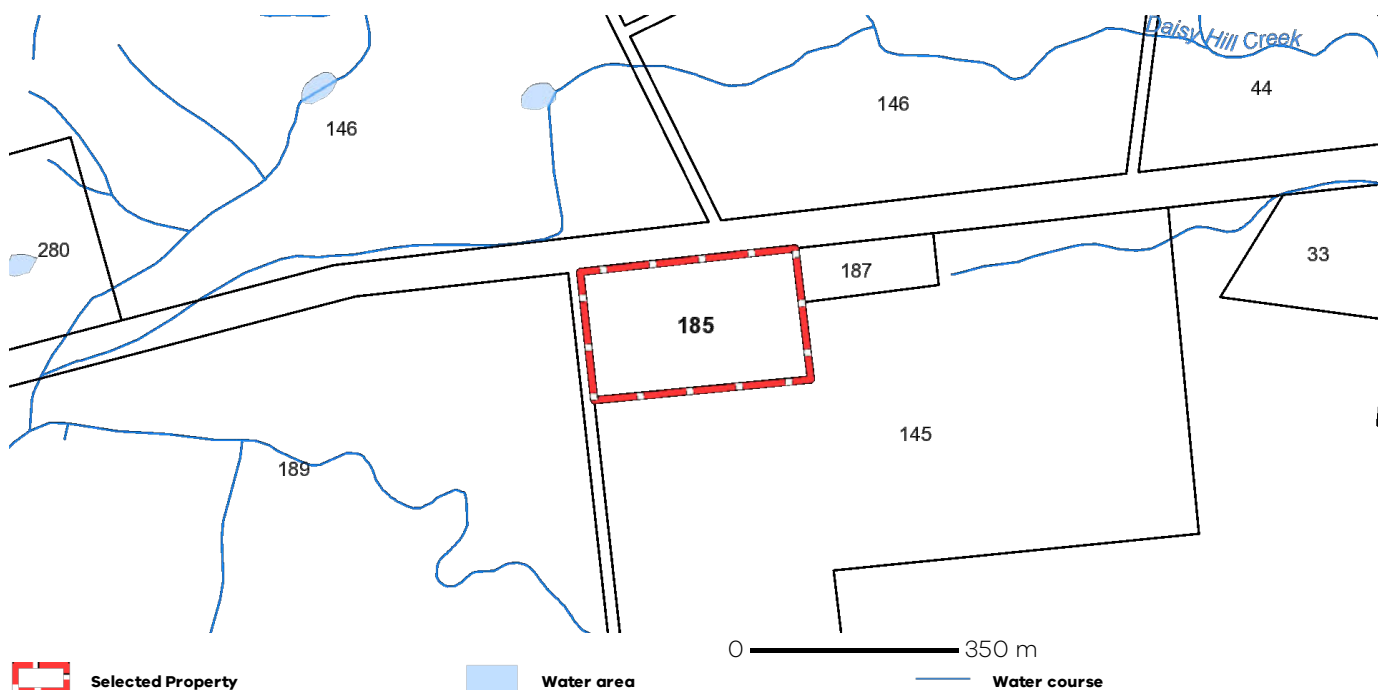
The Planning Property Report for this property can be found here - [Planning Property Report](#)

Planning Property Reports can be found via these two links

Vicplan <https://mapshare.vic.gov.au/vicplan/>

Property and parcel search <https://www.land.vic.gov.au/property-and-parcel-search>

Area Map



From www.planning.vic.gov.au at 09 June 2025 06:36 PM

PROPERTY DETAILS

Address:	185 LILLICUR ROAD AMHERST 3371	
Crown Description:	Allot. 11 Sec. W PARISH OF LILLICUR	
Standard Parce identifier (SP):	11~W\PP2994	
Local Government Area (Council):	CENTRAL GOLDFIELDS	www.centralgoldfields.vic.gov.au
Council Property Number:	33670.0185	
Planning Scheme:	Central Goldfields	Planning Scheme Central Goldfields
Directory Reference:	Vicroads 58 C4	

UTILITIES

Rural Water Corporation:	Goulburn-Murray Water
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Power Distributor:	POWERCOR

STATE ELECTORATES

Legislative Council:	WESTERN VICTORIA
Legislative Assembly:	RIPON

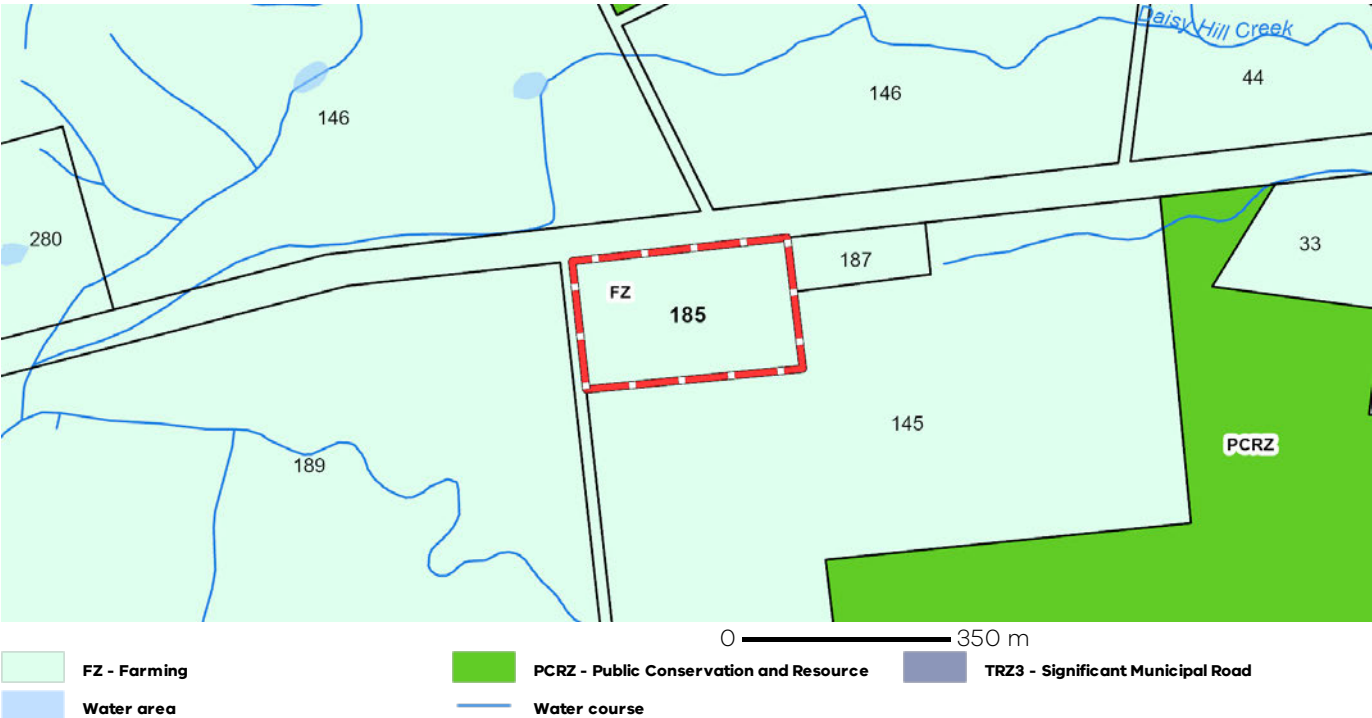
OTHER

Registered Aboriginal Party:	Dja Dja Wurrung Clans Aboriginal Corporation
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[View location in VicPlan](#)

Planning Zones

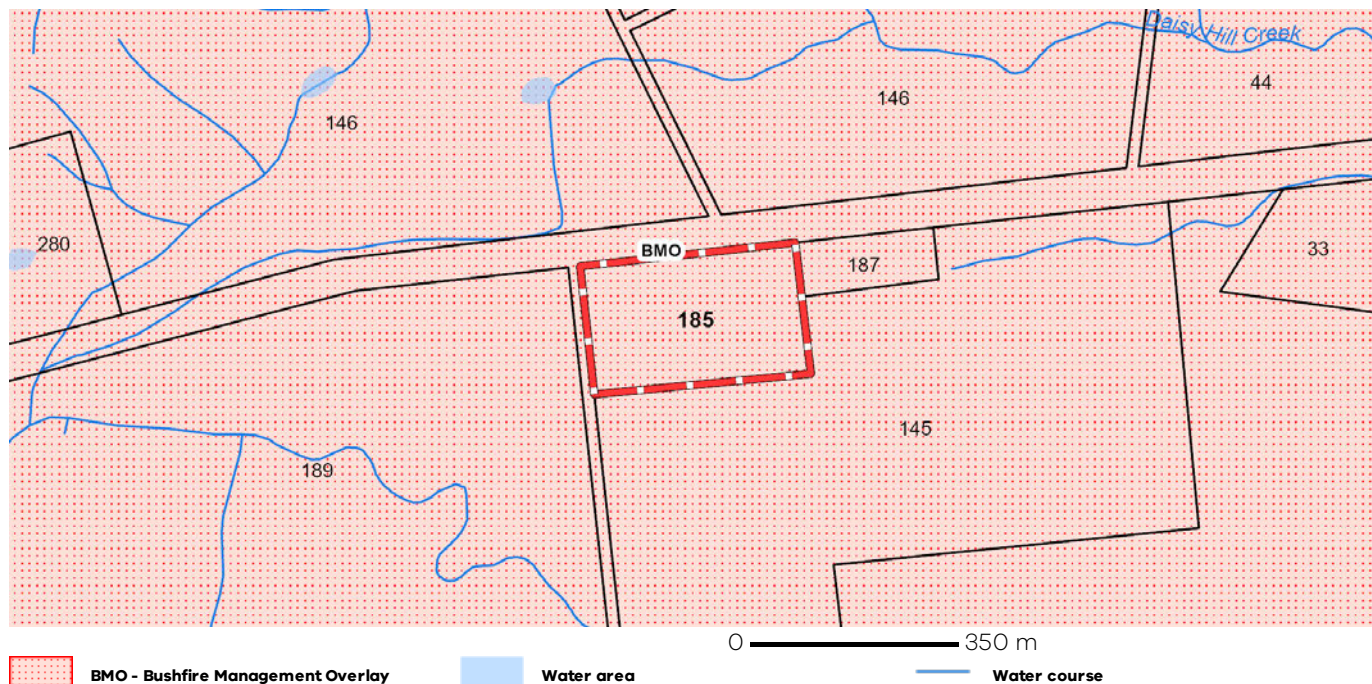
[FARMING ZONE \(FZ\)](#)
[SCHEDULE TO THE FARMING ZONE \(FZ\)](#)



Note: labels for zones may appear outside the actual zone please compare the labels with the legend.

Planning Overlays

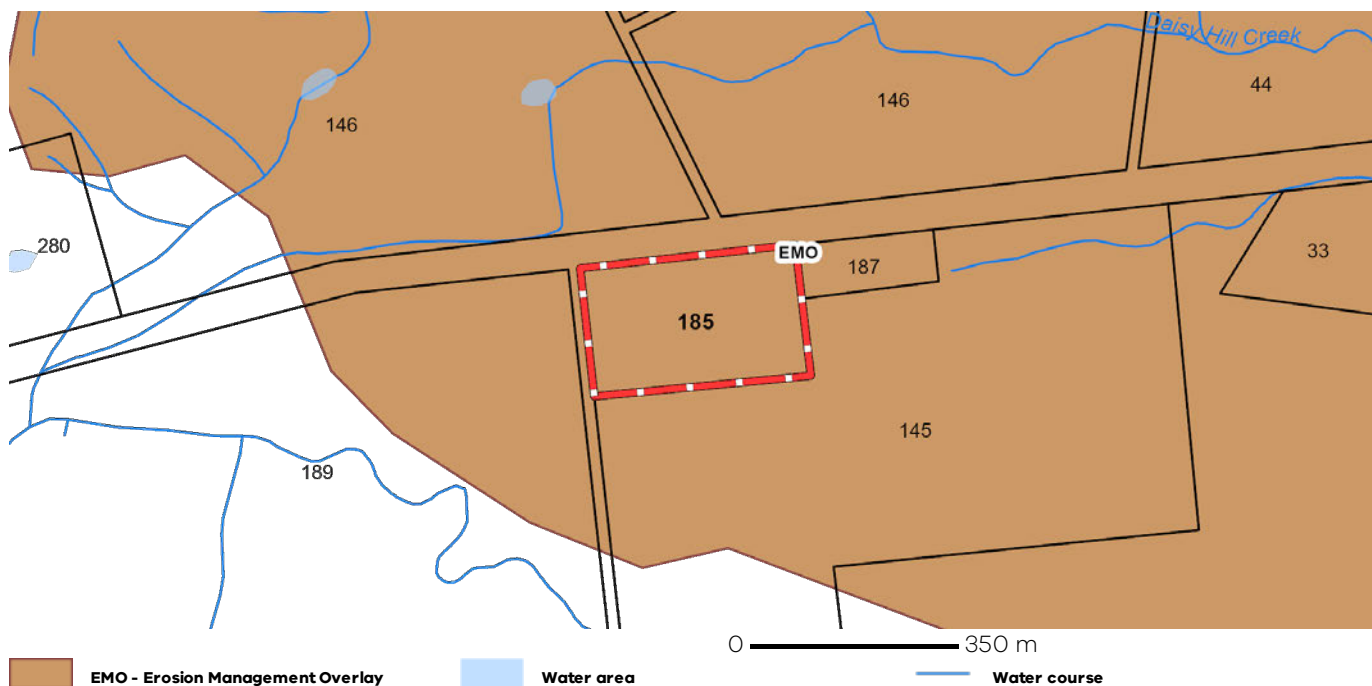
BUSHFIRE MANAGEMENT OVERLAY (BMO)



Note: due to overlaps, some overlays may not be visible, and some colours may not match those in the legend

EROSION MANAGEMENT OVERLAY (EMO)

EROSION MANAGEMENT OVERLAY SCHEDULE (EMO)

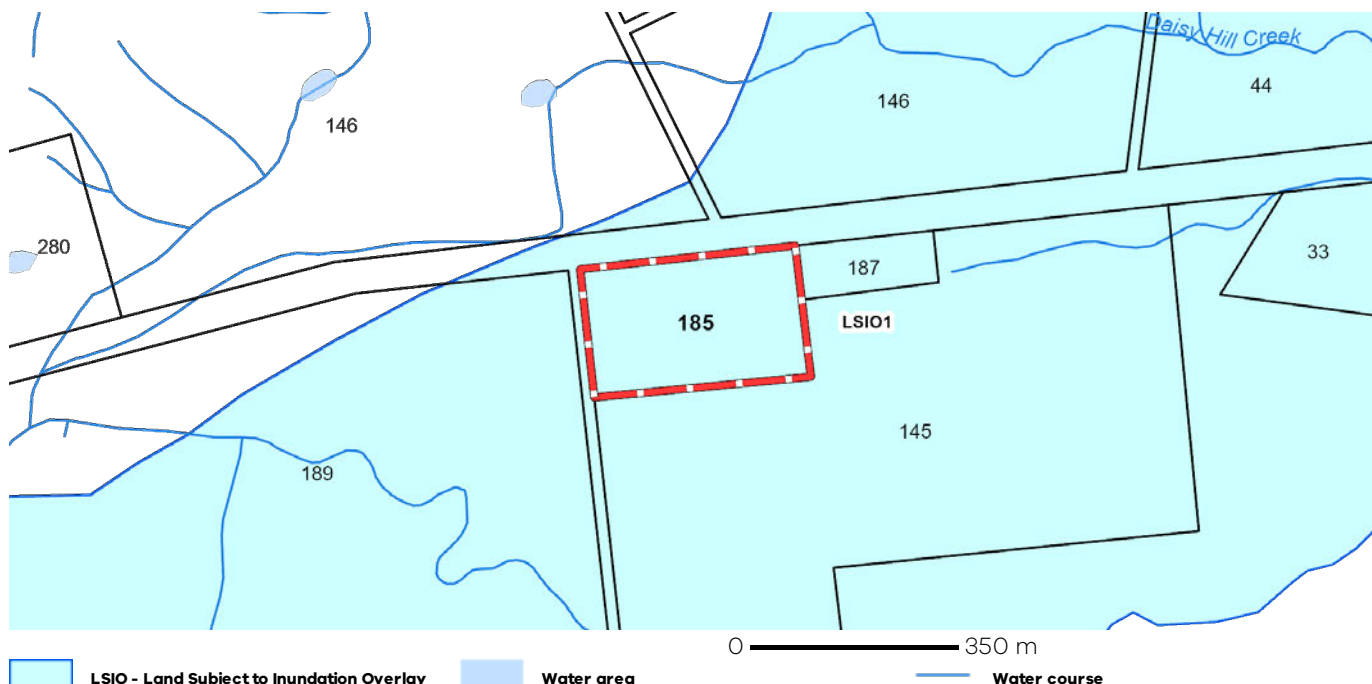


Note: due to overlaps, some overlays may not be visible, and some colours may not match those in the legend

Planning Overlays

LAND SUBJECT TO INUNDATION OVERLAY (LSIO)

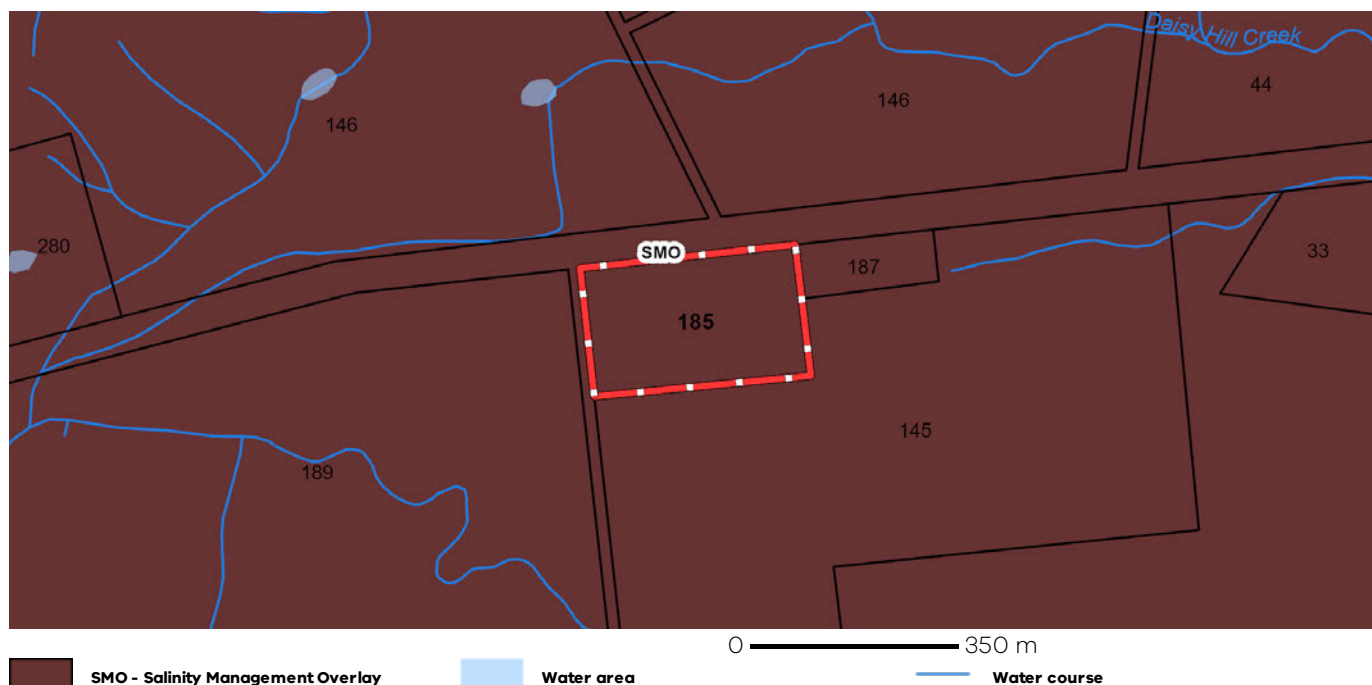
LAND SUBJECT TO INUNDATION OVERLAY - SCHEDULE 1 (LSIO1)



Note: due to overlaps, some overlays may not be visible, and some colours may not match those in the legend

SALINITY MANAGEMENT OVERLAY (SMO)

SALINITY MANAGEMENT OVERLAY SCHEDULE (SMO)



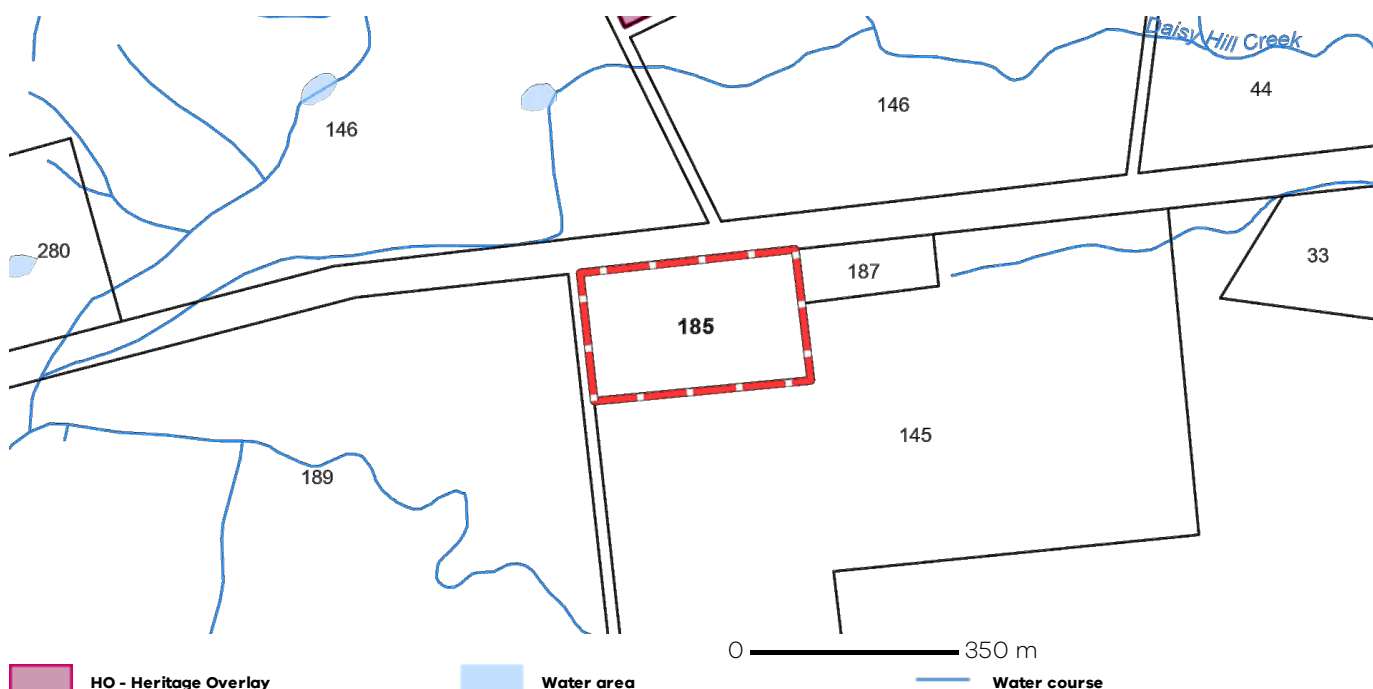
Note: due to overlaps, some overlays may not be visible, and some colours may not match those in the legend

Planning Overlays

OTHER OVERLAYS

Other overlays in the vicinity not directly affecting this land

HERITAGE OVERLAY (HO)



Note: due to overlaps, some overlays may not be visible, and some colours may not match those in the legend

Further Planning Information

Planning scheme data last updated on 05 June 2025.

A **planning scheme** sets out policies and requirements for the use, development and protection of land. This report provides information about the zone and overlay provisions that apply to the selected land. Information about the State and local policy, particularly general and operational provisions of the local planning scheme that may affect the use of this land can be obtained by contacting the local council or by visiting <https://www.planning.vic.gov.au>

This report is NOT a **Planning Certificate** issued pursuant to Section 199 of the **Planning and Environment Act 1987**. It does not include information about exhibited planning scheme amendments, or zonings that may affect the land. To obtain a Planning Certificate go to Titles and Property Certificates at Landata - <https://www.landata.vic.gov.au>

For details of surrounding properties, use this service to get the Reports for properties of interest.

To view planning zones, overlay and heritage information in an interactive format visit <https://mapshare.maps.vic.gov.au/vicplan>

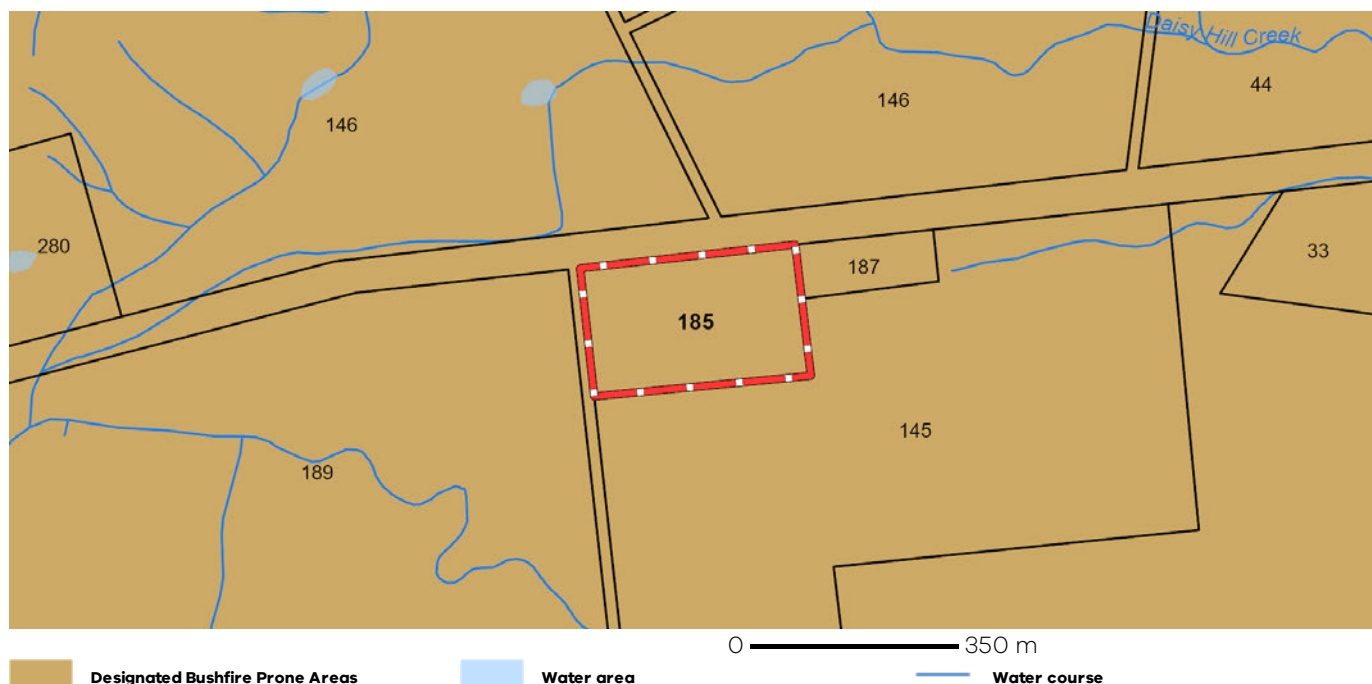
For other information about planning in Victoria visit <https://www.planning.vic.gov.au>

Designated Bushfire Prone Areas

This property is in a designated bushfire prone area. Special bushfire construction requirements apply to the part of the property mapped as a designated bushfire prone area (BPA). Planning provisions may apply.

Where part of the property is mapped as BPA, if no part of the building envelope or footprint falls within the BPA area, the BPA construction requirements do not apply.

Note: the relevant building surveyor determines the need for compliance with the bushfire construction requirements.



Designated BPA are determined by the Minister for Planning following a detailed review process. The Building Regulations 2018, through adoption of the Building Code of Australia, apply bushfire protection standards for building works in designated BPA.

Designated BPA maps can be viewed on VicPlan at <https://mapshare.vic.gov.au/vicplan/> or at the relevant local council.

Create a BPA definition plan in [VicPlan](#) to measure the BPA.

Information for lot owners building in the BPA is available at <https://www.planning.vic.gov.au>.

Further information about the building control system and building in bushfire prone areas can be found on the Victorian Building Authority website <https://www.vba.vic.gov.au>. Copies of the Building Act and Building Regulations are available from <http://www.legislation.vic.gov.au>. For Planning Scheme Provisions in bushfire areas visit <https://www.planning.vic.gov.au>.

Native Vegetation

Native plants that are indigenous to the region and important for biodiversity might be present on this property. This could include trees, shrubs, herbs, grasses or aquatic plants. There are a range of regulations that may apply including need to obtain a planning permit under Clause 52.17 of the local planning scheme. For more information see [Native Vegetation \(Clause 52.17\)](#) with local variations in [Native Vegetation \(Clause 52.17\) Schedule](#)

To help identify native vegetation on this property and the application of Clause 52.17 please visit the Native Vegetation Information Management system <https://nvim.delwp.vic.gov.au/> and [Native vegetation \(environment.vic.gov.au\)](#) or please contact your relevant council.

You can find out more about the natural values on your property through NatureKit [NatureKit \(environment.vic.gov.au\)](#)

Groundwater Resource Report

Groundwater catchment: Loddon

VICGRID94 Easting: 2378489 Northing: 2483027

Depth to water table: < 5m

Water table salinity (mg/L): 3501 - 7000

Groundwater layers (Aquifers and Aquitards)	Depth below surface (m)	Groundwater salinity (mg/L)
UTB Upper Tertiary / Quaternary Basalt basalt (fractured rock)	0 - 7	1001 - 3500
UTQA Upper Tertiary / Quaternary Aquifer layered clay, sands and silt	7 - 9	3501 - 13000
BSE Mesozoic and Palaeozoic Bedrock (basement) sedimentary (fractured rock): Sandstone, siltstone, mudstone, shale. Igneous (fractured rock): includes volcanics, granites, granodiorites.	9 - 209	1001 - 3500

Groundwater management unit (GMU)	Depth below surface (m)	PCV (ML/yr)
LODDON HIGHLANDS WSPA	ALL	20,697

For further information about this report contact:

Department of Environment, Land, Water & Planning

Email: ground.water@delwp.vic.gov.au

For further information on groundwater licensing in this area contact:

Goulburn Murray Water

Phone: 1800 013 357

Email: reception@g-mwater.com.au

Website: <http://www.g-mwater.com.au/water-resources/ground-water>

Disclaimer

This publication may be of assistance to you but the State of Victoria and its employees do not guarantee that the publication is without flaw of any kind or is wholly appropriate for your particular purposes and therefore disclaims all liability for any error, loss or other consequence which may arise from you relying on any information in this publication.

Printed: 22 July 2025

Date Updated: 11 January 2019



Environment,
Land, Water
and Planning



WESTERN VICTORIA
SOIL TESTING

PROPERTY OVERVIEW

APPROXIMATE LOCATIONS
NOT TO SCALE

CLIENT: WENDY VON DOK
PROJECT: 185 LILLICUR ROAD
AMHERST

WVST REF: 240713-2
CLIENT REF:

DRAWN BY: BAB
DATE: 22 JULY 2025



	PROPOSED LAA		CLIENT: WENDY VON DOK PROJECT: 185 LILLICUR ROAD AMHERST
	APPROXIMATE LOCATIONS SCALE 1:300	WVST REF: 240713-2 CLIENT REF:	DRAWN BY: BAB DATE: 22 JULY 2025



APPENDIX B – BOREHOLE LOGS

Client:	Wendy von Dok		Date drilled:	10/06/2025
Project:	185 Lillicur Road, Amherst		Report number:	250713-2
Method:	Vehicle mounted drill rig		Borehole log no:	1
Depth (mm)	Structure	Material Description	Testing	
0 – 100	Topsoil	Clayey Sandy SILT, brown, stiff, moist, fine to medium sand, low plasticity clays, some fine to medium quartz gravel	DCP 4	
100 – 200			DCP 4	
200 – 300	Soil profile	(Sandy) Silty CLAY, low plasticity, variously mottled orange, red, grey, brown, yellow and/or off-white, stiff or very stiff, moist, fine or fine to medium sand, trace to some fine to medium quartz gravel <i>Fine to coarse quartz gravel bed from 0.6 to 0.9 metres</i>	DCP 3	
300 – 400			DCP 2	
400 – 500			DCP 4	
500 – 600			DCP 3	
600 – 700			DCP 14	
700 – 800			DCP 23	
800 – 900				
900 – 1000				
1000 – 1100				
1100 – 1200				
1200 – 1300				
1300 – 1400				
1400 – 1500				
1500 – 1600				
1600 – 1700				
1700 – 1800				
1800 – 1900				
1900 – 2000				
2000 – 2100				
2100 – 2200				
2200 – 2300				
2300 – 2400				
2400 – 2500				
2500 – 2600		Gravelly Sandy Silty CLAY, low plasticity, mottled brown & orange, very stiff, moist, fine sand, fine to medium quartz gravel		
2600 – 2700				
2700 – 2800		Silty CLAY, low plasticity, pale grey, off-white, stiff, moist, some fine sand, saprolitic		
2800 – 2900				
2900 – 3000				

Client:	Wendy von Dok		Date drilled:	10/06/2025
Project:	185 Lillicur Road, Amherst		Report number:	250713-2
Method:	Vehicle mounted drill rig		Borehole log no:	3
Depth (mm)	Structure	Material Description	Testing	
0 – 100	Topsoil	Sandy SILT, brown, stiff, moist, fine to medium sand		
100 – 200	Soil profile	(Sandy) Silty CLAY, low plasticity, variously mottled orange, red, grey, brown, yellow and/or off-white, stiff or very stiff, moist, fine or fine to medium sand, trace to some fine to medium quartz gravel	Sample BH3/BH4 0.2-1.5m	
200 – 300				
300 – 400				
400 – 500				
500 – 600				
600 – 700				
700 – 800				
800 – 900				
900 – 1000				
1000 – 1100				
1100 – 1200				
1200 – 1300				
1300 – 1400				
1400 – 1500				
1500 – 1600				
1600 – 1700		Gravelly Sandy Silty CLAY, low plasticity, mottled brown & orange, very stiff, moist, fine sand, fine to medium quartz gravel		
1700 – 1800				
1800 – 1900				
1900 – 2000				
2000 – 2100				
2100 – 2200		Silty CLAY, low plasticity, mottled off-white & yellow, stiff, moist, some fine sand, saprolitic		
2200 – 2300				
2300 – 2400				
2400 – 2500				

Client:	Wendy von Dok		Date drilled:	10/06/2025
Project:	185 Lillicur Road, Amherst		Report number:	250713-2
Method:	Vehicle mounted drill rig		Borehole log no:	4
Depth (mm)	Structure	Material Description	Testing	
0 – 100	Topsoil	Clayey Sandy SILT, brown, stiff, moist, fine to medium sand, low plasticity clays, some fine to medium quartz gravel		
100 – 200				
200 – 300	Soil profile	(Sandy) Silty CLAY, low plasticity, variously mottled orange, red, grey, brown, yellow and/or off-white, stiff or very stiff, moist, fine or fine to medium sand, trace to some fine to medium quartz gravel	Sample BH3/BH4 0.2-1.5m	
300 – 400				
400 – 500				
500 – 600				
600 – 700				
700 – 800				
800 – 900				
900 – 1000				
1000 – 1100				
1100 – 1200				
1200 – 1300				
1300 – 1400				
1400 – 1500				
1500 – 1600				
1600 – 1700				
1700 – 1800				
1800 – 1900		Gravelly Sandy Silty CLAY, low plasticity, mottled brown & orange, very stiff, moist, fine sand, fine to medium quartz gravel		
1900 – 2000				
2000 – 2100		Silty CLAY, low plasticity, pale grey with orange & brown mottles, stiff, moist, some fine sand, saprolitic		
2100 – 2200				
2200 – 2300				
2300 – 2400				
2400 – 2500				

APPENDIX C – SITE PHOTOGRAPHS



Site of proposed residence at time of investigation, looking southwest.



Site at time of investigation, looking northeast.



Site at time of investigation, looking southeast.



Site at time of investigation, looking north.



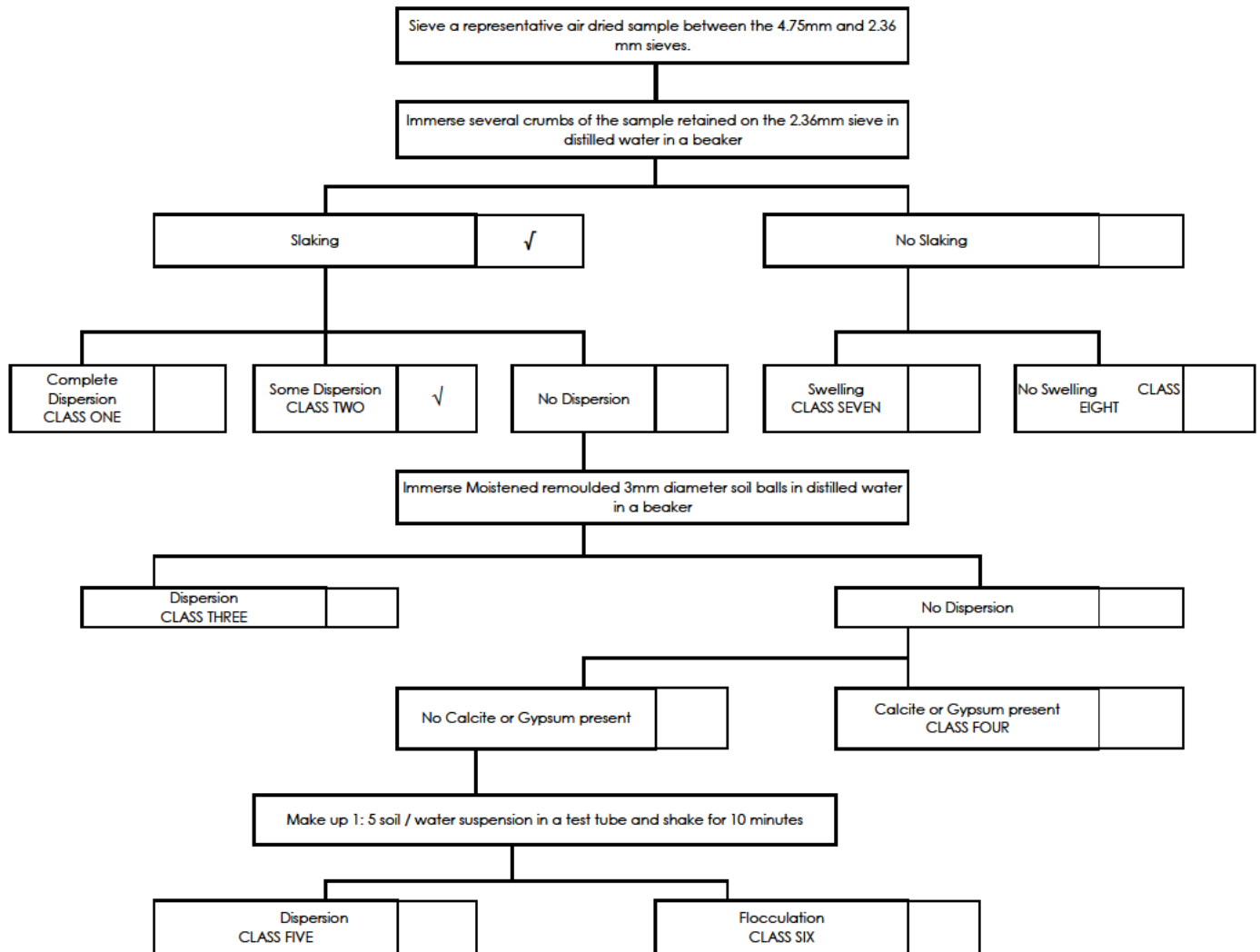
Site at time of investigation, looking south.



Site at time of investigation, looking west.

APPENDIX D – NATA ACCREDITED TEST REPORTS



REPORT OF DETERMINATION OF EMERSON CLASS NUMBER OF A SOIL**AS 1289.3.8.1****EMERSON CLASS NUMBER : 2**

Lab Number : 7732/25/435	
Client : Western Victoria Soil Testing, 20 Boak Ave Mt Helen VIC	Project : Lab testing ex Amherst, Your Ref : 250713-2
Sampled By : Client	Date Sampled : 19/06/2025
Sampling Method : Sampled by Client, tested as presented	
Date Tested : 24/06/2025	Material : Clay ex BH 3/ 4
Start Time : 11:45 AM	Finish Time : 2:50 PM
Water Type & temperature : Distilled @ 14° C	
Tested By : JB	Checked By : RB

NOTES

Class One : show strong dispersing reaction, ie covers nearly whole bottom of beaker
Class Two : Moderate to slight reaction spreading in thin streaks on bottom of beaker
Class Three : Soil remoulded at Plastic Limit disperses in water
Class Four : Remoulded soil does not disperse in water, Calcium Carbonate or Calcium Sulphate is present
Class Five : Does not disperse and the 1:5 soil/water suspension remains dispersed after 5 minutes
Class Six : Does not disperse and the 1:5 soil/water suspension begins to flocculate within 5 minutes
Class Seven : Crumbs of soil remain coherent in water and swells
Class Eight : Crumbs of soil remain coherent and do not swell

NATA Registered Testing Facility, Accreditation No 10664.
Accredited for compliance with ISO/IEC 17025 - TestingR. Bennett
Authorised Signatory :24/06/2025
Date :

REPORT OF SOIL CLASSIFICATION

Client : Western Victoria Soil Testing, 20 Boak Ave Mt Helen VIC		Project: Lab testing ex Amherst (Your Ref : 250713-2)																																	
Lab Reference No : 7732/25/435		Date Sampled: 19/06/2025	Sampled by : Client																																
Sample No. Location	1																																		
Material	Ex BH 3/4 Clay																																		
Particle Size Distribution (AS1289.3.6.1)																																			
A.S Sieve (mm)	<table border="1"> <tr><td>75.0</td><td></td></tr> <tr><td>53.0</td><td></td></tr> <tr><td>37.5</td><td></td></tr> <tr><td>26.5</td><td>100</td></tr> <tr><td>19.0</td><td>99</td></tr> <tr><td>13.2</td><td>98</td></tr> <tr><td>9.5</td><td>95</td></tr> <tr><td>6.7</td><td>92</td></tr> <tr><td>4.75</td><td>88</td></tr> <tr><td>2.36</td><td>83</td></tr> <tr><td>1.18</td><td>76</td></tr> <tr><td>0.6</td><td>72</td></tr> <tr><td>0.425</td><td>69</td></tr> <tr><td>0.3</td><td>66</td></tr> <tr><td>0.15</td><td>58</td></tr> <tr><td>0.075</td><td>51</td></tr> </table>			75.0		53.0		37.5		26.5	100	19.0	99	13.2	98	9.5	95	6.7	92	4.75	88	2.36	83	1.18	76	0.6	72	0.425	69	0.3	66	0.15	58	0.075	51
75.0																																			
53.0																																			
37.5																																			
26.5	100																																		
19.0	99																																		
13.2	98																																		
9.5	95																																		
6.7	92																																		
4.75	88																																		
2.36	83																																		
1.18	76																																		
0.6	72																																		
0.425	69																																		
0.3	66																																		
0.15	58																																		
0.075	51																																		
Plasticity Tests	<table border="1"> <tr><td>AS 1289 3.1.2 Liquid Limit %</td><td>39</td></tr> <tr><td>AS 1289 3.2.1 Plastic Limit %</td><td>13</td></tr> <tr><td>AS 1289 3.3.1 Plasticity Index %</td><td>26</td></tr> <tr><td>AS 1289 3.4.1 Linear Shrinkage %</td><td>11.5</td></tr> <tr><td>linear shrinkage status</td><td>curled</td></tr> </table>			AS 1289 3.1.2 Liquid Limit %	39	AS 1289 3.2.1 Plastic Limit %	13	AS 1289 3.3.1 Plasticity Index %	26	AS 1289 3.4.1 Linear Shrinkage %	11.5	linear shrinkage status	curled																						
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AS 1289 3.4.1 Linear Shrinkage %	11.5																																		
linear shrinkage status	curled																																		

Sampling Method : AS1289.1.2.1 Clause 6.4 – from layers in pavement or earthworks
linear shrinkage status curling (cl) / crumbling (cb) / neither (na)
All samples are oven dried and dry sieved

Approved Signatory: R.Bennett

Date Issued : 30/06/2025



NATA Accredited Testing Facility, Accreditation Number 10644.
Accredited for compliance with ISO/IEC 17025 - Testing

REPORT OF DETERMINATION OF pH OF A SOIL**AS1289.2.1.1, AS1289.4.3.1**

Sample pH:	5.3
Sample Conductivity (uS/cm)	180
Sample Moisture Content (%)	22

Lab Number : 7732/25/435	
Client : Western Victoria Soil Testing 20 Boak Ave Myt Helen VIC	Project: Lab testing ex Amherst Your Ref : 250713-2
Sampled By : Client	Date Sampled : 24/06/2025
Sampling Method : Sampled by Client method not known. Results relate to testing performed only.	
Date Tested : 26/06/2025	Material : Clay
Sample Source / Identification : BH 3	
Date received : 24/06/2025	Water Type & temperature : Distilled 17oC

Solution Tested at Ratio : 30g and 75g water

pH of Distilled Water before use : 7.05

/ Air Dried

Natural

NOTE : Conductivity test results reported in this report are excluded from references to NATA including accreditation of the test results

NATA Accredited Testing Facility, Accreditation Number 10644.
Accredited for compliance with ISO/IEC 17025 - Testing

Authorised Signatory :

27/06/2025

Date :

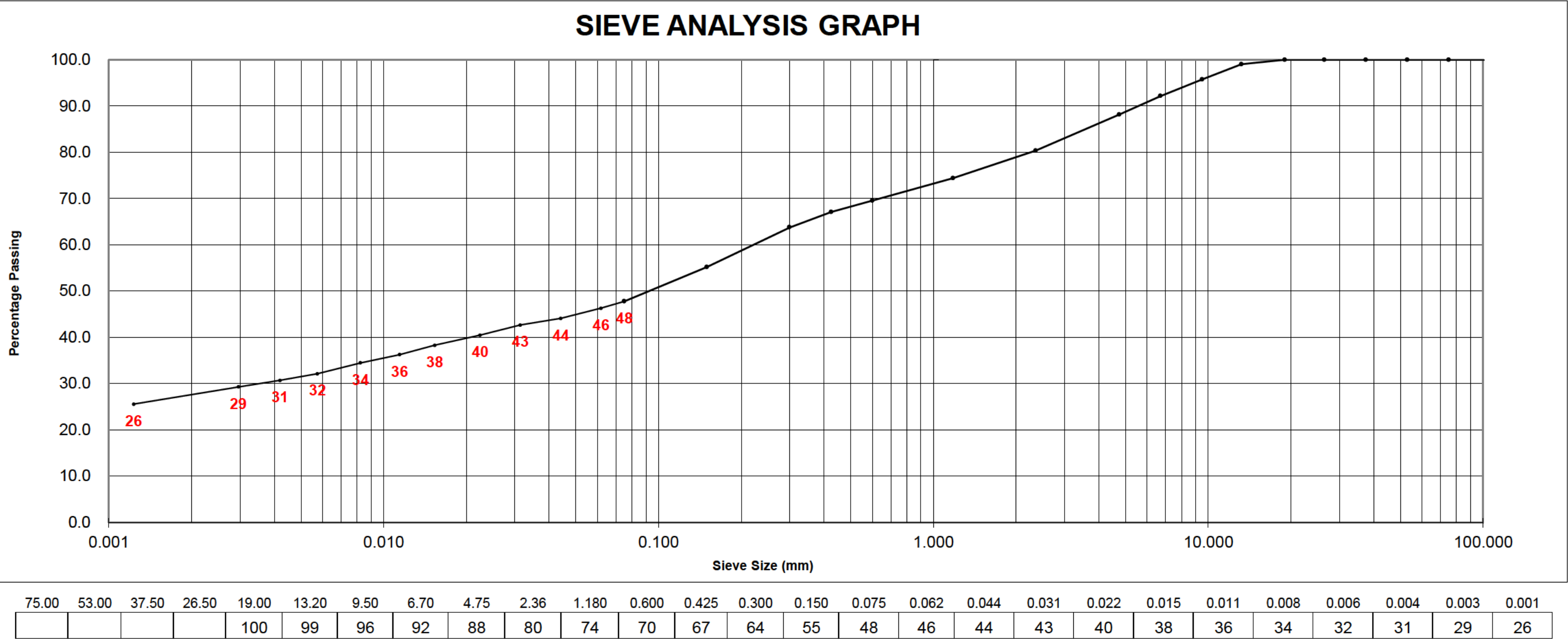
QUALITY OF MATERIALS REPORT

Customer: Geotest Civil Services
Customer Address: PO Box 5298, Geelong North VIC
Project: GCS - 2025 Material Testing, 7732/25
Location: -
Customer Order No.: 7732/25/435

Report Number: **QOM-S25DS-05218**
Report Date: 8/07/2025
CG Job No: 1097873.0008
Sieve Analysis Test Method: AS 1289.3.6.1
AS1289 3.6.3
Page: 1 of 1

Testing performed and reported at our Dandenong South Laboratory 12712

Sample No.:	S25DS-05218
ID No.:	-
Lot No:	-
Date Sampled:	19/06/2025
Date Tested:	8/07/2025
Sampling Method:	As Received
Material Source:	
Material Description:	CLAY trace sand, brown, medium plasticity.
Sample Location:	WVST - Amherst 250713-2
Sample Preparation Method:	As Received
Loss in pre-treatment (%)	-
Moisture Content (%) AS 1289.2.1.1	11.9
Particle Density g/cm ³ AS 1289.3.5.1	2.77
Liquid Limit (%) AS 1289.3.1.2	-
Plastic Limit (%) AS 1289.3.2.1	-
Plasticity Index AS 1289.3.3.1	-
Linear Shrinkage (%) AS 1289.3.4.1	-
Cracking, Curling, Crumbling (1,2,3)	
P.I. x % Passing 0.425mm	-
L.S. x % Passing 0.425mm	-
Ratio of % Passing (0.075/0.425)	0.71



Soil Classification in accordance with AS1726 (Tables 9 & 10)

-

Remarks:

Dispersion Method: mechanical Hydrometer: grams per litre



Accredited for compliance with ISO/IEC 17025 - Testing
Corporate Accreditation No. 12719

This report shall not be reproduced expect in full. Reported results are related only to the item(s) tested.

J Lamont



Head Office
25 Metcalf Street
DANDENONG SOUTH VIC
3175

Ph: +61 3 8796 7900

Form No: CG.349.009

Issue Date: 28/08/2024

APPENDIX E – WATER BALANCE

Victorian Land Capability Assessment Framework

Please read the attached notes before using this spreadsheet																
Irrigation area sizing using Nominated Area Water Balance & Storage Calculations																
Site Address:		185 Lillicur Road, Amherst														
Date:		22/07/2025				Assessor:		Western Victoria Soil Testing								
INPUT DATA																
Design Wastewater Flow	Q	360	L/day	Based on maximum potential occupancy and derived from Table 4 in the EPA Code of Practice (2016)												
Design Irrigation Rate	DIR	15.0	mm/day	Based on soil texture class/permeability and derived from Table 9 in the EPA Code of Practice (2016)												
Nominated Land Application Area	L	27	m ²	¹												
Crop Factor	C	0.4 - 0.7	unitless	Estimates evapotranspiration as a fraction of pan evaporation; varies with season and crop type ²												
Rainfall Runoff Factor	RF	1.0	unitless	Proportion of rainfall that remains onsite and infiltrates, allowing for any runoff												
Mean Monthly Rainfall Data	Talbot (Post Office) - 88056			BoM Station and number												
Mean Monthly Pan Evaporation Data	BoM climate data			Evaporation data extracted from http://www.bom.gov.au/jsp/ncc/climate_averages/evaporation/index.jsp												
Parameter	Symbol	Formula	Units	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Days in month	D		days	31	28	31	30	31	30	31	31	30	31	30	31	365
Rainfall	R		mm/month	31.1	33.0	30.8	37.7	50.1	56.3	58.4	60.9	54.3	49.8	41.3	35.7	539
Evaporation	E		mm/month	203	178	138	85	49	31	34	50	70	109	145	182	1274
Crop Factor	C		unitless	0.70	0.70	0.70	0.60	0.50	0.45	0.40	0.45	0.55	0.65	0.70	0.70	
OUTPUTS																
Evapotranspiration	ET	ExC	mm/month	142	125	97	51	25	14	14	23	39	71	102	127	827.1
Percolation	B	DIRxD	mm/month	465.0	420	465.0	450.0	465.0	450.0	465.0	465.0	450.0	465.0	450.0	465.0	5475.0
Outputs		ET+B	mm/month	607.1	544.6	561.6	501.0	489.5	464.0	478.6	487.5	488.5	535.9	551.5	592.4	6302.1
INPUTS																
Retained Rainfall	RR	RxRF	mm/month	31.1	33	30.8	37.7	50.1	56.3	58.4	60.9	54.3	49.8	41.3	35.7	539.4
Applied Effluent	W	(QxD)/L	mm/month	413.3	373.3	413.3	400.0	413.3	400.0	413.3	413.3	400.0	413.3	400.0	413.3	4866.7
Inputs		RR+W	mm/month	444.4	406.3	444.1	437.7	463.4	456.3	471.7	474.2	454.3	463.1	441.3	449.0	5406.1
STORAGE CALCULATION																
Storage remaining from previous month			mm/month	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Storage for the month	S	(RR+W)-(ET+B)	mm/month	-162.7	-138.3	-117.5	-63.3	-26.1	-7.6	-6.9	-13.3	-34.2	-72.7	-110.2	-143.4	
Cumulative Storage	M		mm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Maximum Storage for Nominated Area	N		mm	0.00												
	V	NxL	L	0												
LAND AREA REQUIRED FOR ZERO STORAGE			m ²	19	20	21	23	25	26	27	26	25	23	21	20	
MINIMUM AREA REQUIRED FOR ZERO STORAGE:				27.0 m ²												
CELLS																
		Please enter data in blue cells														
XX		Red cells are automatically populated by the spreadsheet														
XX		Data in yellow cells is calculated by the spreadsheet, DO NOT ALTER THESE CELLS														
NOTES																
¹ This value should be the largest of the following: land application area required based on the most limiting nutrient balance or minimum area required for zero storage																
² Values selected are suitable for pasture grass in Victoria																

APPENDIX F – POTENTIAL PLANTS FOR THE DISPOSAL FIELD

Distribution pipes of effluent systems are not generally subject to root blockage if constructed as recommended by the Code of Practice. The following list, although not exhaustive, is included as a guide to species that have been found from industry experience to be satisfactory.

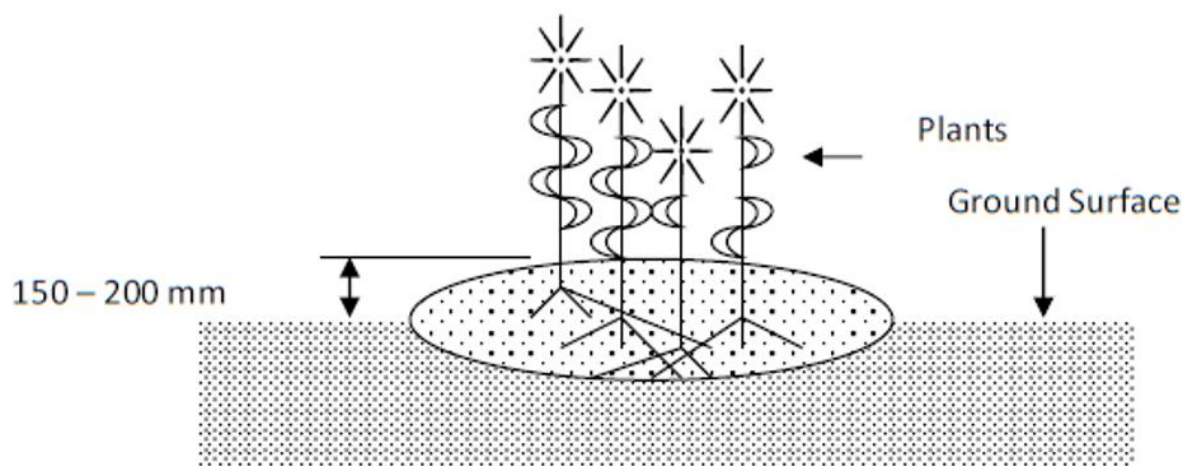
Botanical names	Common names
<i>Phragmites australis</i>	Common Reed
<i>Canna x generalis</i>	Canna Lily
	Calla Lily
	Ginger Lily
<i>Acacia howittii</i>	Sticky Wattle
<i>Callistemon citrinus</i>	Crimson Bottlebrush
<i>Callistemon macropunctatus</i>	Scarlet Bottlebrush
<i>Leptospermum lanigerum</i>	Wooley Tea-tree
<i>Melaleuca decussata</i>	Cross Honey Myrtle
<i>Melaleuca ericifolia</i>	Swamp Paperbark
<i>Melaleuca halmaturorum</i>	Salt Paperbark
<i>Tamarix juniperina</i>	Flowering Tamarisk
<i>Eleocharis acuta</i>	Cannas
	Common Spike-rush
	Buffalo/Kikuyu
	Geranium
	Hydrangeas
	Tall Wheat Grass
	Strawberry Clover
	White Clover
	Perennial Rye
	Bougainvillea

Note: Care should be taken when locating trees to ensure they do not shade the system unless they draw from it.

Contact your local garden nursery for water tolerant plants or refer to gardening books such as:

- *Grow What Where*, The Australian Plant Study Group, Viking O'Neill (Penguin Books, 1990)
- *Gardening with Australian Plants*, Roger Eliot (Lothian Publishing, 1990)

Planting in damp conditions



Tree planting near disposal fields and drains

Bushes, shrubs and trees should generally not be permitted to grow directly over absorption trenches or sand filters to minimise problems should the systems need to be dug up for maintenance. Where trees are near drainage lines, difficulties with roots entering the drains can be anticipated. Plants listed below should not be planted near drains (within 8 metres) due to the risk of pipe blockage.

Botanical names	Common names
<i>Eucalyptus camaldulensis</i>	River Red Gum
<i>Eucalyptus citiododra</i>	Lemon-scented Gum
<i>Fraxinus raywoodi</i>	Claret Ash
<i>Eucalyptus cladocalyx</i>	Sugar Gum
<i>Plananus (all species)</i>	Plane Trees
<i>Populus nigra, etc.</i>	Poplar
<i>Salix babylonica, etc.</i>	Weeping Willow

The following plants are generally satisfactory for planting up to within 2 metres of any drain or drainage area.

Botanical names	Common names
<i>Acacia lonifolia</i>	Sallow Wattle
<i>Callistemon viminalis</i>	Weeping Bottlebrush
<i>Callistemon lilacinus</i>	Lilac Bottlebrush
<i>Eucalyptus preissiana</i>	Bell-fruit Mallee
<i>Viminaria juncea</i>	Native Broom

COVER SHEET

Please note this permit application is made up of several documents. Due to their size they will be submitted in 4 separate emails as summarised below.

- A. CGS Council Application Form, printed page with signature and Land Title documents.
- B. Supporting Information (this document)
- C. Land Capability Assessment
- D. Bushfire Management Statement

B. SUPPORTING INFORMATION

Table of Contents

1. Proposal	P2
○ Why a planning permit is being sought	
○ Description of the site and proposed new dwelling	
2. Existing Conditions	P10
○ Current use	
○ Access	
○ Physical features and climate	
○ Power supply	
○ Water	
○ Wastewater-see attached LCA	
3. Responses to Decision Guidelines Clause 35.07-6	P15
○ General issues	
○ Agricultural issues	
○ Environmental issues	
○ Design and siting issues	

1 The Proposal

Why a planning permit is being sought

I seek a permit to replace a decades old dwelling with a new dwelling of similar size in the same area. Prior to me purchasing the property in 2012, the old dwelling accommodated shearers so it has been in continuous use as a dwelling for decades. The dwelling is an integral part of the farm's ongoing development, but it was poorly designed and is now compromised by termite damage and weathering and needs to be replaced.

Figure 1a shows the shearer's dwelling in the background and shearing shed in the foreground, as they were in 2012. Figure 1b is a close-up of the shearer's dwelling in 2012 and Figure 1c, the dwelling in 2025.



(a) 2012 Facing South-West



(b) 2012 Facing South



(c) 2025 Facing South-West

Figure 1 (a) Shearer's dwelling (background) and shearing shed (foreground) in 2012 when I purchased the property (b) close-up of the dwelling in 2012 and (c) close-up of the dwelling as it is now in 2025.

The old wooden shearing shed is still intact and is being used as a storage area but is also degraded and will eventually be dismantled. The corrugated roof and steel posts which were added on not long before I purchased the property (Figure 2) are very sound and will be retained as a carport for machinery and vehicles.



(a) Facing North 2012



(b) Facing North 2025

Figure 2 (a) Shearing shed in 2012 and (b) now in 2025 where some walls have been removed to make way for a carport and work bench under the metal roof which was constructed not long before I purchased the property

Description of the site and proposed new dwelling

The property is 8 Ha or 20 Acres and rectangular in shape being 362m x 224m (Figures 3 & 4). The old dwelling and shearing shed are in the NW corner along the West boundary. There are no other structures on the property.

The new dwelling will be located slightly further NE of the old dwelling, but it will still be at the highest part of the property in a relatively flat area. The existing dwelling has a footprint of about 80 m² and the proposed dwelling will have a footprint of about 100 m² (Figures 4, 6,7).

The building location and concept design are depicted in site, floor and elevation plans in Figures 6-8 below. The building will be a simple rectangular shape, single storey, with a timber frame construction, hip roof, plaster interior cladding and corrugated iron external cladding and roofing. The house will be raised on concrete stumps to address the LSIO but the open area underneath the building will be covered to comply with the BMO. The house will be constructed to BAL 19 standard. External walls will be Eucalyptus green Colorbond and the roof a light slate Colorbond. The base boards will be a light slate grey and made of fibro-cement. All windows will be sliding aluminium. Stormwater movement will be facilitated around the building with swales. There will be a small 1.8 m wide veranda and decking on the east side to provide shade in summer and a small porch at the back to protect the back entrance from wind and rain.

Using a similar site and footprint to the existing dwelling is preferable for several reasons.

- No agricultural land needs to be sacrificed, disrupted or degraded.
- It's the highest point of the property which is beneficial in the context of the LSIO, drainage of stormwater and wastewater diversion by gravity to the east.
- It is a relatively flat site so no excavation is required.
- It's close to the existing all-weather crossover from Lillicur Rd and driveway.
- It's a safe distance, e.g. about 200m away from the gas pipe easement.
- It's a defensible space close to a tanked water supply.



Figure 3 Aerial photo of the property showing the property boundary and existing buildings in the NW corner



Figure 4 Aerial photo showing the existing dwelling in the bottom right-hand corner and site of the proposed new dwelling, slightly further NE.



Figure 5 Site of the proposed new dwelling, taken from the driveway facing W-SW. The old dwelling sits to the left and the shearing shed to the right.

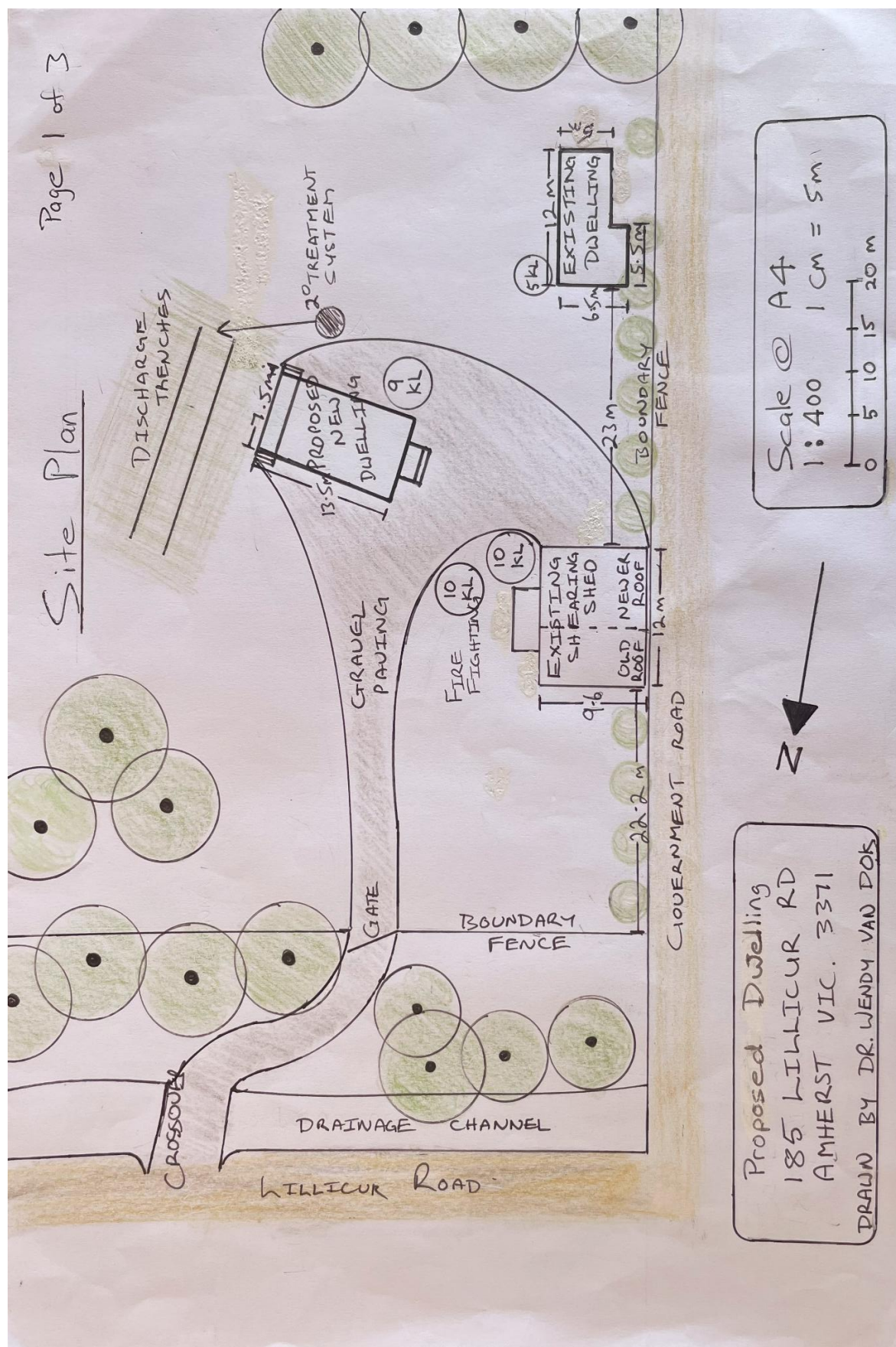


Figure 6 Scaled site plan showing the existing and proposed new dwelling

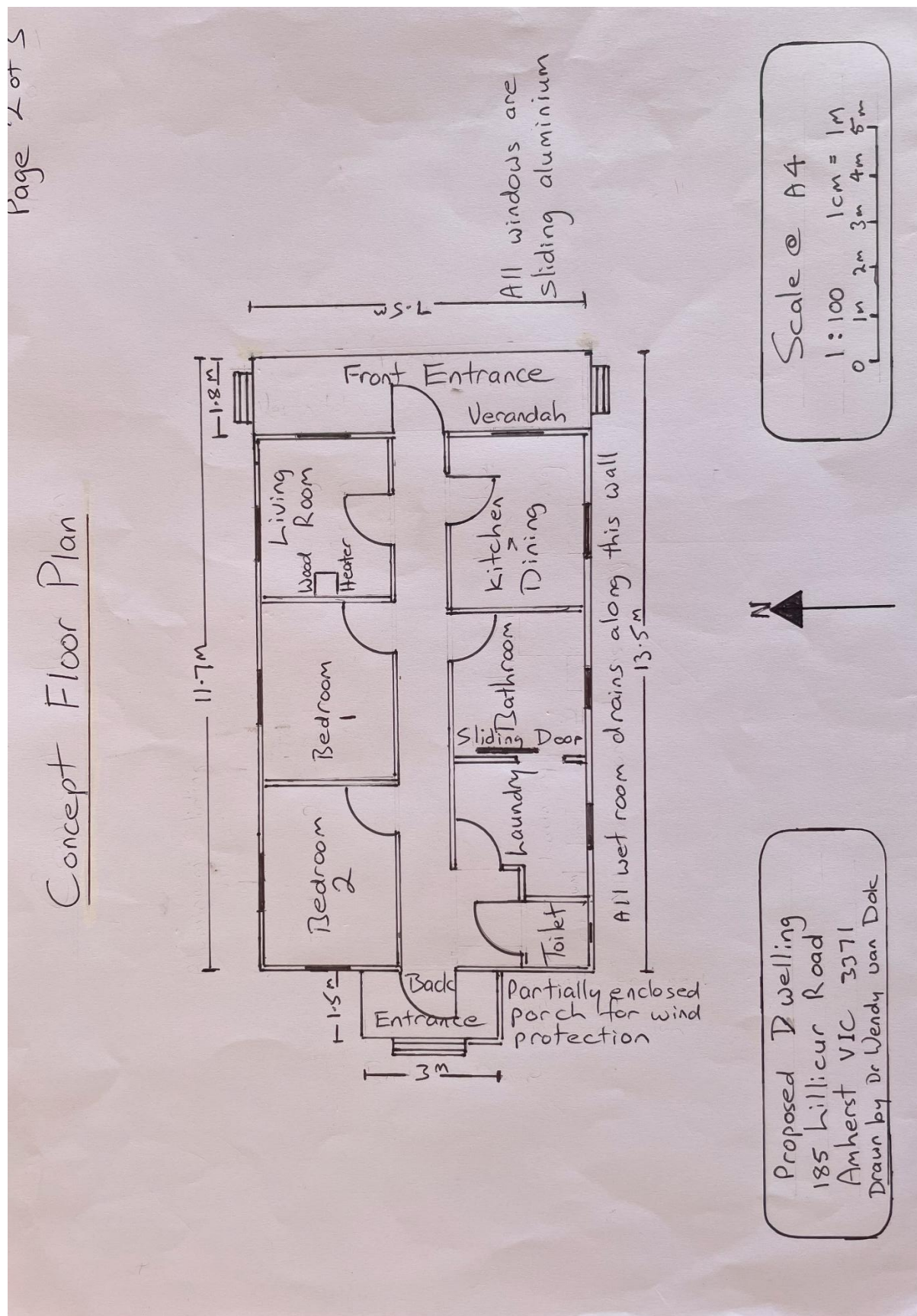


Figure 7 Scaled concept floor plan for the proposed new dwelling

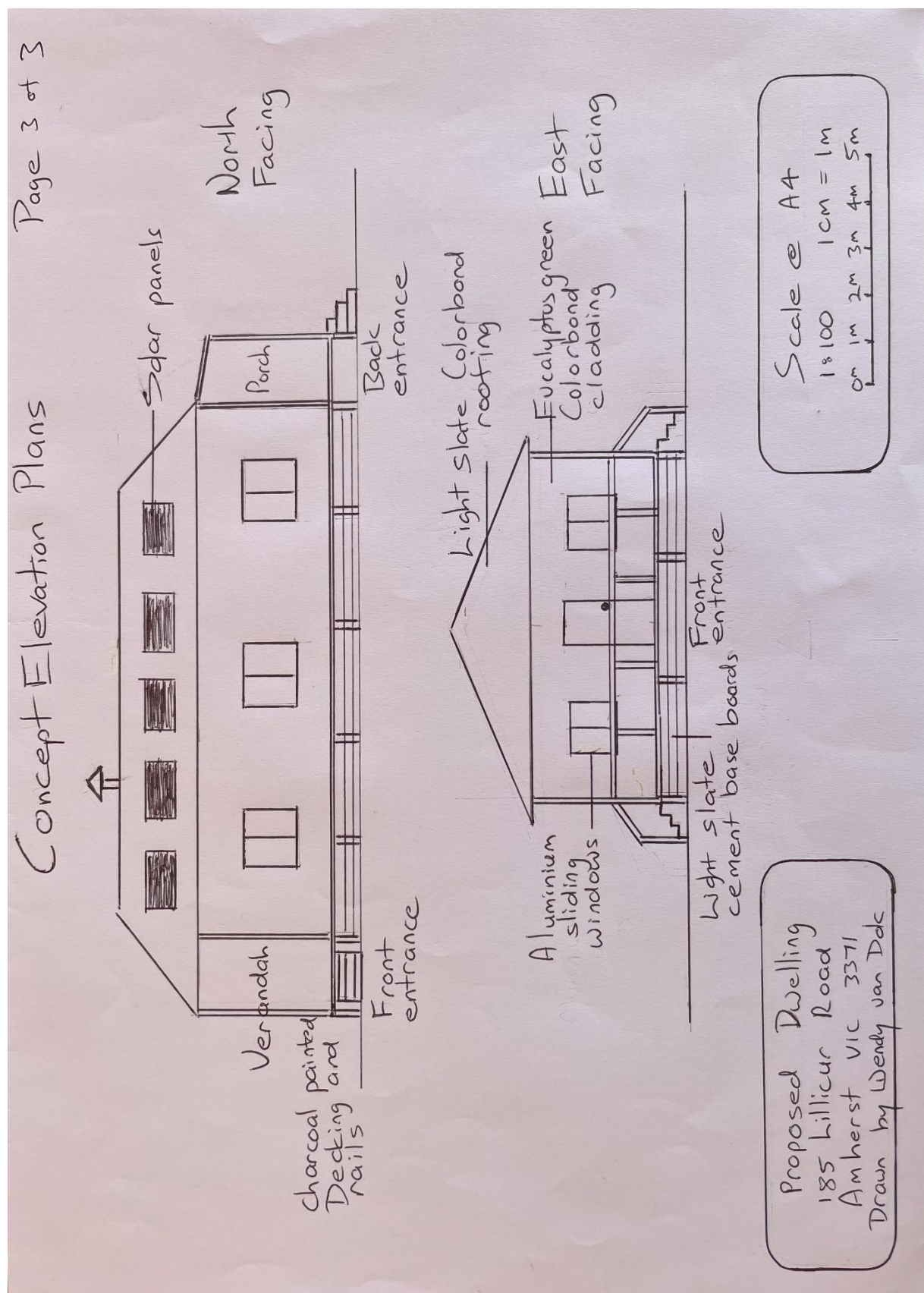


Figure 8 Scaled concept elevation plans of the proposed new dwelling

2 Existing Conditions

Current use

The land is being transformed into a regenerative native plant farm that produces food, foliage, timber and native grass seeds.

When I purchased the property in 2012, it was cleared, weedy, heavily compacted from over-grazing, polluted with agricultural chemicals and had poor quality exposed soil (Figure 9). There were only 4 very old growth trees on the property, and all are along the boundary fences, well away from the dwelling, 2 are Yellow Gum and 2 are Grey Box.

The property, now called Amherst Farm, has more vegetative cover, fewer weeds, less erosion and is far more productive (Figure 10). There is a mixture of grasses covering the whole property, and so far about 30% of the farm has been planted out with shrubs and trees. The intent is to plant another 1,000 seedlings over the next 5 years, mainly Wattles, Sandalwood and Box-ironbark Eucalypts (see Figure 11).



(a)



(b)

Figure 9 Photos of the property in 2012 when I purchased it (a) view from West boundary fence next to the dwelling and (b) view from the NW corner.



(a)



(b)

Figure 10 Same views as in Figure 3 but taken in 2024 to illustrate the increase in vegetation cover (a) view from West boundary fence next to the dwelling and (b) view from the NW corner.



Figure 11 Semimature Wattle, Sandalwood and Eucalyptus trees that are being grown at Amherst Farm for edible seeds, nuts and high value timber, native grass seeds are also being harvested.

Access

There is an all-weather crossover from Lillicur Rd (Figure 12a) and driveway into the property (Figure 12b). Both are at a high point of the property. There is also an unsealed Government Road that runs along the West boundary in the neighbouring property (Figure 13) with an accessible gate close to the gas pipe easement in the SW corner. There is plenty of room for vehicles to manoeuvre and turn once you pass through the front gate.



(a)



(b)

Figure 12 (a) Crossover from Lillicur Rd (b) driveway into the property/dwelling



Figure 13 Government Road which runs along my West boundary in the neighbour's property, access can be gained to my property through a gate at the SW corner.

Physical features and climate

The land has a gentle gradient of about 1:60 or 2-3% with the highest contour along the West boundary (Figure 14). The highest point is where the old dwelling is now. The property drains in a NE direction. There is no natural permanent or running water on the property. There is a small dam <1ML on the NE boundary, but it is always dry in Summer. It does not appear to be sealed properly.

Amherst climate ranges in extremes from severe 40°C heat and dry in summer to frosts as low as -5°C and heavy rain in winter. The closest BoM weather station is at Talbot, 7 km away where median annual rainfall is 540mm. However, Talbot long-term data have a lot of gaps so the Maryborough weather station data, 15 km away has been used for the calculations in Tables 1 & 2. Median annual rainfall at Maryborough is 535.6 mm. Winds dominate from the South and SW all year with hot North winds occurring frequently in Summer.

Power supply

There is no mains power, so the existing dwelling is completely off-grid. Current power comes from a combination of solar for electricity, gas cylinders for cooking and hot water, wood heating, petrol driven pumps and a petrol generator as back-up. This same mix of energy sources will be used for the new dwelling, but the solar panels will be scaled up from 200W to 1000W and the batteries scaled up from 300Ah to 750Ah.

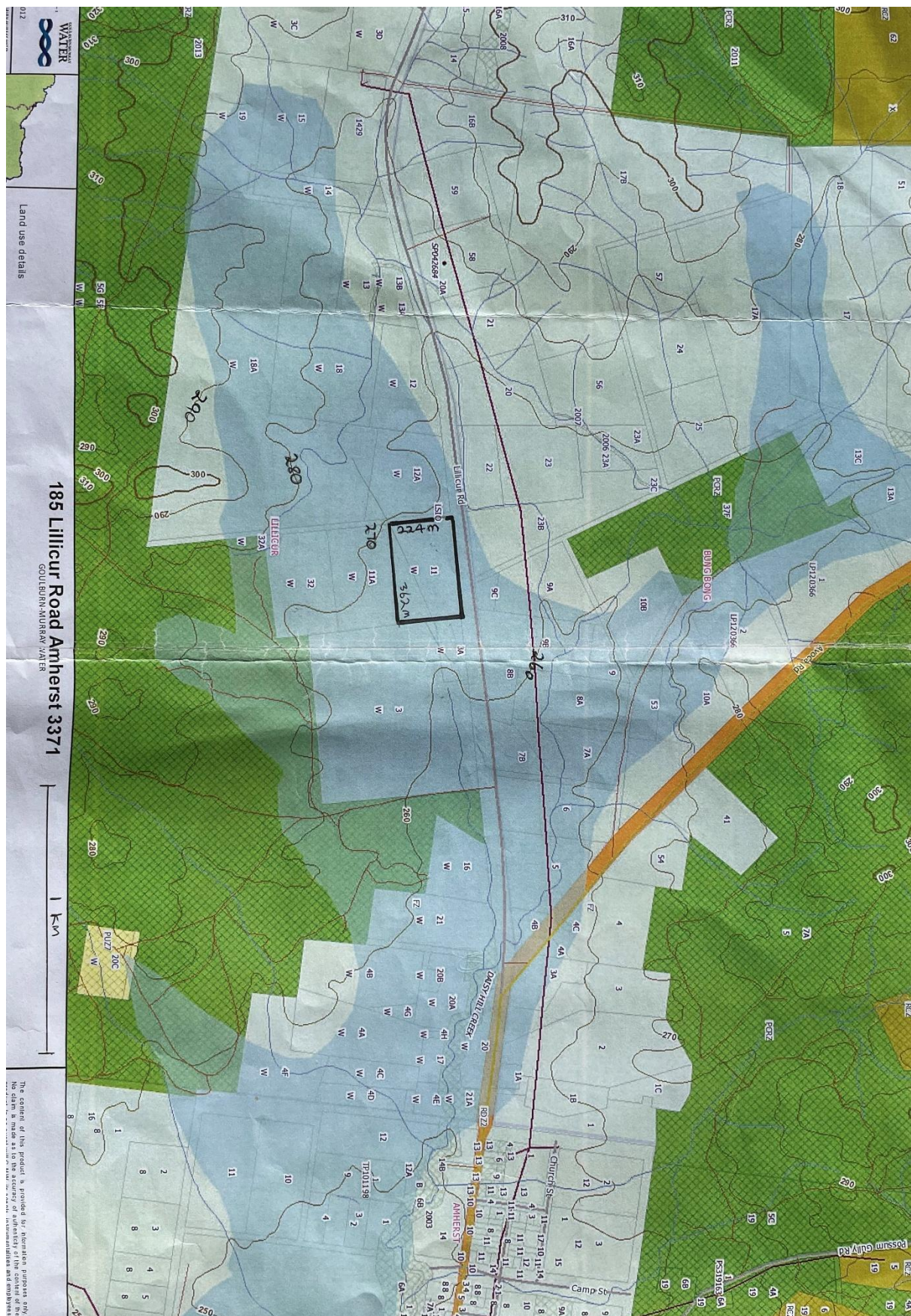


Figure 14 Contour map of the catchment surrounding 185 Lillicur Rd Amherst.

Water

Current water demand is intermittent, mostly for one person and is supplied by 14,000L of tank water which is harvested from the dwelling and shearing shed roofs. The proposed dwelling will be designed with two bedrooms although in the foreseeable future, mostly only one person will be living there, and the second bedroom will be used as an office.

Tables 1 and 2 below indicate that sufficient potable water can be harvested from the shed and house roofs and be stored in tanks with a total capacity of 20,000 litres. In addition, there will be a 10kL tank dedicated to firefighting. The older roof of the shearing shed will be used to fill the firefighting tank before the shed is dismantled. Overflow from the other shed roof will keep the tank topped up. While it will take at least a year to fill all the tanks, there will only be one person living in the dwelling in the foreseeable future.

Table 1 Estimated monthly harvestable rainwater supply

Month	Median Rainfall Maryborough (m)	Total Roof Area House: 7.5x13.5 = 101 m ² Shed: 7.3x9.6 = 70 m ² (m ²)	Harvestable Supply Median rainfall x 171 ² m ³ [kL]
Jan	.023	171	3.9
Feb	.022	171	3.8
Mar	.025	171	4.3
Apr	.032	171	5.5
May	.042	171	7.2
Jun	.054	171	9.2
Jul	.053	171	9.1
Aug	.053	171	9.1
Sep	.045	171	7.7
Oct	.048	171	8.2
Nov	.034	171	5.8
Dec	.029	171	5.0

Table 2 Supply and demand, based on current use by one person using a composting toilet

Month	Supply [kL]	Current Monthly demand per person [kL]	Storage
Jan 31	3.9	2.2	1.7
Feb 28	3.8	2.2	1.6
Mar 31	4.3	2.2	2.1
Apr 30	5.5	2.2	3.3
May 31	7.2	2.2	5.0
Jun 30	9.2	2.2	7.0
Jul 31	9.1	2.2	6.9
Aug 31	9.1	2.2	6.9
Sep 30	7.7	2.2	5.5
Oct 31	8.2	2.2	6.0
Nov 30	5.8	2.2	3.6
Dec 31	5.0	2.2	2.8

Wastewater

In the absence of a sewerage system, mains water or mains power, a Land Capability Assessment (LCA) was undertaken by Western Victoria Soil Testing to assess the soil's suitability and capability to both treat and retain all generated effluent within the allotment's boundaries.

The Land Capability Class Rating (LCCR) of the site was determined to be a 5, primarily due to the risk of sodic/dispersive soil at the site. Therefore, wastewater will be managed as per the recommendations of the LCA. That is, a secondary wastewater treatment system connected to a conventional trench system with a minimum total trench length of 40m and where the trenches are 0.6m in width. The treatment system chosen will achieve a minimum 20/30/10 effluent quality (BOD < 20mg/L, TSS < 30mg/L and E. Coli < 10cfu/100mg).

The quality of grey and blackwater will be managed, as much as possible, at the source, by:

- using efficient appliances and being frugal with water use,
- not discharging bleach or caustic cleaning chemicals down the drains,
- using gentle liquid detergents for cleaning and where necessary an antimicrobial surface spray,
- filtering hair, lint and food at the drains,
- using only liquid, phosphorus free, and low sodium detergents, body wash, and shampoos,
- using buckets for cleaning and washing that can be emptied onto different plants,
- using buckets to collect clean water from the shower as the temperature warms,
- not pouring oils and fats down the drain, these will be soaked up by paper towel and burnt or composted.

3 Responses to Decision Guidelines of Clause 35.07-6

General Issues

- This application is for a permit to replace a decades-old, degraded dwelling with a modest new resource-efficient dwelling in the same area and with a similar footprint. Prior to 2012, when I purchased the property, the dwelling accommodated shearers and other stock workers so it has been in continuous use as a dwelling since it was built, possibly in the early 1980s. The dwelling is now integral to the operation of Amherst Farm where native trees are being grown for food, foliage and timber.
- None of the neighbours wish to live on their properties and so there is no reason why this proposal to replace an existing dwelling should lead to the proliferation of other dwellings in the area.
- The farm has a LSIO, but the dwelling and planned wastewater discharge field are both in the upper contours of the flood plain. The house will be built on stumps.
- Constant presence and surveillance will improve security and lessen the chance of break-ins and theft of expensive farm machinery and tools which have occurred in the past.
- The gas pipeline easement, about 200m further south of the dwelling will not be affected. There are no covenants or Section 173 agreement that relate to the property.
- The old dwelling will eventually be dismantled and returned to grass.

Agricultural Issues

- The property is 8 Ha, which is less than the preferred 40 Ha for a dwelling in a Farm Zone, but this application only wants to replace old for new. Having a proper residence will accelerate the farming and regeneration of the land as it will allow the

owner to be on site full-time. It will also increase the agricultural and economic value of the land.

- Why such a small parcel of land was zoned Farming in the first place is unclear. However, it is unlikely the parcel of land could sustain any traditional agriculture, at least not profitably. Had the property been left as it was in 2012, it is likely it would be in even worse condition than it was back then.
- Both neighbouring farm owners had the opportunity to buy the land and expand their farms before I purchased it, but they chose not to. Therefore, replacing the old dwelling with a new, more sustainable building is not going to limit their operations.
- Based on my experience of staying at the property intermittently over the past 10 years, to date, no activities on neighbouring farms have adversely affected my farm except for road dust and a couple of times when the use of insecticides killed a lot of bees and other insects. However, since I spoke to my neighbour about the dead bees, he has not sprayed again.

Environmental Issues

- Some shrubs and young trees will need to be removed to comply with the BMO but these were all planted by me over the past 10 years. There are only 4 old growth trees on the property, and none will be affected by the building.
- Managing grass, bushfire hazards, pest animals and other land issues will all be easier with a permitted residence and constant presence.
- Over ten years, regenerative farming practices have improved the land significantly.
 - Erosion of topsoil from the higher, more exposed parts of the property has been ameliorated by the roots of trees and shrubs, and by keeping grass cover all year.
 - Patches of soil that were rendered sterile by chemicals in the past have had green clippings piled on them for many years and are slowly recovering.
 - By pruning limbs and foliage and allowing them to remain on the ground, carbon and other nutrients are being returned to the soil which not only improves fertility but also provides habitat, protects the soil in summer and helps slow stormwater flow and impedes erosion.
 - Acacias, which are legumes, are grown extensively but many are short lived so when they die and are cut down, the roots are left in the ground which helps to nitrify the soil.
 - The trees, by way of their deep roots, are reversing the effects of previous land clearing by transpiring groundwater and lowering the water table.
 - Soil biota and terrestrial wildlife have increased significantly. Insects in particular bees, are thriving which benefits all farms in the vicinity.
 - Finally, several weeds like thistles have been eradicated and others like cape tulip are now under control.

Design and Siting Issues

The new dwelling will be sited at the highest part of the property in a relatively flat area. The only earthworks required will be post hole digging and the associated trench works for effluent disposal.

The building design has been heavily influenced by the BMO and LSIO and is intended to be resource efficient in terms of water, energy and materials. The external colours, Eucalyptus green and slate grey will merge with the landscape and enhance the area once the old buildings are demolished.

Building next to the existing dwelling is preferable for several reasons.

- No agricultural land needs to be sacrificed, disrupted or degraded.
- It's close to the all-weather crossover from Lillicur Rd and driveway into the property,
- It's as far away as possible from the gas pipe easement and small dam.

- It's a defensible space close to a tanked water supply.
- No old growth vegetation will be affected.
- The closest waterway, Daisy Creek, is about 110m north and bends further away in a northerly direction. It is ephemeral.
- With regards to the BMO, the risk to life, property and community infrastructure has been reduced to a low level, as bushfire hazard can never be eliminated.
- There will be no change to traffic except perhaps during the build. The main disruption will be trucks entering and exiting and some minor earthworks.

In conclusion, replacing the existing dwelling, which has been in continuous use for decades, with a more sustainable and safer dwelling, will have many benefits. It will accelerate the farm's progress, improve agricultural productivity and enable the environmental benefits of regenerative farming at Amherst Farm to be extended.

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

VOLUME 01676 FOLIO 024

Security no : 124126793800F

Produced 04/08/2025 10:20 AM

CROWN GRANT

LAND DESCRIPTION

Crown Allotment 11 Section W Parish of Lillicur.

REGISTERED PROPRIETOR

[REDACTED]

ENCUMBRANCES, CAVEATS AND NOTICES

Any crown grant reservations exceptions conditions limitations and powers noted on the plan or imaged folio set out under DIAGRAM LOCATION below. For details of any other encumbrances see the plan or imaged folio set out under DIAGRAM LOCATION below.

DIAGRAM LOCATION

SEE TP738244S 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: 185 LILLICUR ROAD AMHERST VIC 3371

DOCUMENT END

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