HEPBURN SHIRE COUNCIL
ORDINARY MEETING OF COUNCIL
PUBLIC AGENDA

Tuesday 18 April 2023

Daylesford Town Hall
76 Vincent Street Daylesford

5:30PM

A LIVE STREAM OF THE MEETING CAN BE VIEWED VIA COUNCIL'S FACEBOOK PAGE

AGENDA

Tuesday 18 April 2023

Daylesford Town Hall

76 Vincent Street Daylesford

Commencing at 5:30PM

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BRADLEY THOMAS

CHIEF EXECUTIVE OFFICER

Tuesday 18 April 2023

CONDUCTING COUNCIL MEETINGS VIRTUALLY

Council continues to be guided by government directives and wants to do the right thing for the health of our community during the COVID-19 pandemic. In line with these directives, the public are unable to attend this meeting in person. This meeting is being held virtually to protect the health and wellbeing of Councillors, Council Officers, and the community.

In the spirit of open, transparent and accountable governance, this meeting will be live-streamed on Council's Facebook page. The meeting will also be recorded and made available on Council's website as soon as practicable after the meeting.

Pursuant to the Ministerial Guidelines, should technology problems be encountered and we are unable to broadcast this meeting, the meeting will be adjourned until resolution or postponed.

Council's meeting will be conducted tonight in accordance with:

- The Local Government Act 2020
- The COVID-19 Omnibus (Emergency Measures) Act 2020
- The Minister's Good Practice Guideline MGPG-1: Virtual Meetings
- Council's Governance Rules; and
- The Hepburn Shire Council Councillor Code of Conduct.

CONDUCTING HYBRID COUNCIL MEETINGS

In the spirit of open, transparent and accountable governance, this meeting will be live-streamed on Council's Facebook page. The meeting will also be recorded and made available on Council's website as soon as practicable after the meeting.

- Council's meeting will be conducted tonight in accordance with:
- The Local Government Act 2020
- The Minister's Good Practice Guideline MGPG-1: Virtual Meetings
- Council's Governance Rules; and
- The Hepburn Shire Council Councillor Code of Conduct.

1 ACKNOWLEDGEMENT OF TRADITIONAL OWNERS

Hepburn Shire Council acknowledges the Dja Dja Wurrung as the Traditional Owners of the lands and waters on which we live and work. On these lands, Djaara have performed age -old ceremonies of celebration, initiation and renewal. We recognise their resilience through dispossession and it is a testament to their continuing culture and tradition, which is strong and thriving.

We also acknowledge the neighbouring Traditional Owners, the Wurundjeri to our South East and the Wadawurrung to our South West and pay our respect to all Aboriginal peoples, their culture, and lore. We acknowledge their living culture and the unique role they play in the life of this region.

2 SAFETY ORIENTATION

Emergency exits and convenience facilities at the venue to be highlighted to members of the public in attendance.

3 OPENING OF MEETING

COUNCILLORS PRESENT:

OFFICERS PRESENT:

STATEMENT OF COMMITMENT

"WE THE COUNCILLORS OF HEPBURN SHIRE

DECLARE THAT WE WILL UNDERTAKE ON EVERY OCCASION

TO CARRY OUT OUR DUTIES IN THE BEST INTERESTS OF THE COMMUNITY

AND THAT OUR CONDUCT SHALL MAINTAIN THE STANDARDS OF THE CODE OF GOOD GOVERNANCE

SO THAT WE MAY FAITHFULLY REPRESENT AND UPHOLD THE TRUST PLACED IN THIS COUNCIL BY THE PEOPLE OF HEPBURN SHIRE"

4 APOLOGIES

5 DECLARATIONS OF CONFLICTS OF INTEREST

6 CONFIRMATION OF MINUTES

RECOMMENDATION

That the Minutes of the Ordinary Meeting of Council held on 21 March 2023 (as previously circulated to Councillors) be confirmed.

7 ITEMS OF URGENT BUSINESS

8 COUNCILLOR AND CEO REPORTS

8.1 MAYOR'S REPORT

Councillor Brian Hood, Coliban Ward

8.2 COUNCILLOR REPORTS

Councillor Lesley Hewitt, Birch Ward

Councillor Tessa Halliday, Cameron Ward

Councillor Don Henderson, Creswick Ward

Councillor Tim Drylie, Creswick Ward

Councillor Juliet Simpson, Holcombe Ward

Councillor Jen Bray, Birch Ward

RECOMMENDATION

That Council receives and notes the Mayor's and Councillors' reports.

8.3 CHIEF EXECUTIVE OFFICER'S REPORT

The Chief Executive Officer Report informs Council and the community of current issues, initiatives and projects undertaken across Council.

- Nil

CHIEF EXECUTIVE OFFICER UPDATE

It is hard to believe that over one quarter of 2023 is already completed.

The March Council Meeting (21 March 2023) noted a number of key reports, including significant changes to various community grant programs undertaken by Council that will streamline processes, increase the pool of available funds and ensure improved governance. Council also noted a report that indicted the current inflationary pressures being experienced by the sector, especially in relation to the construction of capital works.

Events within the Shire continue with very successful weekends at both Clunes Booktown and Cresfest brining many visitors to the area and providing great opportunities for local residents and businesses.

A stunning new public artwork, 'The Drop', has been installed at the Glenlyon Dam. International artist, Yu Fang Chi, has created a polished stainless steel sculptural form that considers water in the landscape. It sits beautifully in the surrounding bush environment only a short distance from the entry road to Glenlyon Dam, in a location that also allows the work to be viewed across the water.

The newly upgraded Quarry Street Reserve public amenities at Trentham are now open to the public. There are some minor updates to be carried out in coming weeks but it's all ready for you to visit and use. The upgrade includes installation of two new electric barbecues, all-abilities toilet facilities, a drinking fountain, accessible carpark and paths. Thank you to the Committee of Management for their role in managing the park and their work supporting this fantastic facility upgrade. An official opening will be held soon.

Council has made a strong submission on the latest consultation report into the Victoria New South Wales Interconnector West (VNI West) project, a high capacity 500 kilovolt (kV) double-circuit overhead transmission line between Victoria and New South Wales. While Council is highly supportive of renewable energy, the submission outlined several concerns.

Crews have been busy in Ullina reconstructing 1.6 kilometres of Ullina Kooroocheang Road between Daylesford Clunes Road and Kellys Lane. This $700,000 project is funded by Council and the Federal Government through the Heavy Vehicle Safety and Productivity Program. Works include widening the road, drainage upgrades and the construction of two new bus stops addressing safety concerns raised by local residents and Public Transport Victoria. The final seal of the road will be carried out next year.

Meetings I have participated in during the month, include:

- Regular staff one on one meetings;
- Councillor briefings;
- Executive Team meetings;
- Meeting with representatives of the Department of Education regarding early years reform and kindergarten infrastructure;
- Audit and Risk Committee;
- Various budget briefings;
- Loddon Campaspe CEOs;
- Loddon Campaspe Mayors and CEOs;
- Meeting with representatives of Ambulance Victoria and Central Highlands Rural Health;
- Meetings in regard to VNI-West and the Western Renewables Link;
- Meeting between Martha Haylett (Rippon MP) and Hepburn Shire Council Mayor, Cr Brian Hood, and myself;
- Victoria 2026 | Ballarat Regional Engagement Forum;
- Visit | Timber Training Centre Creswick;
- Joint State Government (LGV) and Local Government update;
- Community Listening Post at Clunes;
- Central Highlands Regional Partnership;
- Briefings in regard to the Clunes Master planning project and Councils Affordable Housing Strategy;
- Meetings with Mayor and Councillors; and
- Destination Marketing Plan workshop.

RECOMMENDATION

That Council receives and notes the Chief Executive Officer's Report for April 2023.

9 PUBLIC PARTICIPATION TIME

This part of the Ordinary Meeting of Council allows for the tabling of petitions by Councillors and Officers and 30 minutes for the purposes of:

- Tabling petitions
- Responding to questions from members of our community
- Members of the community to address Council

Community members are invited to be involved in public participation time in accordance with Council's Governance Rules.

Individuals may submit written questions or requests to address Council to the Chief Executive Officer by 10:00am the day before the Council Meeting.

Some questions of an operational nature may be responded to through usual administrative procedure. Separate forums and Council processes are provided for deputations or for making submissions to Council.

Questions received may be taken on notice but formal responses will be provided to the questioners directly. These responses will also be read out and included within the minutes of the next Ordinary Meeting of Council to make them publicly available to all.

BEHAVIOUR AT COUNCIL MEETINGS

Council supports a welcoming, respectful and safe environment for members of the community to participate at Council Meetings regarding issues that are important to them. Council's Governance Rules sets out guidelines for the Mayor, Councillors, and community members on public participation in meetings. It reinforces the value of diversity in thinking, while being respectful of differing views, and the rights and reputation of others.

Under the Governance Rules, members of the public present at a Council Meeting must not be disruptive during the meeting.

Respectful behaviour includes:

- Being courteous when addressing Council during public participation time and directing all comments through the Chair
- Being quiet during proceedings
- Being respectful towards others present and respecting their right to their own views

Inappropriate behaviour includes:

- Interjecting or taking part in the debate
- Verbal abuse or harassment of a Councillor, member of staff, ratepayer or member of the public
- Threats of violence

9.1 PETITIONS

9.2 PUBLIC QUESTIONS

The CEO will read questions received in accordance with Council's Governance Rules and the Mayor will respond on behalf of Council.

9.3 REQUESTS TO ADDRESS COUNCIL

Members of our community who have submitted a request in accordance with Council's Governance Rules will be heard.

10 STATUTORY PLANNING

10.1 PLN 22/0263 - STAGED SUBDIVISION OF LAND AND DEVELOPMENT OF 31 TOWNHOUSES - 17 SMITH STREET, DAYLESFORD
ACTING DIRECTOR COMMUNITY AND DEVELOPMENT

In providing this advice to Council as the Statutory Planner, I Julie Lancashire have no interests to disclose in this report.

ATTACHMENTS

1. PLN22/0263 - Plans - Architectural Plans - 17 Smith Street, Daylesford [**10.1.1** - 29 pages]
2. PLN22/0263 - Illustrations - Indicative Aerial Views - 17 Smith Street, Daylesford [**10.1.2** - 1 page]
3. PLN22/0263 - Plans - Cut and Fill Plan - 17 Smith Street, Daylesford [**10.1.3** - 2 pages]
4. PLN22/0263 - Report - Planning Report - 17 Smith Street, Daylesford [**10.1.4** - 61 pages]
5. PLN22/0263 - Report - Bushfire Development Report - 17 Smith Street, Daylesford [**10.1.5** - 35 pages]
6. PLN22/0263 - Report - Traffic Report - 17 Smith Street, Daylesford [**10.1.6** - 22 pages]
7. PLN22/0263 - Report - Clause 55 Rescode Assessment Report - 17 Smith Street, Daylesford [**10.1.7** - 25 pages]
8. PLN22/0263 - Report - Clause 56 Rescode Assessment Report - 17 Smith Street, Daylesford [**10.1.8** - 35 pages]
9. PLN22/0263 - Report - Arborist Report - 17 Smith Street, Daylesford [**10.1.9** - 19 pages]
10. PLN22/0263 - Report - Waste Management Report - 17 Smith Street, Daylesford [**10.1.10** - 15 pages]
11. PLN22/0263 - Report - Stormwater Management Report - 17 Smith Street, Daylesford [**10.1.11** - 25 pages]
12. PLN22/0263 - Report - Sustainability Management Report - 17 Smith Street, Daylesford [**10.1.12** - 152 pages]
13. PLN22/0263 - Referral Response - Goulburn Murray Water - 17 Smtih Street, Daylesford [**10.1.13** - 2 pages]
14. PLN22/0263 - Referral Response - North Central Catchment Management Authority - 17 Smtih Street, Daylesford [**10.1.14** - 2 pages]
15. PLN22/0263 - Referral Response - Country Fire Authority - 17 Smtih Street, Daylesford [**10.1.15** - 2 pages]
16. PLN22/0263 - Referral Response - Councils Engineering Department - 17 Smtih Street, Daylesford [**10.1.16** - 3 pages]
17. PLN22/0263 - Objections - Redacted Objections - 17 Smith Street, Daylesford [**10.1.17** - 11 pages]

EXECUTIVE SUMMARY

The proposed development forms part of the Middleton Field project at the eastern entry to Daylesford. This application has undergone public notice and five objections have been received to date. The matter is being reported to Council as the cost of development exceeds $2million and has received five or more objections.

This is an architect designed project and townhouses will achieve an energy rating of 7.5.

The dwellings and further subdivision will take place on superlots as previously approved in the multi-lot subdivision for 17 Smith Street, Daylesford (PA2504).

The proposed development provides an opportunity for a diverse housing product and for the provision of affordable housing.

The recommendation is for a Notice of Decision to Grant a Planning Permit to be issued subject to conditions as included as part to this report depicted in the recommendation.

An amended plan condition has been included to the recommendation to consider accessibility options for the eastern townhouses (Townhouses 27-31).

RECOMMENDATION

That Council, having complied with the relevant sections of the Planning and Environment Act 1987, issues a Notice of Decision to Grant a Planning Permit in respect of Application No. PLN22/0263 for the Staged Subdivision of land and Development of 31 townhouses generally in accordance with the endorsed plans at 17 Smith Street, Daylesford, subject to the following conditions:

Amended plans

1) *Before the commencement of development, amended plans to the satisfaction of the Responsible Authority must be submitted to and approved by the Responsible Authority. When approved, the plans will be endorsed and will then form part of the permit. The plans must be drawn to scale with dimensions and must be generally in accordance with the advertised plans prepared by Breathe Architecture (Rev 03 dated 23/11/2022), but further modified to show:*

    a) *The height of the type 6 townhouses to be reduced to be either equal to or less than 9m in height, in accordance with Clause 55.03-2.*
    b) *Inclusion of accessibility options, in particular for Townhouses 27-31.*

Dwellings Conditions

2) *The development as shown on the endorsed plans must not be altered or modified unless otherwise agreed in writing by the Responsible Authority.*

3) *All external materials must be non-reflective and finished in natural colours or shades to the satisfaction of the Responsible Authority.*

4) *Before the development starts, a full schedule of materials, finished and colours, including colour samples (colour samples in a form that is able to be endorsed and held on file, must be submitted to and approved by the Responsible Authority. When approved, the schedule will be endorsed and will then form part of the permit.*

5) *No plant, equipment, services or architectural features other than those shown on the endorsed plans are permitted above the roof level of the building unless otherwise agreed in writing by the Responsible Authority.*

6) *All piping and ducting (excluding down pipes, guttering and rainwater heads) must be concealed from public view to the satisfaction of the Responsible Authority.*

7) *All areas of disturbed ground must be stabilised and revegetated at the completion of the development to the satisfaction of the Responsible Authority.*

Subdivision

8) *The layout of the subdivision as shown on the endorsed plans must not be altered or modified unless otherwise agreed in writing by the Responsible Authority.*

9) *Unless otherwise approved in writing by the Responsible Authority, prior to the issue of Statement of Compliance for any stage of the approved subdivision:*
   a) *The development approved by this permit must be substantially completed (e.g. lockup stage as a minimum) in accordance with the endorsed plans forming part of that Planning Permit (or any amendment to that permit) to the satisfaction of the Responsible Authority. Evidence must be submitted which demonstrates that the development is substantially completed to the satisfaction of the Responsible Authority; or*
   b) *The owner of the land must enter into an agreement with the Responsible Authority pursuant to Section 173 of the Planning and Environment Act 1987 which provides for all development to be in accordance with the endorsed plans forming part of this permit (or any amendment to that permit) or any subsequent Planning Permit.*

The owner must pay the costs of preparation, review, execution and registration of the agreement and the agreement must be registered on the newly created title/s. The Section 173 Agreement may be ended by the Responsible Authority at the written request of the owner and at no cost to Council.

10) *The amenity of the locality must not be adversely affected by the activity on the site, the appearance of any buildings, works or materials, emissions from the premises or in any other way, to the satisfaction of the Responsible Authority.*

11) Before any plan(s) of subdivision are certified under the Subdivision Act 1988, a staging plan must be submitted to and approved by the Responsible Authority. When approved the staging plan will be endorsed and form part of this permit.

12) The subdivision of the land must proceed in the order of the stages shown on the endorsed plan except with the written consent of the Responsible Authority.

13) The owner of the land must enter into agreements with the relevant authorities for the provision of water supply, drainage, sewerage facilities, electricity and telecommunications services to each lot shown on the endorsed plan in accordance with the authority's requirements and relevant legislation at the time.

14) All existing and proposed easements and sites for existing or required utility services and roads on land must be set aside in the relevant plan of subdivision submitted for certification in favour of the relevant authority for which the easement or site is to be created.

15) The plan of subdivision submitted for certification under the Subdivision Act 1988, must be referred to the relevant authority in accordance with Section 8 of the Act.

*16) Before the issue of Statement of Compliance for **Stages 1, 2 & 3**, a Construction Environmental Management Plan must be submitted to and approved by the Responsible Authority. The management plan must show:*

- *a) Measures to control erosion and sediment-laden water runoff including the design details of structures;*
- *b) Dust Control;*
- *c) Where any construction wastes, equipment, machinery and/or earth is to be stored//stockpiled during construction;*
- *d) Where access to the site for construction vehicles will occur;*
- *e) The location and details of a sign to be erected at the entrance(s) of the site advising contractors that they are entering a 'sensitive site' with prescribed tree protection zones and fences.*
- *f) The location of any temporary buildings or yards.*
- *g) Details of a contact person/site manager must be provided.*
- *h) Reference must be included to the Environmental Protection Authority's publication 960 'Doing it right on subdivisions'.*

Councils Engineering Department Conditions

Stormwater Drainage

17) Prior to Statement of Compliance, all underground and surface drainage works that are considered necessary by the Responsible Authority shall be constructed in accordance with professionally prepared plans and computations to be provided by the developer and approved by the Responsible Authority prior to the commencement of construction.

18) The drainage works shall include the provision of an onsite stormwater detention system designed to ensure that the post development runoff does not exceed predevelopment runoff from the development.

19) The drainage works shall be installed to transport stormwater runoff from the subject land and surrounding land and/or adjoining road(s) to an approved point of discharge.

20) No concentrated stormwater shall drain or discharge from the land to adjoining properties.

21) Prior to Statement of Compliance being issued, the drainage system must be constructed and completed.

22) The return period for a detention system is to be 20% AEP where there is overland escape path and 1% AEP if the failure of the detention system will cause property damage or inundation of freehold titles.

23) All allotments shall be provided with drainage outfall (house connection) connected to the underground drainage system to the satisfaction of the Responsible Authority.

24) House drainage connection shall be constructed in accordance with Infrastructure Design Manual Standard Drawing SD 510 or SD 505 with hot dip galvanised kerb adaptors.

25) Stormwater shall be connected to the legal point of discharge to the satisfaction of the Responsible Authority.

26) Prior to Statement of Compliance, all drainage easements deemed necessary by the Responsible Authority must be provided by the Permit Holder to protect and facilitate existing and future drainage infrastructure.

27) Easements shall be provided through properties between the development site and the nominated legal point of discharge. Minimum width of drainage easements shall be 2.0m for stormwater.

28) A new stormwater easement and pipe shall be created/constructed along the Eastern boundary for the purpose of draining new lots and overland flow.

29) Drainage easements shall be created to allow for gravity stormwater drainage to the satisfaction of Responsible Authority.

30) If the proposed stormwater drainage system includes any works to be undertaken during dwelling construction stage, the Owner must enter into a Section 173 Agreement with the responsible Authority under section 173 and 174 of the Planning and Environment Act, requiring that such works shall be constructed and completed during the dwelling construction stage.

31) The Owner must pay all of the costs and expenses including Responsible Authority's lawyers checking fees for any associated works required in relation to the preparation, execution, registration, enforcement and cancellation of this Agreement. This includes costs for obtaining necessary consents if required by the Land Titles Office before registration of this Agreement, should it be required.

32) It is the responsibility of the developer, to prepare a Stormwater Strategy Plan to identify and record the manner by which the quantity and quality of stormwater shall be managed for the catchment. The stormwater strategy plan must demonstrate how to avoid adverse impact on neighbouring properties and surrounding road network due to the development. Drainage design plans and legal point of discharge will not be considered until the drainage strategy has been established.

33) Where stormwater detention is proposed on public land, including road reserve, the detention system must be designed in such a way so as to minimise the ongoing maintenance costs and maximise the public benefit of the area. No area used for stormwater detention shall be considered for the purposes of public open space.

34) It is the responsibility of the developer to meet the requirements for stormwater quality as stated in the BPEM (Best Practice Environmental Management) Guidelines.

Access

35) Vehicle access/crossing to the land is to be located, constructed and maintained to the satisfaction of the Responsible Authority.

36) Prior to statement of compliance the following will be constructed for approval:

- *a) Vehicle access/crossing to all lots is to be constructed in accordance with Infrastructure Design Manual Standard Drawing SD 240 or to approval of Responsible Authority.*
- *b) Vehicle access/crossing to the land shall be located so that adequate sight distance is achieved to comply with Australian Standard AS2890.1:2004 Section 3.2.4 and as specified in AusRoad's Guide to Road Design Part 4A Section 3.4 - 'Sight Distance at Property Entrance'.*
- *c) Minimum 10.0m and 9.0m clearance shall be maintained from any road intersection and between adjacent crossovers respectively.*
- *d) Any proposed vehicular crossing shall have satisfactory clearance to any side-entry pit, power or Telecommunications pole, manhole cover or marker, or street tree. Any relocation, alteration or replacement required shall be in*

accordance with the requirements of the relevant Authority and shall be at the applicant's expense.

37) *The final location and construction of the vehicle crossing is to be approved by the Responsible Authority via a "Consent to Work within the Road Reserve", prior to undertaking of works, unless shown on certified plans and constructed prior to statement of compliance.*

38) *Sufficient vehicle turn around space must be provided within any common property areas, with all common property vehicle ingress and egress needing to be completed in a forward motion.*

39) *Prior to construction a plan showing turning circles shall be submitted to the Responsible Authority for approval.*

40) *All costs incurred in complying with the above conditions shall be borne by the permit holder.*

Access & Mobility

41) *All footpaths shall be designed and constructed in accordance with the relevant Australian Standards, Infrastructure Design Manual (IDM) and to the satisfaction of the Responsible Authority.*

42) *Before the issue of Statement of Compliance for each stage under the Subdivision Act 1988, vehicle access/crossings to all lots are to be located and constructed and maintained to the satisfaction of the Responsible Authority.*

Landscaping

43) *Before the commencement of development, a detailed landscape plan to the satisfaction of the Responsible Authority must be submitted to and approved by the Responsible Authority. When approved the landscape plan will be endorsed and will then form part of the permit. The landscape plan must be prepared by a person suitably qualified or experienced in landscape design and must be drawn to scale with dimensions. The landscape plan must show:*

- *a) The locations of all landscaping works to be provided on the land including landscaping to ameliorate the view into the site from Raglan Street and the intersection of Raglan Street/Midland Highway/Daylesford-Trentham Road.*
- *b) The locations of any trees to be retained or removed from the land (including details of species and size)*
- *c) A detailed schedule of all proposed trees, shrubs and groundcovers, including botanical names, common names, pot sizes, sizes at maturity and quantities of each plant*
- *d) Details of the proposed surface finishes of pathways and driveways*
- *e) Details of the irrigation system to be used on landscaping following completion of the landscaping works*
- *f) Details of any rain gardens/Water Sensitive Design*

44) Prior to the occupation of the dwellings, the landscaping works shown on the approved landscape plan must be carried out and completed to the satisfaction of the Responsible Authority, or bonded (if agreed to in writing by the Responsible Authority). If the Responsible Authority agrees to bonding of outstanding works, a time by which the works must be completed will be specified by the Responsible Authority.

45) All landscaping works as shown on the endorsed plans must be maintained, including that any dead, diseased or damaged plants are to be replaced, to the satisfaction of the Responsible Authority, for a period of two years.

Plan Checking & Supervision Fee

46) In accordance with the Subdivision Act 1989, Responsible Authority requires the following fees for works undertaken on this Subdivision.

a) Plan checking fee of 0.75% of the value of works.

b) Supervision fee of 2.50% of the value of works.

Goulburn-Murray Water Conditions

47) All works within the subdivision must be done in accordance with EPA Publication 960 "Doing it Right on Subdivisions, Temporary Environmental Protection Measures for Subdivision Construction Sites", September 2004.

48) Each lot must be provided with connection to the reticulated sewerage system in accordance with the requirements of the relevant urban water authority.

49) All stormwater discharged from the site must meet the urban run-off objectives and Standard C25 as specified in Clause 56.07-4 of the Victorian Planning Provisions. All infrastructure and works to manage stormwater must be in accordance with the requirements of the Responsible Authority.

Country Fire Authority Conditions

50) The subdivision as shown on the endorsed plans must not be altered without the consent of the CFA.

51) Prior to the issues of Statement of Compliance under the Subdivision Act 1988 the following requirements must be met to the satisfaction of the CFA:

a) Above or below ground operable hydrants must be provided. The maximum distance between these hydrants and the rear of all building envelopes (or in the absence of building envelopes, the rear of the lots) must be 120 metres and the hydrants must be no more than 200 metres apart. These distances must be measured around lot boundaries.

b) The hydrants must be identified with marker posts and road reflectors as applicable to the satisfaction of the Country Fire Authority.

52) Roads must be constructed to a standard so that they are accessible in all weather conditions and capable of accommodating a vehicle of fifteen (15) tonnes for the trafficable road width.

a) *The average grade must be no more than 1 in 7 (14.4%) (8.1 degrees) with a maximum of no more than 1 in 5 (20%) (11.3 degrees) for no more than 50 meters. Dips must have no more than a 1 in 8 (12%) (7.1 degree) entry and exit angle.*
b) *Curves must have a minimum inner radius of 10 metres.*
c) *Have a minimum trafficable width of 3.5 metres and be clear of encroachments for at least 0.5 metres on each side and 4 metres above the access way.*
d) *Roads more than 60m in length from the nearest intersection must have a turning circle with a minimum radius of 8m (including roll-over kerbs if they are provided) T or Y heads of dimensions specified by the CFA may be used as alternatives.*

Permit Expiration Conditions

Dwellings

53) This permit will expire if one of the following circumstances applies:
a) *The development is not commenced within two years from the date of this permit.*
b) *The development is not completed within four years from commencement of construction of the dwellings.*

Subdivision

54) This permit will expire if one of the following circumstances applies:

a) *The plan of subdivision for Stage 1 is not certified within ten years of the date of this permit.*
b) *The plan of subdivision for Stage 2 is not certified within ten years of the date of this permit.*
c) *The plan of subdivision for Stage 3 is not certified within ten years of the date of this permit.*
d) *Each stage of subdivision does not receive Statement of Compliance within five years of the date of certification.*

The Responsible Authority may extend the permit if a request is made in writing in accordance with Section 69 of Planning and Environment Act 1987.

BACKGROUND

Site and Surrounds

Subject Site

The subject site has an overall area of 4.87ha, however it is observed that the actual development area of this application is restricted to the area of the three 'superlots' that were created, following the previous multi-lot subdivision of 17 Smith Street,

Daylesford approved under permit PA2504. The total area of the three superlots equates to 6,323m².

The site was previously accessed via an unsealed driveway connecting to Smith Street in the west. However, this has recently been removed and in accordance with the approved subdivision, a new road, providing access to and from Smith Street is being constructed.

Surrounding Area

Much of the surrounding area is located within the NRZ1 and is characterised by single-storey brick or weatherboard homes on approximately 600m² lots. Immediately to the north of the site is St Michael's Primary School and just north of this is Daylesford College.

The site does reside close to the Daylesford township boundary (east), where there is a distinct land use transition from residential to agricultural properties. Smith Street itself feeds directly onto the Midland Highway, 200m south of the entrance to the subject site.

Proposal

The proposal is for the construction of 31 dwellings and subsequent subdivision of each dwelling. The development is to be provided in three stages with 18 dwellings in Stage One, eight dwellings in Stage Two and five dwellings in Stage Three. The dwellings will all be two storey and there is a mix of two- and three-bedroom product. The public open space to be provided as part of the already approved subdivision runs east/west between Stages One and Two of the development and an additional north/south communal open space area is provided in Stage One.

All proposed lots have an area of less than 300m² and for those with frontages less than 7.5m wide, vehicle access is provided via a rear common property driveway. The majority of lots will have their own street frontage to the internal road network, where others have been orientated to face the public open space area between proposed Stages One and Two. The lots proposed have been designed to present consistently to the street and will all have similar size frontages. The provision of similar frontages, as well consistent built form, and setbacks, amongst all 31 proposed lots, assists with the creation of a consistent character, alongside what is a new streetscape.

The landscaping works proposed by the applicant go over and above the minimum expectations and can be viewed as a net improvement that will enhance the level of vegetation in the local area and add to existing character. No native vegetation is proposed to be removed, with the proposal being designed to incorporate existing trees on site within the development's open space areas.

While the design of the subdivision and proposed lots, does differ from what is typically seen in the surrounding area, the site's position behind established built

form on both Smith Street and the Midland Highway, means the development will have little to no impact on both the established character of the area, or on view-lines between areas of significance.

Relevant Planning Ordinance applying to the site and proposal

Zoning:	Neighbourhood Residential Zone Schedule 1 (NRZ1)
Overlays:	Environmental Significance Overlay Schedule 1 (ESO1) Environmental Significance Overlay Schedule 2 (ESO2)
Particular Provisions	Clause 52.06 - Car Parking Clause 53.02 - Bushfire Planning Clause 55 – Two or more dwellings on and lot Clause 56 - Subdivision
Relevant Provisions of the PPF	• Clause 11.01-1R Settlement - Central Highlands • Clause 11.01-1L Township and settlements • Clause 12.01-1L Native vegetation and habitat protection • Clause 12.01-2S Native vegetation management • Clause 12.05-2S Landscapes • Clause 13.02-1S Bushfire planning • Clause 14.02-2L Mineral springs and freshwater springs protection - Hepburn Shire • Clause 15.01-01S Urban design • Clause 15.01-1L Urban design • Clause 15.01-2S Building design. • Clause 15.01-2L Environmentally Sustainable Development • Clause 15.01-3S Subdivision Design • Clause 15.01-3L Subdivision in Hepburn Shire • Clause 15.01-04S Healthy neighbourhoods • Clause 15.01-5S Neighbourhood Character • Clause 15.01-5L-01 Neighbourhood Character in Daylesford

	• Clause 16.01-01S Housing supply • Clause 16.01-2S Housing Affordability • Clause 16.01-2L Affordable Housing • Clause 18.02-1S Walking • Clause 18.02-4S Roads • Clause 19.02-6S Open Space Clause 19.02-6L Open Space	
Under what clause(s) is a permit required?	32.09-3 (NRZ1)	Subdivision of Land
	32.09-6 (NRZ1)	Construction and Extension of Two or more Dwellings on a Lot.
	Clause 52.06-3	Reduction of Car Parking
Objections?	Five (5)	

KEY ISSUES

Zoning and Overlay Considerations

NRZ

The NRZ aims to:

- Recognise areas of predominantly single and double storey residential development.
- Manage and ensure that development respects the identified neighbourhood character, heritage, environmental or landscape characteristics.
- Allow educational, recreational, religious, community and a limited range of other non-residential uses to serve local community needs in appropriate locations.

The applicant is applying to subdivide the land, which in accordance with Clause 32.09-3 does require a permit. A permit is also required to construct two or more dwellings on a lot, in accordance with the requirements set out under Clause 32.09-6.

Schedule 1 to Clause 32.09 applies the Daylesford Neighbourhood Residential Precincts.

Schedule 1 does not specify a minimum subdivision area or set out any requirements relating to buildings and works. It is also worth noting that the subject site falls outside of the identified Daylesford Neighbourhood Character Precincts.

The primary purpose of the schedule is to ensure that development achieves the identified preferred neighbourhood character for Daylesford, this purpose is reflected in the schedules decision guidelines, as seen below:

- Whether the design, height, setback, appearance and interface of the proposed buildings and works is appropriate within the streetscape and to any heritage place on the land or adjacent land.
- Whether the proposed landscaping enhances the existing landscape character and vegetation in the precinct.
- Whether the significant elements of the precinct are retained including those elements that contribute to its setting.
- Whether subdivision retains the important elements and features which form part of the significance and character of the precinct, the visual setting and the important view-lines between these elements.
- Whether the proposed subdivision will complement or adversely affect the cultural significance of any heritage place within the precinct.
- Whether subdivision will complement or adversely affect the key characteristics of the precinct such as streetscape, lot sizes, lot pattern, lot layout or existing building forms in the precinct or would result in development that would adversely affect the rhythm, scale and pattern of buildings in the precinct.

A Clause 56 assessment is required, and this is discussed further below under Particular Provisions.

The proposal is for a thirty-one-lot subdivision and for the associated buildings and works. All proposed lots have an area of less than 300m² and for those with frontages less than 7.5m wide, vehicle access is provided via a rear common property driveway. The majority of lots will have their own street frontage to the internal road network, where others have been orientated to face the public open space area between proposed Stages One and Two. The lots proposed have been designed to present consistently to the street and will all have similar size frontages. The provision of similar frontages, as well consistent built form and setbacks, amongst all 31 proposed lots, greatly assists with the creation of a consistent character, along what is ultimately an entirely new streetscape.

The landscaping works proposed by the applicant go over and above the minimum expectations and can be viewed as a net improvement that will enhance the level of vegetation in the local area and enhance existing character. No native vegetation is proposed to be removed, with the proposal being designed to incorporate existing trees on site within the development's open space areas.

While the design of the subdivision and proposed lots, does differ from what is typically seen in the surrounding area, the site's position behind established built form on both Smith Street and the Midland Highway, means the development will

have little to no impact on both the established character of the area, or on view-lines between areas of significance.

Overlay Considerations

ESO:

The ESO aims to:

- Identify areas where the development of land may be affected by environmental constraints.
- Ensure that development is compatible with identified environmental values. Pursuant to Clause 42.01-2 a permit is required to both subdivide land and to construct a building or construct or carry out works within the ESO unless a schedule to the overlay stipulates that a permit is not required.

Decision guidelines relating to this application include:

- The statement of environmental significance and the environmental objective contained in a schedule to this overlay.
- Any other matters specified in a schedule to this overlay.

The subject site is covered by Schedules 1 and 2 to the ESO of the Hepburn Planning Scheme, which implements Special Water Supply Catchment Protection and Mineral Springs Groundwater Protection, respectively.

ESO1:

Schedule 1 to the ESO aims to achieve the following objective:

To ensure all development is undertaken in a manner that protects, restores and enhances natural resources and environmental systems and seeks to eliminate detrimental impacts in the quality and quantity of water in the catchment, to ensure the long-term plentiful supply of quality water.

Section 3.0 of Schedule 1 states that a permit is not required to:

Construct a building or construct or carry out works that are located more than 30 metres away from a waterway, if all of the following are met:

- The building and works do not generate any additional wastewater unless it is connected to a reticulated sewerage system.
- Any site cut required is less than one metre in depth.
- Any site cut required is less than 300 square metres in area.
- No stormwater is discharged within 100 metres from a waterway unless it is discharged into the street drainage system or a legal point of discharge.

The site is located more than 30 metres away from a waterway, but it will result in site cuts of more than one metre in depth and greater than 300m² in area, therefore triggering a permit. A permit is also triggered under Section 3.0 of Schedule 1 for subdivision.

Relevant decision guidelines for the ESO1 include:

- The proximity of the development to waterways, drainage lines and water supply reservoirs in the catchment.
- The possible impact and effect of the development on the quantity and quality of water in waterways, drainage lines, water supply reservoirs and springs.
- The need for and measures to:
    - Provide buffers for or separation from waterways, drainage lines, gullies, property boundaries and any existing disposal areas or systems.
    - Minimise and reduce nutrient loads, turbidity and siltation in waterways, drainage lines and water supply reservoirs.
    - Decrease or reduce the velocity of stormwater into waterways, drainage lines and water supply reservoirs.
    - Prevent erosion of natural features, including banks, streambeds and adjoining land.
    - Improve filtration and infiltration of water.
    - Retain and increase native vegetation to prevent or limit adverse effects on waterways, drainage lines and water supply reservoirs.
- The means of treatment and disposal of all sewage, sullage, stormwater and other wastes on site which is consistent with a geotechnical report or land capability report having regard to the slope, soil type and other environmental factors including the potential for pollution of waterways and ground water.

The proposal does comply with the relevant decision guidelines of ESO1. The development achieves best practice standards for the detention and treatment of stormwater and will be connected to the main drainage system already being provided to Stages One, Two and Three of Middleton Field. Middleton Field has been designed to account for the flows of the "EcoVillage". The site proposes more than adequate stormwater treatment and will ensure that run-off is treated to pre-development levels.

ESO2:

Schedule 2 to the ESO aims to achieve the following objective:

- To protect the mineral springs, their aquifers and their environs, private domestic bores and water bores that provide town water supply from the impacts of effluent and drainage.

Point 3.0 of Schedule 2 states that a permit is only not required for buildings and works if it is associated with informal outdoor recreation.

As the proposed use is residential, a permit is triggered for buildings and works under Schedule 2 of the ESO.

Relevant decision guidelines for the ESO2 include:

- The impact of development on drainage and stormwater run-off, wastewater disposal, stream bed erosion, solid waste disposal, commercial waste disposal, storage of fuel, pesticide and fertiliser and hazardous materials.
- The slope, soil type and other environmental factors including the potential for pollution of the mineral spring and freshwater and the impact this may have on the quality and yield of water from the spring.
- The need to prevent or reduce the concentration of wastewater or stormwater.
- Potential threats to mineral springs water quality.
- The need to retain vegetation to prevent or limit adverse effects on the mineral spring or freshwater.

The proposed development is observed as complying with the relevant decision guidelines of ESO2. The stormwater drainage for the site has been designed to ensure no impact upon the quality or quantity of mineral spring water or freshwater resources. The development proposes an effective rainwater harvesting and filtration system that will adequately regulate flows and detain runoff. The site will be connected to reticulated sewer and water, further ensuring the protection of water quality in the area.

Neighbourhood Character

The proposed medium density development is located within a recently approved subdivision which is currently under construction. It will interface with the newly created residential lots and provides for a new and emerging character within an already approved development.

A condition of permit for a detailed landscape plan can also include the provision of landscape to ameliorate the view into the site when viewed externally from Raglan Street in particular.

Aboriginal Heritage

The site is not within an area that has been identified as an area of Cultural Heritage Sensitivity.

Adherence to ResCode

Clause 55 applies to developments where two or more dwellings are proposed to be built in a lot. The NRZ requires that consideration be given to the following objectives:

- Clause 55.02-1 Neighbourhood Character - Complies

Clause 15.01-5L-01 is a policy which applies to neighbourhood character in Daylesford, which is further supported by the Daylesford Neighbourhood Character Study. The policy identifies several precincts within and around the town, which have differing neighbourhood character qualities. However, it is noted that the subject site

is located outside of these areas and is not within an identified neighbourhood character precinct.

Despite the subject site not being located in any of the Daylesford Neighbourhood Character Precincts, the proposed design of the townhouses is clearly a departure from the established character of nearby dwellings. As mentioned, the majority of surrounding dwellings have either brick or weatherboard facades and while the proposed townhouses will have timber cladding, there is a distinct difference between the two façade types.

It should be acknowledged that given the type of development proposed and the applicant's goals of creating an "EcoVillage" which achieves a minimum 7.5 NatHERS rating, that fully integrating with established neighbourhood character is difficult and unlikely to be achieved without severely compromising the design.

The development's visual impact is minimal due to it being located behind established residential development on both Smith Street and the Midland Highway, with views to the site limited.

Overall, it is considered unlikely that the proposal will have a detrimental impact upon established neighbourhood character.

- Clause 55.02-2 Residential Policy – Complies

Strategic directions policy actively encourages smaller and more compact housing within established townships.

- Clause 55.02-3 Dwelling Density – Complies

As mentioned, the proposed development plans to deliver 31 dwellings, across three superlots. The site will deliver various housing products which feature developments with between one to three bedrooms. Most of the townhouses will feature kitchens on the ground floor.

- Clause 55.02-4 Infrastructure – Complies

All proposed dwellings will be connected to utility services including water, sewer, power and telecommunications. The addition of the townhouses is not anticipated to result in overloading existing capacity. It is acknowledged that all dwellings will have solar panels installed on rooftops, with the power capacity of each townhouse ranging between approximately 2900W to 11000W.

If necessary, permit conditions can be implemented to deal with any overloading concerns.

- Clause 55.02-5 Integration with the Street – Complies

All townhouses are provided with vehicular and pedestrian links and the wider development boasts an extensive and interconnected footpath network, making the development area easy to traverse on foot.

The majority of the 31 lots proposed are orientated to face the proposed internal roads of the subdivision, however Lots 7 through to 18 (Proposed Development Zone 2) instead front the community garden space.

No front fencing is proposed, and vehicle access for several of the townhouses is to be provided via rear laneways (common property).

- Clause 55.03-1 Street Setback – Complies

It is acknowledged that the nature and type of development proposed, will inevitably result in street setbacks that are smaller than what is typically seen in the local area, and that this is largely unavoidable for developments that propose a housing product like what the applicant has applied for.

While the setbacks provided are a divergence from what is typically seen in the area, the applicant has gone to lengths to ensure the consistency of setbacks within the proposed 31 lot development and make efficient use of available space. The design is also seen as an appropriate response to the slope of the site and the retention of established, mature vegetation is commendable.

- Clause 55.03-2 Building Height – Generally Complies

The vast majority of the townhouses proposed as part of this development do accord with the height restrictions set out by the applied NRZ. It is also acknowledged that there is a noticeable amount of slope in the NGL, resulting in some instances for the townhouses to exceed the 9m height limit.

The Type 6 townhouses, shown from the South Elevation on drawing TP25 of the submitted plans, have a height of 9.39m, exceeding the height limits. While there is some minor form of slope at this location, it is observed that the cross-sections of these buildings are less than 8m wide, which means a breach of the 9m height limit is not acceptable in this instance.

Amendments to the submitted plans should be required, to reduce the height of these buildings to either below or equal to 9m.

- Clause 55.03-3 Site Coverage – Complies

Each superlot has a total site coverage either equal to or less than the maximum permissible total site coverage of 60% stated under Clause 55.03-3.

- Clause 55.03-4 Permeability – Complies

All three superlots far exceed the minimum 20% permeable area requirement and are compliant with Standard B9.

- Clause 55.03-5 Energy Efficiency – Complies

All living areas within the development have been orientated to the north to take advantage of solar access. All townhouses are to be fitted with several solar panels each, installed on the northern side of the roof to maximise solar exposure. The power capacity of each townhouse differs, ranging between approximately 2900W to 11000W.

- Clause 55.03-6 Open Space – Complies

The development does intend to provide public and communal space internally, specifically between superlots one and two.

A 192.2m² communal landscape garden area is proposed, that would be situated between Lots 12 and 13. It is noted that there is no direct frontage from either of these dwellings to the communal garden. However, several windows have been incorporated into the side structure of both these lots to increase passive surveillance of the garden area. The space is easily accessible by the surrounding lots and has a large enough footprint to be a usable space and not just a token open area.

- Clause 55.03-7 Safety – Complies

All proposed buildings have a clear view of the internal road layout, providing excellent passive surveillance.

All dwellings have been designed to limit any blank walls/interfaces to the internal road network, communal garden spaces, this is achieved through the use of windows and wide public spaces, avoiding the creation of any alleyways or narrow spaces.

Private spaces for all dwellings are not able to be accessed by the public and used as thoroughfares.

- Clause 55.03-8 Landscape – Complies

The amount of landscaping proposed is extensive and commendable taking up considerable portions of each superlot's total area. While the townhouses proposed are a different kind of housing product to what is typically seen in the area, each dwelling will have a small front garden area and backyard private open space, in keeping with the character of nearby dwellings along Smith Street. In addition, a 192.2m² communal garden area is proposed to be developed in the space between Lots 12 and 13. The area between superlots one and two will become a 'Public Council Garden', 782m² in size and will be vested in Council and handed over. Indigenous trees within the development area are proposed to be retained and incorporated into the garden areas, along the frontages or backyards of lots. It would appear the 'Public Council Garden' area, has been sited specifically to ensure the retention of many of the mature native trees established on site.

- Clause 55.03-9 Access – Complies

The applicant has ensured that each dwelling fronting a street will only provide one single-width crossover, in accordance with Standard B14. The vehicle crossovers provided for the site, when facing a street, occupy less than 40% of the street frontage, in accordance with Standard B14, for lots that have a street frontage width of less than 20 metres. It is observed that none of the proposed dwellings within superlot one have crossovers into the street, and instead vehicle access is provided via a rear common property driveway.

- Clause 55.03-10 Parking Location – Non-Compliant

All proposed two- and three-bedroom townhouses provide the required amount of parking for residents. However, the four single bedroom dwellings do not include any car parking spaces, similarly none of the required 6 visitor parking spaces have been provided. This has left a parking shortfall of approximately 10 spaces.

A car parking demand assessment has been provided and it is also acknowledged that the site's ultimate purpose is that of an "EcoVillage", where the possibility of residents owning a car is lower and owners may use other methods. The assessment also highlights the use of on-street parking to make up for this shortfall.

It should also be acknowledged that Daylesford is a small regional town and future residents of the development may not necessarily work within the town and need to travel to other regional centres such as Castlemaine or Ballarat. These journeys will most likely require a car, or some form of private transportation, primarily due to the distance of travel required, and the fact that public transportation options within the town are limited.

The assessment states that there is opportunity for the site to provide up to 34 on-street car parks, but this would include wholly blocking off areas required for bin collection, particularly for superlots 2 and 3, which is a less than desirable outcome. While the on-street parking may well accommodate the shortfall, the blocking of bin collection spaces on potentially a regular basis is less than desirable.

It is noted that adequate protection for residents from vehicular noise has been provided.

- Clause 55.04-1 Side and Rear Setback – Complies

Side setbacks are seen as generally in accordance with the standard, though it is noted a variation was required for dwellings within superlot 1. These variations are in areas that have no interface with adjoining dwellings and is generally seen as acceptable.

Overall, the development generally accords with the Standard.

- Clause 55.04-2 Walls on Boundaries – Not Applicable.
- Clause 55.04-3 Daylight to Existing Windows – Complies

The proposed development will have no impact on daylight into existing habitable room windows at any of the neighbouring properties. Shadow diagrams have been provided.

- Clause 55.04-4 North Facing Window – Complies

Proposed townhouses are located a sufficient distance from existing private open space to negate any effect on existing solar access for neighbouring dwellings.

- Clause 55.04-5 Overshadowing Open Space – Complies

Proposed townhouses are located a sufficient distance from existing private open space to negate risk of overshadowing.

- Clause 55.04-6 Overlooking – Complies

Proposed townhouses are located a sufficient distance from existing private open space to negate risk of overlooking.

- Clause 55.04-7 Internal Views – Complies

The windows of the proposed double-storey dwellings have been sited or obscured to limit views into existing, neighbouring secluded private open space or habitable rooms.

- Clause 55.04-8 Noise Impacts – Complies

Noise impacts from the proposal are considered minimal and restricted largely to the movement of private vehicles.

- Clause 55.05-1 Accessibility – Complies

Majority of units are provided with ground floor access, ensuring ease of entry to those with limited mobility.

However, due to the slope of the property, stairs are required to gain access to some dwellings. Stairs have also been used to help minimise the footprint of several of the homes.

The development is seen as generally in accordance with this objective.

- Clause 55.05-2 Dwelling Entry – Complies

All dwellings are provided with a clearly defined and visible entry, be it via the street frontage, or the green walkway area between superlots one and two.

Visibility of all dwelling front entrances is good, with adequate passive surveillance provided.

- Clause 55.05-3 Daylight to New Windows – Complies

The proposed townhouses are all oriented to the north and provided with adequate solar access.

- Clause 55.05-4 Private Open Space – Complies

Dwellings within superlot one include SPOS at ground floor. Dwellings within superlot two and three include SPOS on balconies, as these dwellings incorporate reverse living arrangements.

The amount of space supplied for private open space is seen as generally in accordance with Standard B28.

- Clause 55.05-5 Solar Access to Open Space – Complies

The townhouses in both superlots one and three are in accordance with Standard B29. The townhouses in superlot three do not quite meet the standard, which the applicant has acknowledged. To remedy this, additional open space in the backyard of these townhouses has been provided to ensure adequate solar access.

The development is therefore seen as generally in accordance with Standard B29.

- Clause 55.05-6 Storage Objective – Complies

According to the site analysis provided on the submitted plans, all Townhouses are provided with at least 6 cubic metres of storage.

- Clause 55.06-1 Design Detail – Complies

Refer to response to Clause 55.02-1.

- Clause 55.06-2 Front Fence – Not Applicable
- Clause 55.06-3 Common Property – Complies

All communal spaces are easily accessible and highly functional. A body corporate entity is to be established to manage areas of common ownership.

- Clause 55.06-4 Site Services – Complies

Access to the site and services to the dwellings have been designed to be easily accessible and locations of site facilities and services can be determined at the detail design phase.

Environmental and Sustainability Issues

As mentioned elsewhere in this report the proposed dwellings will achieve a 7.5 energy rating which meets and exceeds best practice requirements.

Amenity Considerations

There are not considered to be any detrimental amenity impacts from the proposed development. Shadow diagrams submitted with the application demonstrate there is no detrimental impact from shadow within the development.

A materials schedule and the perspectives show a development that comprises a mix of external materials that will blend with the environment.

The plans as presented will result in a built form outcome that achieves a high standard.

Car Parking

The purpose of Clause 52.06 is to:

- Ensure the provision of an appropriate number of car parking spaces having regard to the demand likely to be generated, the activities on the land and the nature of the locality.
- Support sustainable transport alternatives to the motor car.
- Promote efficient use of car parking spaces through the consolidation of car parking facilities.
- Ensure that car parking does not adversely affect the amenity of the locality.
- Ensure that the design and location of car parking is of a high standard, creates a safe environment for users and enables easy and efficient use.

Clause 52.06-5 contains Table 1, which dictates the number of car parking spaces required by a proposed development and applies a specific rate based on the land use type proposed.

For dwellings, the number of spaces required varies depending on the number of bedrooms proposed.

For dwellings with only one or two bedrooms, a single parking space is required. For those with three or more bedrooms and additional space is needed.

One parking space is also required for visitors to every five dwellings proposed as part of a development.

Clause 52.06-3 requires that the proposed development provide a total of 58 car parking spaces across the 31-lot development, and this total includes providing at least six visitor parking spaces.

The applicant is proposing to provide a total of 48 parking spaces across the development, with the four single-bedroom dwellings not being provided with a parking space, and none of the visitor parking spaces provided. This has created a parking shortfall of ten spaces.

Part of the applicant's proposal to Council includes a Traffic Impact Assessment (prepared by One Mile Grid) and a car parking demand assessment has been provided as part of the overall assessment, aimed at justifying the development's parking shortfall.

Council acknowledges that the site's ultimate goal of creating an "EcoVillage", means that the possibility of residents owning a car is perhaps lower than the average homeowner, and that residents may seek to use other methods of transportation. The car parking demand assessment provided also highlights that the availability of on-street parking within the development area will make up for this shortfall.

Despite the above, it should be acknowledged that Daylesford is a regional town and future residents of the development may not necessarily work within the town and may be required to travel to other regional centres such as Castlemaine (37kms) or Ballarat (44kms). These journeys will most likely require a car, or some form of private transportation to be completed, primarily due to the distance of travel required, and the fact that public transportation options within the town are limited.

The submitted Traffic Impact Assessment states that there is opportunity for the site to provide up to 34 on-street car parks. The availability of this on-street parking will be impacted by routine bin collection. However, this will only occur once per week and is considered a reasonable impact and it is also noted that there has been no objection to the applicant's proposed parking provision from Council's Engineering Department.

Clause 56 and Subdivision Layout

The proposed subdivision is the further subdivision of superlots to facilitate the development of the construction of the 31 dwellings.

Clause 56 applies to residential subdivisions with the NRZ requiring consideration be given to all clauses with the exception of *Clauses 56.03-1 – 56.03-3, 56.03-5, 56.06-1 and 56.06-3.*

- Clause 56.01-1 Subdivision Site and Context Description – Complies.
- Clause 56.01-2 Subdivision Design Response – Complies

The proposal does meet the relevant objectives of Clause 56 of the planning scheme.

- Clause 56.02-1 Strategic Implementation – Complies

The development is confined within the Daylesford township boundary and will serve as an infill residential development, which is actively supported by local policy, which seeks to limit the outward expansion of the town.

- Clause 56.03-4 Built Environment – Complies

The development aims to create its own unique character, by providing a relatively consistent type of hosing product and a high-quality landscape finish. Its positioning allows for the potential of the development creating a unique sense of place within the wider community, while still providing a functional environment easily integrated with nearby established areas.

- Clause 56.04-1 Lot Diversity and Distribution – Complies

The NRZ does not apply any set targets relating to net residential density or lot mix. The development will provide a variety of housing options which will broaden the site's appeal to future purchasers, as it will host a mix of three-, two- and one-bedroom townhouses.

- Clause 56.04-2 Lot Area and Building Envelopes – Complies

All proposed lots will have an area of less than 300m². All lots proposed within the development area are of a consistent size and shape and all proposed dwellings have been designed and will be constructed in accordance with the requirements of the planning scheme.

- Clause 56.04-3 Solar Orientation of Lots

All living areas within the development have been orientated to the north to take advantage of solar access. Only the five lots within superlot three face east. It is acknowledged that the orientation of these lots is largely a consequence of the heritage cottage being retained within the development.

- Clause 56.04-4 Street Orientation – Complies

All lots have been sited to maximise opportunities for passive surveillance into the areas of open space and are orientated to front the internal road network.

- Clause 56.04-5 Common Area – Complies

The proposal does involve the creation of common property areas in the form of communal garden space and rear lanes for vehicle access to some of the lots. An owner's corporation will be created for the overall development, as well as for each

of the three superlots. These corporations will be responsible for the maintenance of all common property areas and waste management.

- Clause 56.05-1 Integrated Urban Landscape – Complies

The applicant has gone to lengths to ensure a positive landscaping outcome for the site through the provision of an extensive network of public and communal open space areas within the development and retention of exiting vegetation on site.

- Clause 56.05-2 Public Open Space Provision – Not Applicable.

The Public Open Space provision has already been met as part of the already approved subdivision PA2504.

- Clause 56.06-2 Walking and Cycling Network – Complies

The development will integrate with the existing pedestrian network and actively encourages the use of this network in place of car travel.

- Clause 56.06-4 Neighbourhood Street Network – Complies

Safe and efficient movement of vehicles is demonstrated by the swept path diagrams provided in the applicant's traffic impact assessment and all lots are afforded safe and convenient access.

- Clause 56.06-5 Walking and Cycling Network Detail – Complies

The development proposes and extensive network of pedestrian paths and spaces for cyclists. These spaces will be easily accessible by future residents and in many instances are safely setback from areas used by motor vehicles, without compromising efficiency.

- Clause 56.06-6 Public Transport Network Detail – Not Applicable.
- Clause 56.06-7 Neighbourhood Street Network Detail – Complies

The design of the proposed internal street network is seen as generally compliant with the Standard C20 listed under Clause 56.06-7.

- Clause 56.06-8 Lot Access – Complies

All lots on site with an area less than 300m² and frontages beneath 7.5m in width have been provided with vehicle access via the rear of the property.

- Clause 56.07-1 Drinking Water Supply – Complies

All proposed lots are provided with direct access to drinking water via their property boundaries.

- Clause 56.07-2 Reused and Recycled Water – Complies

Rainwater tanks will be installed throughout the development area and connected to provide water for gardening and toilet flushing purposes.

- Clause 56.07-3 Wastewater Management – Complies

Sewer will be made available to the site following the installation of sewer at the adjacent Middleton Field development and sewer services will also be installed

within the proposed common property area. All sewers must be designed to AS3500.2:2021.

- Clause 56.07-4 Stormwater Management – Complies

The proposal has met best practice standards regarding the treatment of stormwater and has achieved a STORM Rating of 115%.

- Clause 56.08-1 Site Management – Complies

Applicant has requested that a Construction Site Management Plan be included as a condition on any permit granted. This request is acceptable, and a permit condition will be included.

- Clause 56.09-1 Shared Trenching – Complies

Many of the utilities will be provided to the site via the adjacent Middleton Field Development and will be made available following the development's completion. The common property area within Stage One, will host several utilities in shared trenching, minimising the impact on landscaping and construction cost.

- Clause 56.09-2 Electricity, Telecommunications and Gas – Complies

All compulsory services have been or are able to be provided to the site. Council notes that the applicant has opted to not provide a gas connection to the development in accordance with their mission statement, and that this is acceptable following amendment VC221 (04/08/22), which makes it so that a gas connection is no longer a mandatory requirement for new developments.

- Clause 56.09-3 Fire Hydrants – Complies

The Bushfire Development Report (prepared by Terramatrix) submitted with the application, states the necessity for providing fire hydrants within 120m of the rear of each lot. Council also notes that the CFA (Country Fire Authority) have included on their response to the application, a condition requiring all hydrants to be within 120m to the rear of lots and to be spaced no more than 200m apart.

- Clause 56.09-4 Public Lighting

Public lighting will have been addressed in the planning permit for the broader subdivision of 17 Smith Street.

POLICY AND STATUTORY IMPLICATIONS

Clause 11.01-1R aims to limit outward growth of Daylesford to minimise environmental impacts and exposure to natural hazards. The proposed development is in accordance with this clause as the development will be located entirely within the Daylesford township boundary within a residential zone and will not impede the functions of nearby agricultural land.

Clause 11.01-1L seeks to locate new dwellings and residential subdivisions within township boundaries. The proposed development and subdivision will take place within the Daylesford township boundary, ensuring compliance with this clause.

Clause 12.01-1L designed to protect and enhance the Shire's native vegetation and habitats. The application does not propose the removal of any existing native vegetation on site and aims to guarantee their retention within the development and buildings have been sited to not encroach within the applied Tree Protection Zones (TPZs).

Clause 12.01-2S aims to ensure that there is no net loss to biodiversity as a result of the removal, destruction or lopping of native vegetation. No native vegetation is proposed to be removed, achieving the primary objective of this clause.

Clause 12.05-2S seeks to protect and enhance significant landscapes and open spaces that contribute to character, identity and sustainable environments. The proposal's location within the township boundary, reduces the risk of the development having a negative impact on the surrounding landscape. It is also acknowledged that the applicant is proposing extensive landscaping works to the subject site, with approximately 35% of the total site developable area being dedicated to garden space. Note that this figure excludes the applicant's proposed 782m² public garden.

Clause 13.02-1S applies to all land within a designated bushfire prone area. As the proposal results in a subdivision of greater than ten lots, bushfire risk must be considered when assessing this application. It is acknowledged that the applicant supplied a Bushfire Development Report (prepared by Terramatrix), after it was requested by Council. Given the site's location within the established Daylesford township area, Council concurs with the applicant that this is a lower bushfire threat area. It is also acknowledged that the CFA have provided their conditional consent for the proposal and that overall, the development is considered unlikely to increase the risk of bushfires to human life.

Clause 14.02-1L aims to enhance and protect the quality and quantity of mineral springs and freshwater springs water and not compromise aquifer integrity through development. The proposed development has incorporated strategies to ensure adequate protection to the quality and quantity of both the mineral and freshwater springs within the municipality. The STORM Rating Report supplied by the applicant states that the proposal does achieve best practice for stormwater management, reticulated sewer will also be supplied to the development, complying with the applied strategies of this clause.

Clause 15.01-1S is designed to create urban environments that are safe, healthy functional and enjoyable and that contribute to a sense of place and cultural identity.

Clause 15.01-1L applies to all development of land within the Township boundary of Daylesford. The proposed development takes steps to ensure that the proposed layout and streetscape of the subject site, respects the established character seen in the surrounding area. While it is noted that the proposed residential development is a divergence from the style typically seen in the local area, it is also acknowledged

that this divergence is a consequence of the applicant's goals to create an "EcoVillage", and that efforts have been made to address local area character through the proposed landscaping works.

Clause 15.01-2S aims to achieve building design and siting outcomes that contribute positively to the local context, enhance the public realm and support environmentally sustainable development. The development will provide all required services and significant efforts have been made to ensure water efficiency, minimised stormwater impact and efficient energy performance.

Clause 15.01-2L seeks to achieve best practice in environmentally sustainable development from the design stage through to construction and operation. The proposal is in accordance with this policy as it achieves environmentally sustainable development best practice.

Clause 15.01-3S to ensure the design of subdivisions achieves attractive, safe, accessible, diverse and sustainable neighbourhoods. The proposed development will create a unique, highly functional and attractive area with a strong sense of place and which strives to encourage alternate means of travel to the car, in accordance with strategies of this policy.

Clause 15.01-3L applies subdivision of land within the township boundaries of Daylesford. The site has been designed to reflect the prevailing subdivision patterns seen within the municipality by implementing a grid-based road layout. The proposal will function as an infill residential development, located within the existing Daylesford township boundary. Infill developments are actively encouraged by council local policy.

Clause 15.01-4S seeks to achieve neighbourhoods that foster healthy and active living and community wellbeing. The site will produce a well-connected, safe and attractive pedestrian and cycling network within the proposed development area, encouraging people to engage in active transport, which is encouraged by this policy.

Clause 15.01-5S aims to recognise, support and protect neighbourhood character, cultural identity, and sense of place. The applicant has made a strong effort to replicate the subdivision pattern seen in the local area and has also looked to retain as much existing vegetation as possible. While the development is ultimately a departure in terms of neighbourhood character from what is generally seen in the area, it is acknowledged that considering the nature of the proposal a departure is largely unavoidable. The overall design of the development will create its own character and unique sense of place. The site's position behind existing dwellings on both Smith Street and the Midland Highway, also means that the development will have little impact on the established character of the local area.

Clause 15.01-5L-01 this policy applies to land in Daylesford within the Neighbourhood Residential Zone and aims to achieve the identified preferred character in residential areas in Daylesford. See above.

Clause 16.01-1S designed to facilitate well-located, integrated and diverse housing that meets community needs. The proposal will work to diversify the available housing stock within the municipality and provide homes which provide for the needs of different people. Community housing will also be provided.

Clause 16.01-2S aims to deliver more affordable housing closer to jobs, transport and services.

Clause 16.01-2L applies to land within the Daylesford Township boundary zoned as Neighbourhood Residential. The proposal, in accordance with the applicable strategies of this policy, will provide community housing via a Registered Housing Agency.

Clause 18.02-1S designed to facilitate an efficient and safe walking network and increase the proportion of trips made by walking. The site will host an extensive, efficient and safe walking network in accordance with the key objectives and strategies of this clause.

Clause 18.02-4S aims to facilitate an efficient and safe road network that integrates all movement networks and makes best use of existing infrastructure. The proposal has provided an efficient and safe internal road network that will be integrated with existing infrastructure and was approved under PA2504 for the broader subdivision of 17 Smith Street.

Clause 19.02-6S seeks to establish, manage and improve a diverse and integrated network of public open space that meets the needs of the community. The development has included provisions for open space that will be integrated with both the development and the local area and will be easily accessible.

Clause 19.02-6L applies to all land proposed for development within the Daylesford township boundary. The applicant has ensured, in accordance with council policy, that the development will maintain and enhance vegetation within the site and has proposed an extensive landscaping treatment to ensure a positive outcome.

GOVERNANCE ISSUES

The implications of this report have been assessed in accordance with the requirements of the Victorian Charter of Human Rights and Responsibilities.

SUSTAINABILITY IMPLICATIONS

The dwellings are proposed to have an energy rating of 7.5 which exceeds the existing requirements and new requirements of 7.0 that are being introduced in May 2023. It therefore exceeds best practice.

FINANCIAL IMPLICATIONS

Any application determined by Council or under delegation of Council is subject to appeal rights and may incur costs at VCAT if appealed.

RISK IMPLICATIONS

No risks to Council other than those already identified.

COMMUNITY AND STAKEHOLDER ENGAGEMENT

The application has been advertised by sending notification of the proposal to adjoining and adjacent owners and a notice on the land. As a result, five (5) objections have been received. The issues raised in the objections are addressed individually as follows.

The objections raised concerns about water management, affordable housing, the existing development, character and construction impacts and relate to a range of permit applications in the precinct.

The applicant has applied a wholistic approach to stormwater management with retarding basins to be provided in both 17 Smith Street and 29 Smith Street to retard water back to predeveloped flows. There will also be a series of sedimentation ponds to treat water to best practice.

At the moment there are uncontrolled flows from Wombat Hill into 9 Raglan Street and the sedimentation ponds will improve water quality by removing contaminants.

Middleton Field

17 Smith Street Daylesford VIC 3460

Drawing Schedule

TP01	Location Plan and Drawing Schedule	03
TP02	Executive Summary	03
TP03	Application & Consultants	03
TP04	Land Survey	02
TP05	Site Analysis	02
TP06	Staging Plan	03
TP07	Proposed Site Plan - Ground Floor	03
TP08	Proposed Site Plan - Level 1	03
TP09	Proposed Site Plan - Rooftop	03
TP10	Garden Area Plan	03
TP11	Entry	03
TP12	Zone 1 Townhouses	03
TP13	Zone 2 Townhouses	03
TP14	Zone 3 Townhouses	03
TP15	Zone 3 Townhouses	03
TP16	Zone 4 Townhouses	03
TP17.1	Zone 4 Townhouses	03
TP17.2	Zone 1, 2 & 4 Townhouses	03
TP19	Proposed Floor Plan - Zone 1	03
TP20	Proposed Floor Plan - Zone 2	03
TP21	Proposed Floor Plan - Zone 3	03
TP22	Proposed Floor Plan - Zone 4	03
TP23	Proposed Elevations	03
TP24	Proposed Elevations	03
TP25	Proposed Elevations	03
TP26	Proposed Elevations	03
TP27	Proposed Sections	03
TP28	Colours & Materials	03
TP29	Shadow Diagram	03

03

Middleton Field

17 Smith Street Daylesford VIC 3460

Set at the foot of the Wombat Hill in Daylesford, Middleton Field is a new carbon-neutral community conceived on contemporary sustainable living.

Middleton Field is a short walkable distance to picturesque Raglan Street and local amenities including the popular Sunday market, food stores, local primary and secondary schools and the Daylesford Hospital.

Recognising the need for a diverse range of housing, the Eco Village in Middleton Field is planned to provide a considered collection of smaller, architecturally designed sustainable homes in Daylesford.

Designed with environmental sustainability at the forefront this project is about homes in the landscape. All homes prioritise passive design principles and outlook to greenery, sitting neatly within the natural fall of the land. Every living room has access to northern sun with right sized punched openings to regulate internal temperatures. Prioritising ethics over aesthetics the homes are design with material sustainability in mind, intending to source materials locally and carbon free where possible. This place is intentional in its design, caring for and respecting its place.

03

Middleton Field

17 Smith Street Daylesford VIC 3460

APPLICANT
HYGGE PROPERTY

STREET ADDRESS
17 SIMITH STREET, DAYLESFORD
VIC 3460

PROPERTY DESCRIPTION
31 SUSTAINABLE TOWN HOUSES

ARCHITECTURE
BREATHE ARCHITECTURE
PRIMARY POC - JEREMY MCLEOD
(03 9381 2007)

LANDSCAPE ARCHITECTURE
ACRE STUDIO
PRIMARY POC - BRETT ROBINSON
(03 7018 3135)

SURVEYOR
MNG
PRIMARY POC - ADAM CRIDDLE
(0437 914 600)

TRAFFIC ENGINEER
OMG
PRIMARY POC - VAL GNANAKONE
(0418 592 383)

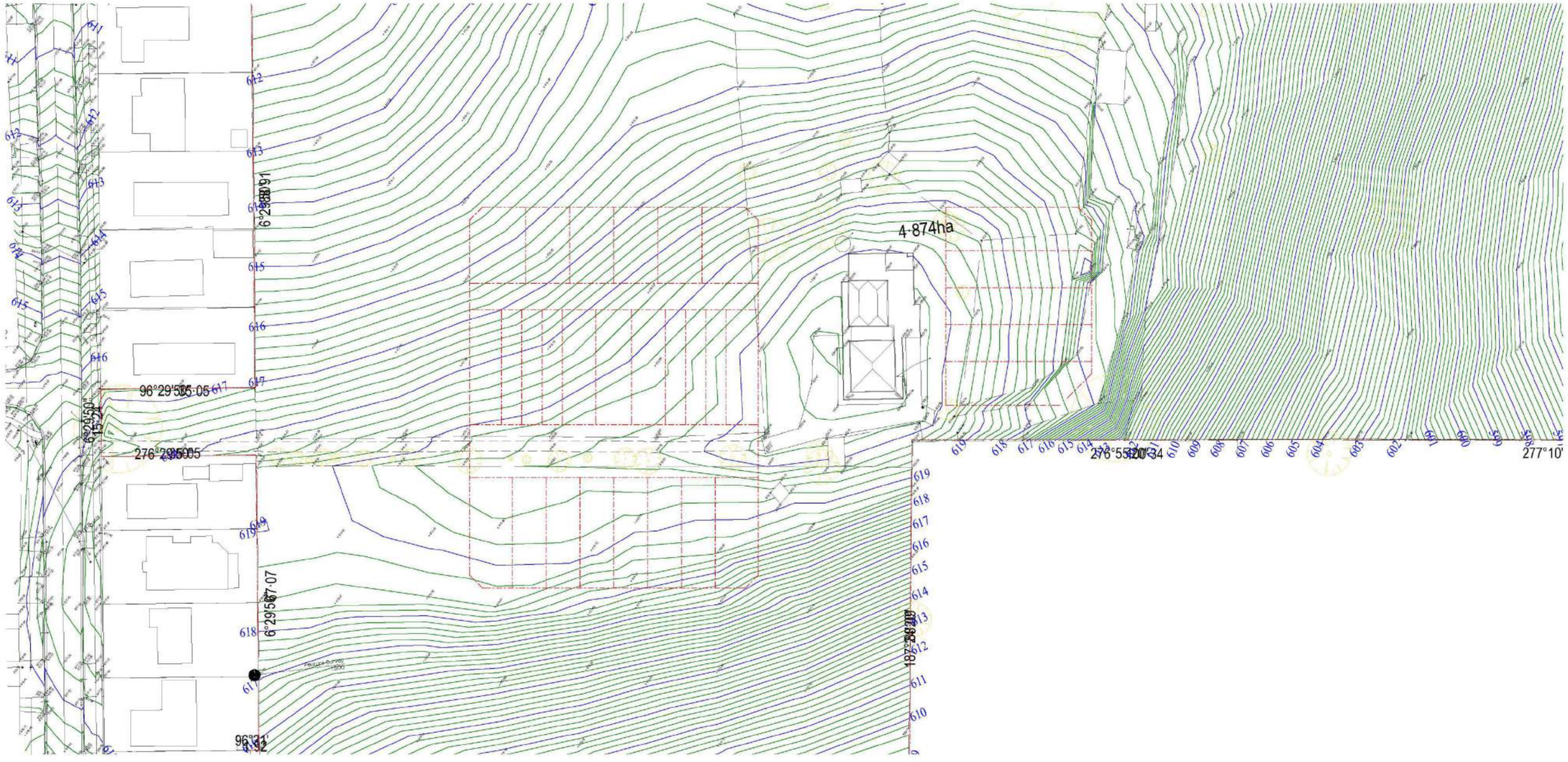
CIVIL ENGINEER
AXIOM CONSULTING
PRIMARY POC - MICHAEL PARKER
(0438 412 447)

TOWN PLANNING
NICHE PLANNING STUDIO
PRIMARY POC - NAOMI BECK (0480
322 835)

03

Land Survey

17 Smith Street Daylesford VIC 3460



BREATHE ARCHITECTURE

TOWN PLANNING

REV	ISSUE TITLE	COMMENT	DATE
01	Town Planning - Rev 01		15/7/2022
02	Town Planning - Rev 02		18/8/2022

LOCATION: 17 Smith Street Daylesford VIC 3460

PROJECT TITLE: Daylesford Eco-Village

JOB	PLOT DATE	ARCHITECT	CAD	SCALE
2121	23/11/2022	JM	AA	@ A1

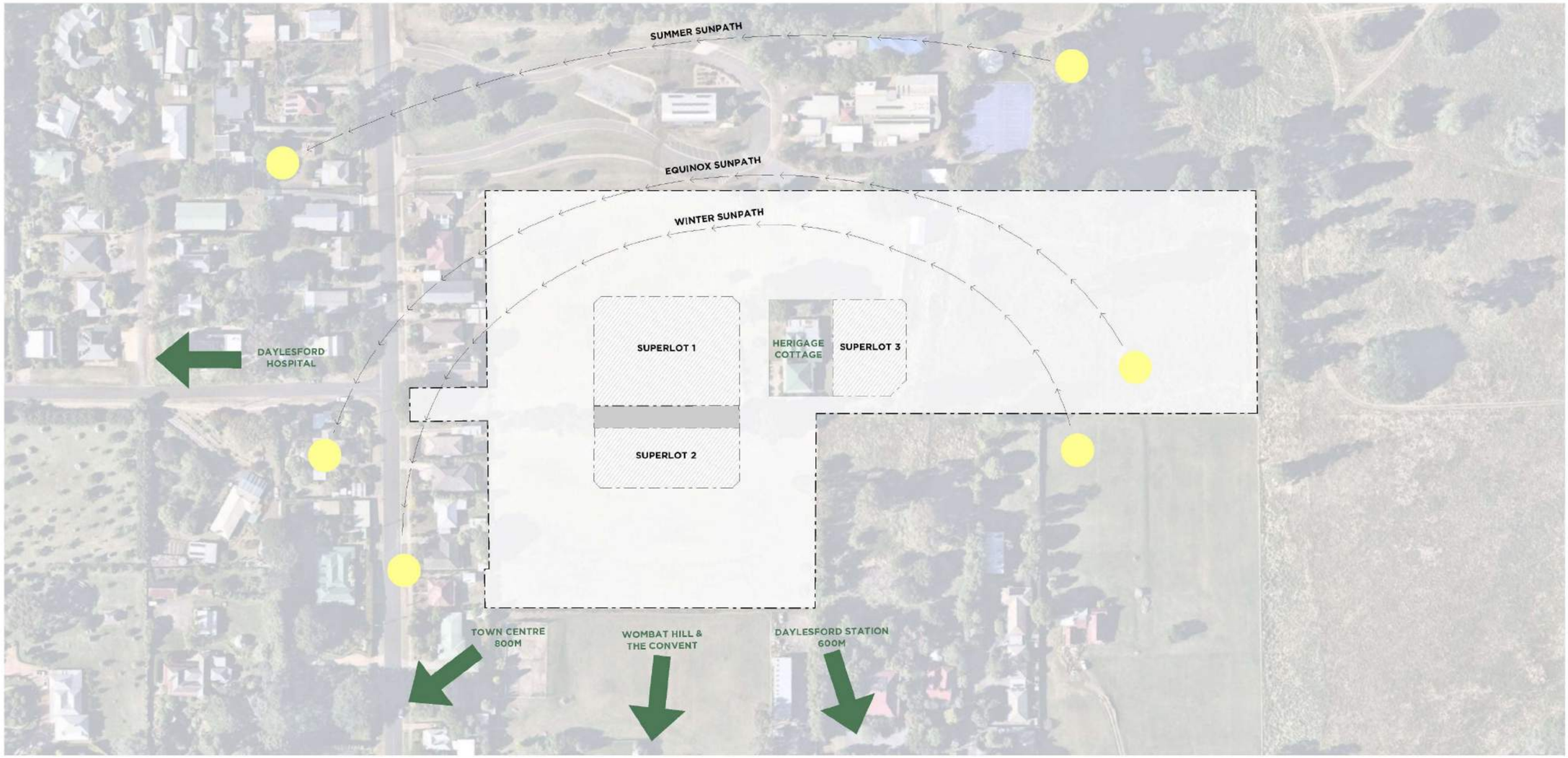
DRAWING TITLE: Land Survey

REVISION: 02

DRAWING: TP04

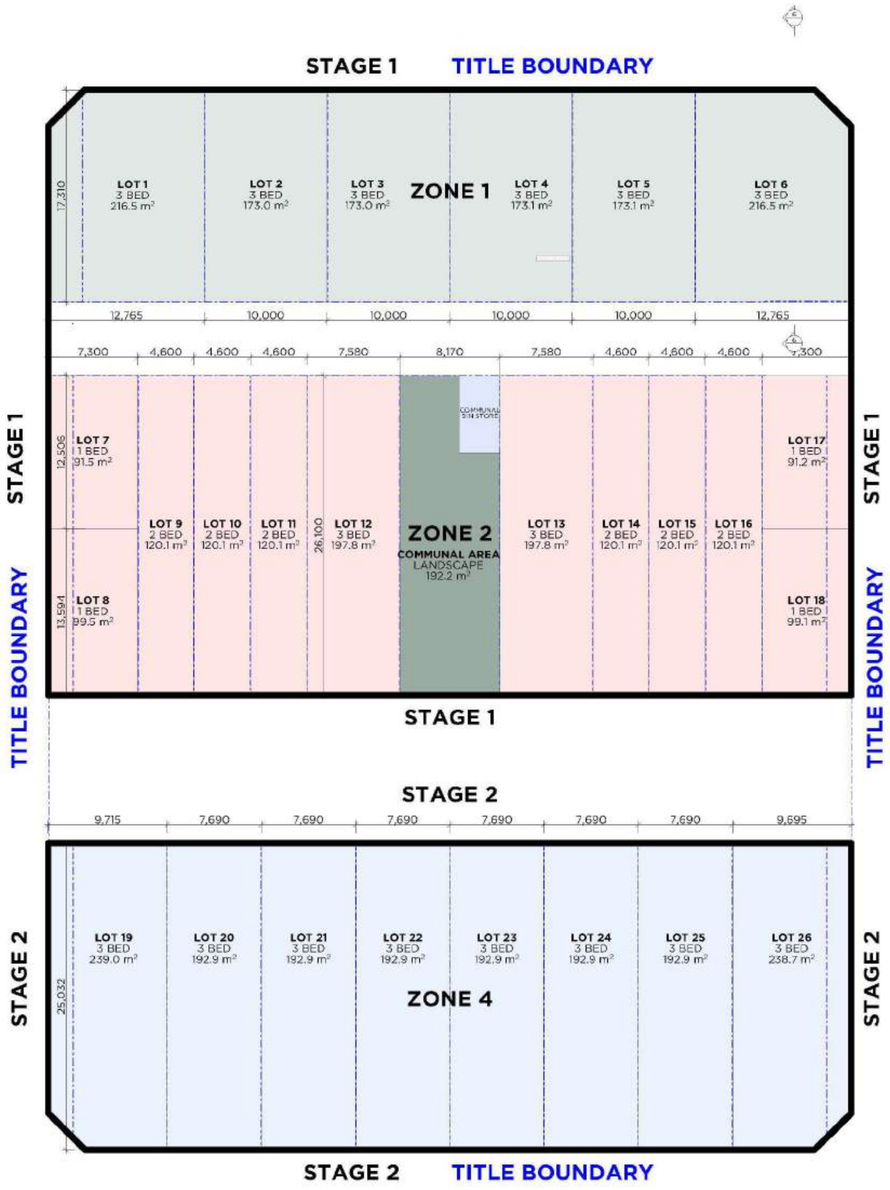
Site Analysis

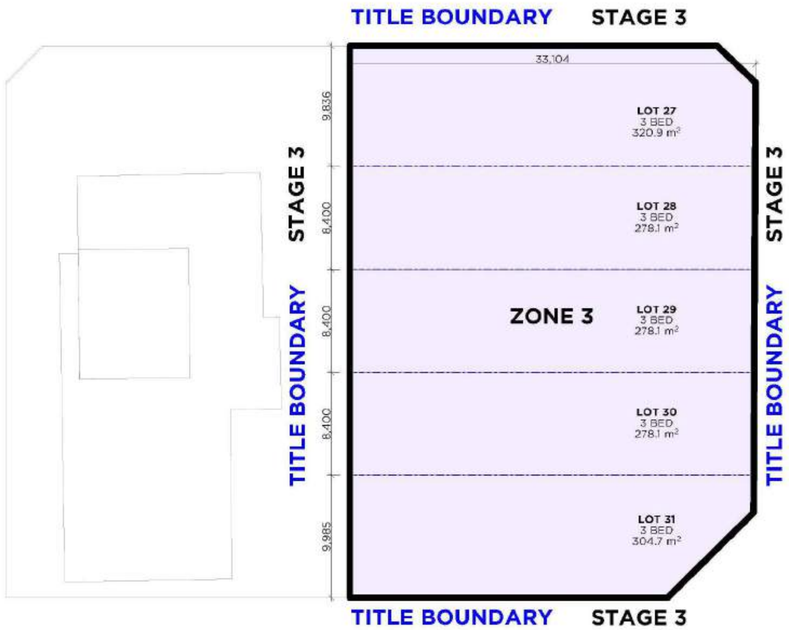
17 Smith Street Daylesford VIC 3460



Subdivision Plan

17 Smith Street Daylesford VIC 3460





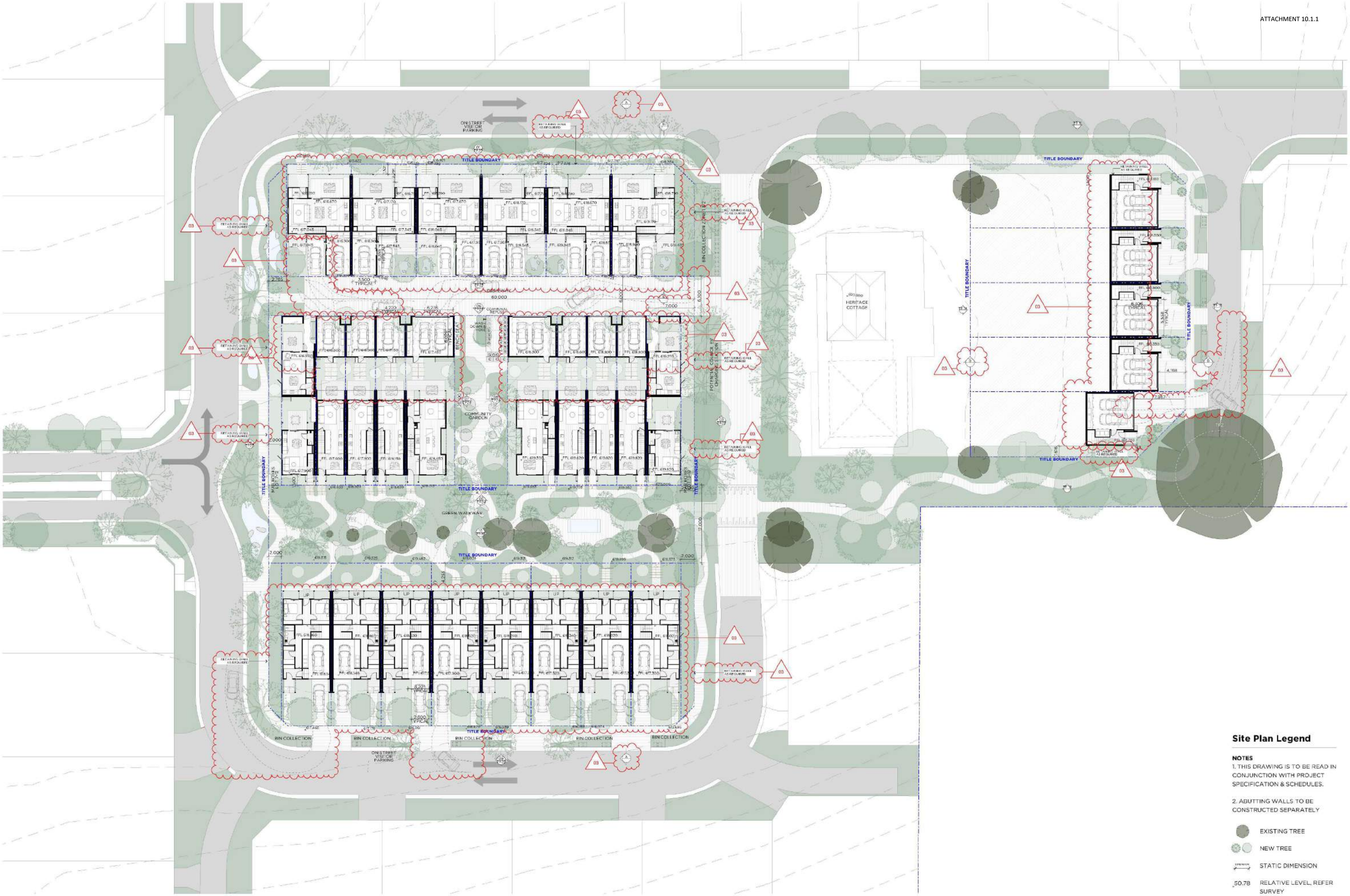
General Notes

1. DO NOT SCALE DRAWINGS. VERIFY ALL DIMENSIONS ON SITE PRIOR TO COMMENCING.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENGAGEMENT OF LICENSED BUILDING SURVEYOR TO SET-OUT THE WORKS AND TO VERIFY DIMENSIONS, BEARING, LEVELS AND EXISTENCE OF SERVICES.
3. UNLESS OTHERWISE SPECIFIED MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH OR BETTER THAN REQUIREMENTS OF RELEVANT AUSTRALIAN STANDARDS.
4. ALL ITEMS USED IN THE WORKS ARE TO BE USED, FIXED, INSTALLED, APPLIED ETC, IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS.
5. ALL DISCONNECTION, RELOCATING, RECONNECTING, CUTTING AND SEALING OF BUILDING SERVICES ARE TO BE DONE IN ACCORDANCE WITH THE RELEVANT AUTHORITY.
6. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE SPECIFICATION & FINISHES SCHEDULE TOGETHER WITH ALL ISSUED INSTRUCTIONS AND ALL OTHER ARCHITECTURAL AND SUB-CONSULTANTS DRAWINGS.
7. AMENDED DRAWINGS SHALL SUPERSEDE ALL PREVIOUS REVISIONS.
8. REFER ANY DISCREPENCIES, INCONSISTENCIES AND OTHER PROBLEMS TO THE ARCHITECT BEFORE PROCEEDING. DO NOT TAKE ANY ACTION UNTIL AN INSTRUCTION FROM THE ARCHITECT IS RECEIVED.

	COVERAGE	PERMEABILITY
SUPERLOT 1	53%	47%
SUPERLOT 2	59%	41%
SUPERLOT 3	60%	40%

			BED COUNT
	4	1 BED	4
	6	2 BED	12
	8	3 BED	24
SUPERLOT 2			
	5	3 BED	15
SUPERLOT 3			
	8	3 BED	24
	32		**79**

SUPERLOT 1				
	GARDEN	03	1,135	35%
	TOTAL		3,229	
SUPERLOT 2				
	GARDEN	03	574	35%
	TOTAL		1,634	
SUPERLOT 3				
	GARDEN	03	514	35%
	TOTAL		1,460	



Site Plan Legend

NOTES

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH PROJECT SPECIFICATION & SCHEDULES.

2. ABUTTING WALLS TO BE CONSTRUCTED SEPARATELY

- EXISTING TREE
- NEW TREE
- STATIC DIMENSION
- 50.78 RELATIVE LEVEL, REFER SURVEY

BREATHE ARCHITECTURE
TYE C OMNIBUS
5/11, ORCHARD ST
BRUNSWICK 3056
VIC AUSTRALIA
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TOWN PLANNING

CHECK ALL DIMENSION PRIOR TO COMMENCEMENT OF WORK. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DOCUMENTS, CONSULTANTS DOCUMENTS AND SPECIFICATIONS. ANY CLARIFICATION OF INCONSISTENCIES / CONFLICTS PRIOR TO ARCHITECT PLEASED TO BE RESOLVED BEFORE PROCEEDING. DO NOT SCALE DRAWINGS.

FILE PATH: [Redacted] - Architect Build for Archicad 24/2019 Daylesford_22_02_24.pln

REV	ISSUE TITLE	COMMENT	DATE
03	Town Planning - Rev 03		15/11/2022
02	Town Planning - Rev 02		19/10/2022
01	Town Planning - Rev 01	Changes as discussed	15/10/2022

LOCATION
17 Smith Street Daylesford VIC 3460

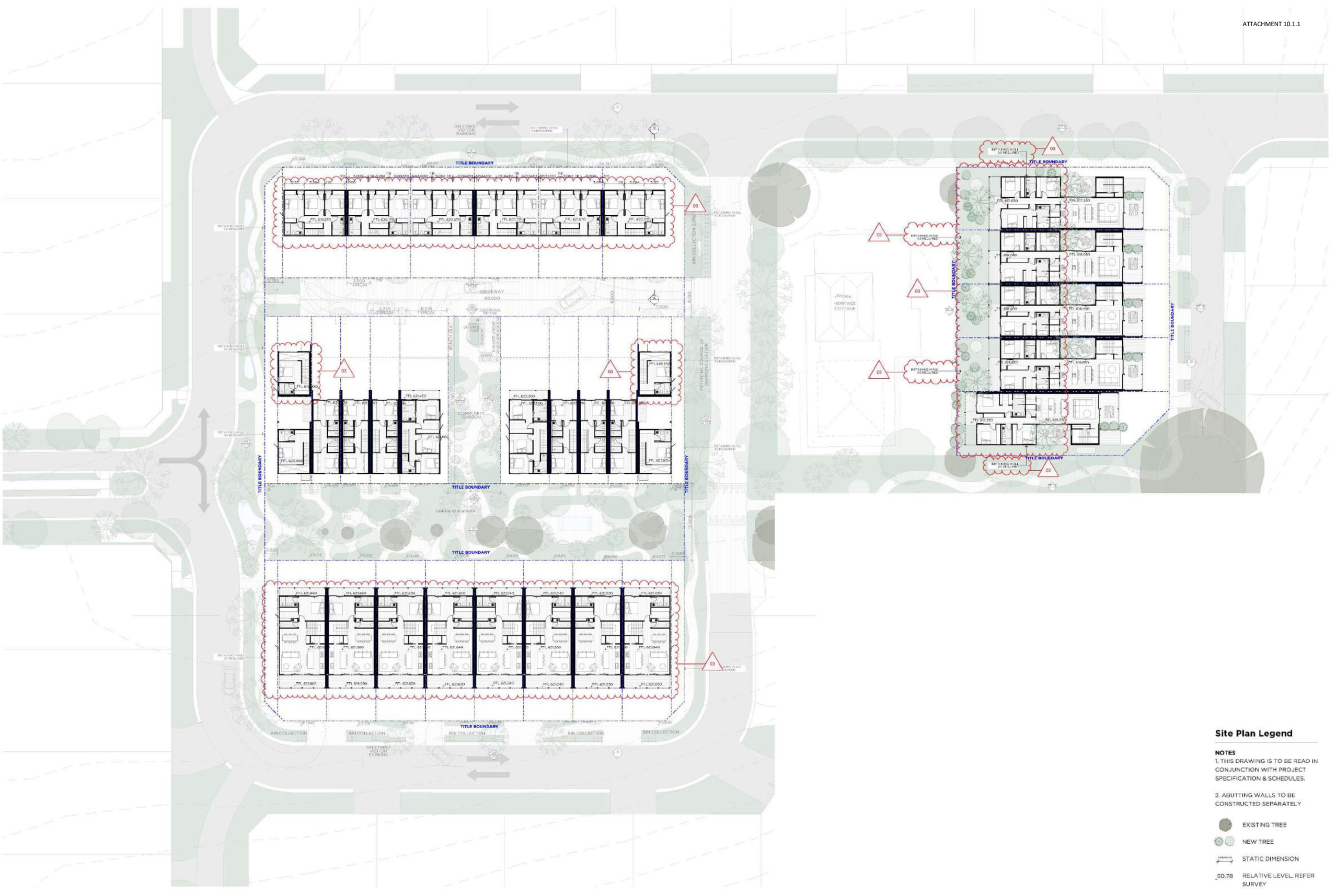
PROJECT TITLE
Daylesford Eco-Village

JOB	PLOT DATE	ARCHITECT	CAD	SCALE
2121	23/11/2022	JM	AA	@ A1

DRAWING TITLE
Proposed Site Plan - Ground Floor

REVISION
03

DRAWING
TP07



Site Plan Legend

NOTES

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH PROJECT SPECIFICATION & SCHEDULES.

2. ABUTTING WALLS TO BE CONSTRUCTED SEPARATELY

- EXISTING TREE
- NEW TREE
- STATIC DIMENSION
- 50.78 RELATIVE LEVEL, REFER SURVEY

BREATHE ARCHITECTURE
SUITE 2, ORMOND ST
BRUNSWICK 3056
VIC, AUSTRALIA
+61 3 9381 3007

TOWN PLANNING

REV	ISSUE TITLE	COMMENT	DATE
01	Town Planning - Rev 01		17/8/2022
02	Town Planning - Rev 02	Changes as discussed	18/8/2022
03	Town Planning - Rev 03	Changes as discussed	19/8/2022

LOCATION: 17 Smith Street Daylesford VIC 3460

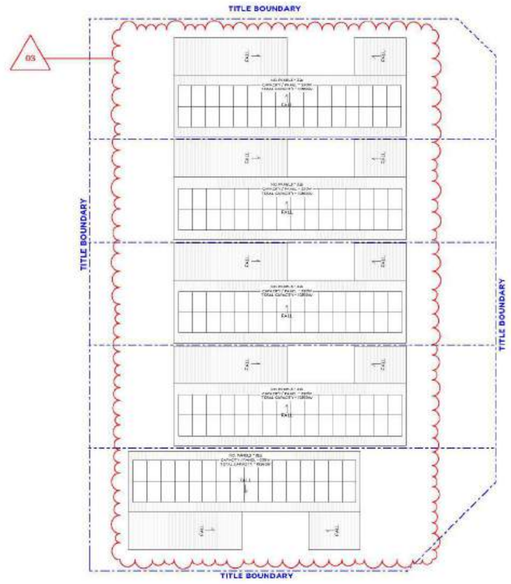
PROJECT TITLE: Daylesford Eco-Village

JOB	PLOT DATE	ARCHITECT	CAD	SCALE
2121	23/11/2022	JM	AA	@ A1

DRAWING TITLE: Proposed Site Plan - Level 1

REVISION: 03

DRAWING: TP08



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TOWN PLANNING

REV	ISSUE TITLE	COMMENT	DATE
01	Town Planning - Rev 01		7/6/2022
02	Town Planning - Rev 02		15/8/2022
03	Town Planning - Rev 03	Changes as clouded	16/8/2022

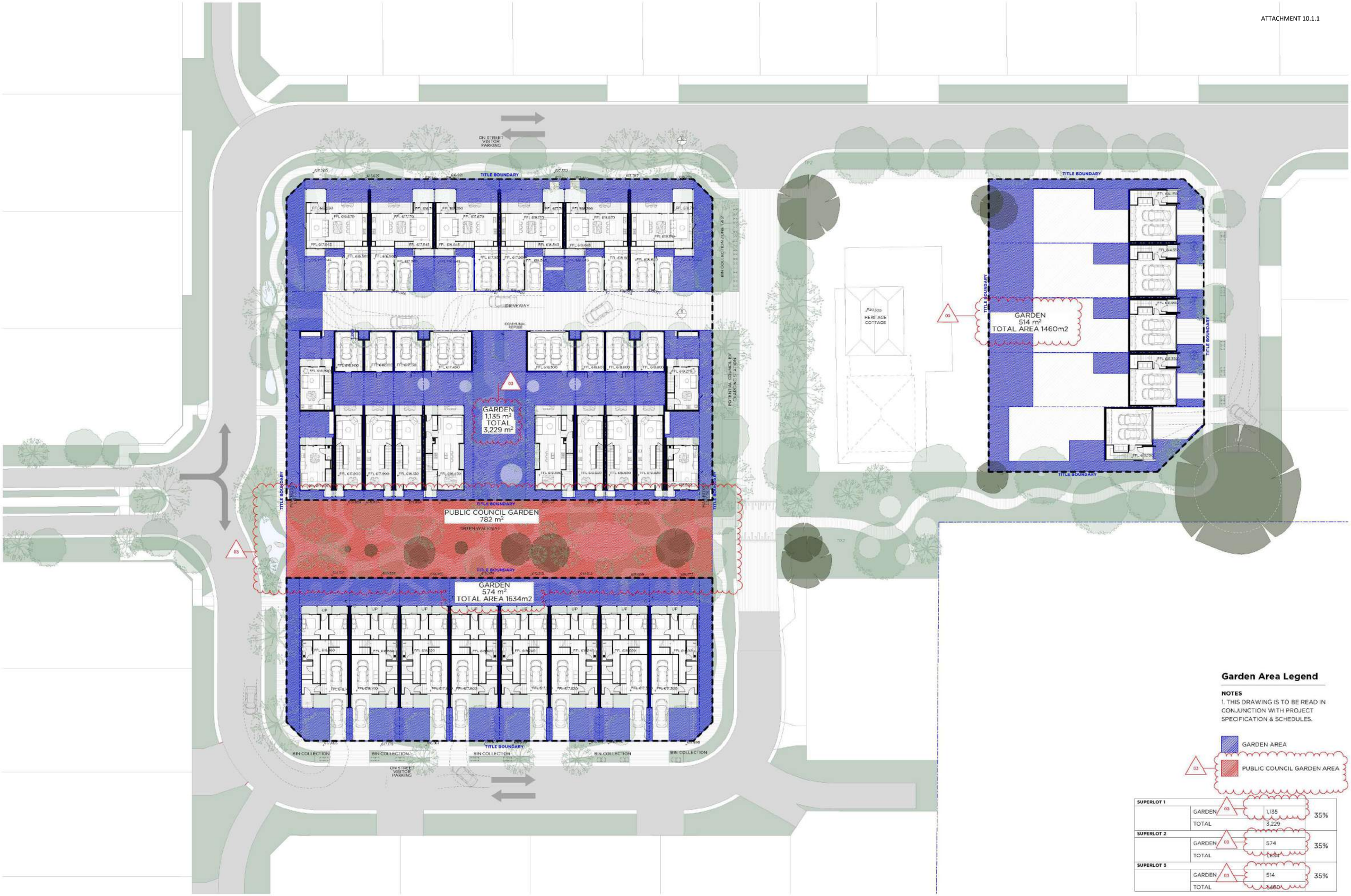
LOCATION
17 Smith Street Daylesford VIC 3460

PROJECT TITLE					
Daylesford Eco-Village					
JOB	PLOT DATE	ARCHITECT	CAD	SCALE	
2121	23/11/2022	JH	AA	@ A1	

DRAWING TITLE
Proposed Site Plan - Rooftop

REVISION
03

DRAWING
TP09



Garden Area Legend

NOTES

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH PROJECT SPECIFICATION & SCHEDULES.

GARDEN AREA

03 PUBLIC COUNCIL GARDEN AREA

SUPERLOT 1				
	GARDEN	03	1,135	35%
	TOTAL		3,229	
SUPERLOT 2				
	GARDEN	03	574	35%
	TOTAL		1634	
SUPERLOT 3				
	GARDEN	03	514	35%
	TOTAL		1460	

BREATHE ARCHITECTURE
THE COMMONS
5/5, ORCHARD ST
BRUNSWICK 3056
VIC AUSTRALIA
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TOWN PLANNING

REV	ISSUE TITLE	COMMENT	DATE
01	Town Planning - Rev 01		17/8/2022
02	Town Planning - Rev 02		18/8/2022
03	Town Planning - Rev 03	Changes as discussed	15/11/2022

LOCATION
17 Smith Street Daylesford VIC 3460

PROJECT TITLE
Daylesford Eco-Village

JOB	PLOT DATE	ARCHITECT	CAD	SCALE
2121	23/11/2022	JM	AA	@ A1

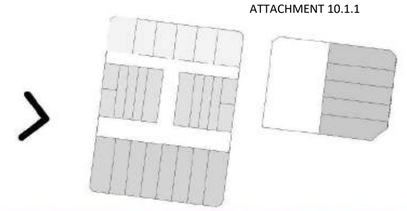
DRAWING TITLE
Garden Area Plan

REVISION
03

DRAWING
TP10

Entry

17 Smith Street Daylesford VIC 3460



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TOWN PLANNING

REV	ISSUE TITLE	COMMENT	DATE
01	Town Planning - Rev 01		1/9/2022
02	Town Planning - Rev 02		19/9/2022
03	Town Planning - Rev 03	Chanes as shouted	15/11/2022

LOCATION
17 Smith Street Daylesford VIC 3460

PROJECT TITLE
Daylesford Eco-Village

JOB	PLOT DATE	ARCHITECT	CAD	SCALE
2121	23/11/2022	JM	AA	@ A1

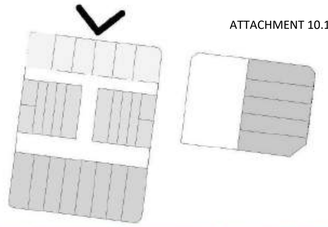
DRAWING TITLE
Entry

REVISION
03

DRAWING
TP11

Zone 1 North Townhouses

17 Smith Street Daylesford VIC 3460



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TOWN PLANNING

REV	ISSUE TITLE	COMMENT	DATE
01	Town Planning - Rev 01		1/11/2022
02	Town Planning - Rev 02		11/11/2022
03	Town Planning - Rev 03	Chanes as doubel	15/11/2022

LOCATION
17 Smith Street Daylesford VIC 3460

PROJECT TITLE
Daylesford Eco-Village

JOB	PLOT DATE	ARCHITECT	CAD	SCALE
2121	23/11/2022	JM	AA	@ A1

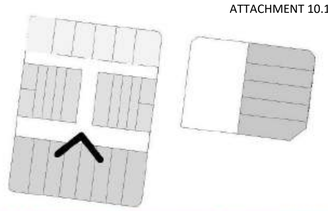
DRAWING TITLE
Zone 1 Townhouses

REVISION
03

DRAWING
TP12

Zone 2 Central Townhouses

17 Smith Street Daylesford VIC 3460



BREATHE ARCHITECTURE

SYD OFFICE
97L GEORGE ST
BRUNSWICK 3056
VIC AUSTRALIA
+61 3 9381 2007

TOWN PLANNING

REV	ISSUE TITLE	COMMENT	DATE
01	Town Planning - Rev 01		17/6/2022
02	Town Planning - Rev 02		19/8/2022
03	Town Planning - Rev 03	Changes as clouded	15/11/2022

LOCATION
17 Smith Street Daylesford VIC 3460

PROJECT TITLE
Daylesford Eco-Village

JOB	PLOT DATE	ARCHITECT	CAD	SCALE
2121	25/11/2022	JM	AA	@ A1

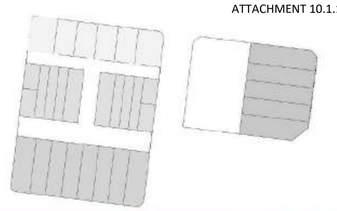
DRAWING TITLE
Zone 2 Townhouses

REVISION
03

DRAWING
TP13

Zone 3 Eastern Townhouses

17 Smith Street Daylesford VIC 3460



BREATHE ARCHITECTURE

TOWN PLANNING

REV	ISSUE TITLE	COMMENT	DATE
01	Town Planning - Rev 01		11/8/2022
02	Town Planning - Rev 02		15/8/2022
03	Town Planning - Rev 03	Chanes as discussed	15/8/2022

LOCATION: 17 Smith Street Daylesford VIC 3460

PROJECT TITLE: Daylesford Eco-Village

JOB	PLOT DATE	ARCHITECT	CAD	SCALE
2121	23/11/2022	JM	AA	@ A1

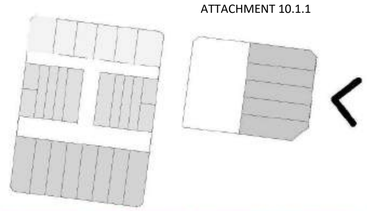
DRAWING TITLE: Zone 3 Townhouses

REVISION: 03

DRAWING: TP14

Zone 3 Eastern Townhouses

17 Smith Street Daylesford VIC 3460



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PHONE
+61 3 9388 3007

TOWN PLANNING

REV	ISSUE TITLE	COMMENT	DATE
01	Town Planning - Rev 01		1/9/2022
02	Town Planning - Rev 02		19/9/2022
03	Town Planning - Rev 03	Changes as clouded	15/11/2022

LOCATION
17 Smith Street Daylesford VIC 3460

PROJECT TITLE
Daylesford Eco-Village

JOB	PLOT DATE	ARCHITECT	CAD	SCALE
2121	23/11/2022	JM	AA	@ A1

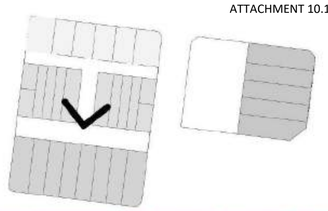
DRAWING TITLE
Zone 3 Townhouses

REVISION
03

DRAWING
TP15

Zone 4 Southern Townhouses

17 Smith Street Daylesford VIC 3460



BREATHE ARCHITECTURE
THE COMMONS
5/11, ORRONG ST
BRUNSWICK 3056
VIC AUSTRALIA
+61 3 9381 2007
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TOWN PLANNING

FILE PATH: R:\Work_WORK - BM\Wood Bell\Architect\24-27 Daylesford St_BIM_Dec\Work\

REV	ISSUE TITLE	COMMENT	DATE
01	Town Planning - Rev 01		17/6/2022
02	Town Planning - Rev 02		19/8/2022
03	Town Planning - Rev 03	Chanes as docked	15/9/2022

LOCATION:
17 Smith Street Daylesford VIC 3460

PROJECT TITLE:
Daylesford Eco-Village

JOB	PLOT DATE	ARCHITECT	CAD	SCALE
2121	23/11/2022	JM	AA	@ A1

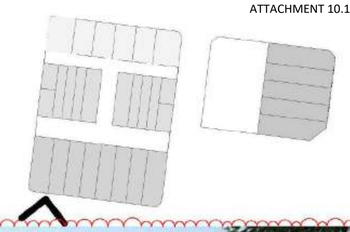
DRAWING TITLE:
Zone 4 Townhouses

REVISION
03

DRAWING
TP15

Zone 4 Southern Townhouses

17 Smith Street Daylesford VIC 3460



BREATHE ARCHITECTURE
THE COMMONS
9/11 ORRONG ST
BRUNSWICK 3056
VIC AUSTRALIA
+61 3 9388 3007
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TOWN PLANNING

REV	ISSUE TITLE	COMMENT	DATE
03	Town Planning - Rev 03		15/11/2022
02	Town Planning - Rev 02		19/10/2022
01	Town Planning - Rev 01	Changes as discussed	16/10/2022

LOCATION
17 Smith Street Daylesford VIC 3460

PROJECT TITLE
Daylesford Eco-Village

JOB	PLOT DATE	ARCHITECT	CAD	SCALE
2121	23/11/2022	JM	AA	@ A1

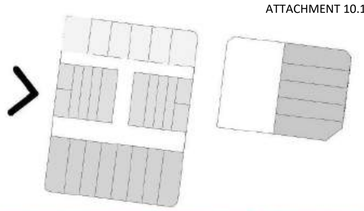
DRAWING TITLE
Zone 4 Townhouses

REVISION
03

DRAWING
TP17.1

Zone 1, 2 & 4 Townhouses, View from West

17 Smith Street Daylesford VIC 3460



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PTY. LTD.
ABN 24 005 223 454
ACN 005 223 454
3/1 GRONOS ST
BRUNSWICK 3056
VIC AUSTRALIA
+61 3 9388 3007
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TOWN PLANNING

REV	ISSUE TITLE	COMMENT	DATE
01	Town Planning - Rev 01		1/9/2022
02	Town Planning - Rev 02		19/9/2022
03	Town Planning - Rev 03	Chanes as shouted	15/11/2022

LOCATION
17 Smith Street Daylesford VIC 3460

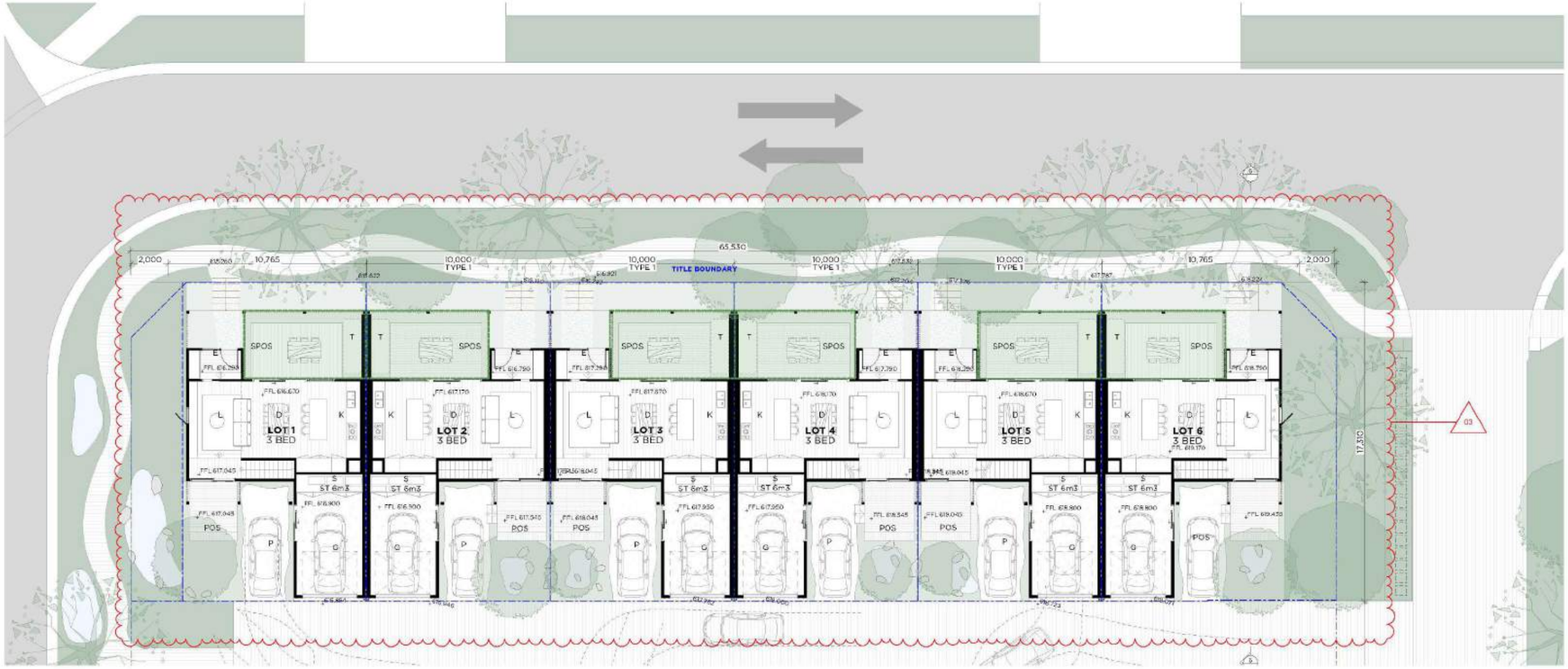
PROJECT TITLE
Daylesford Eco-Village

JOB	PLOT DATE	ARCHITECT	CAD	SCALE
2121	23/11/2022	JM	AA	@ A1

DRAWING TITLE
Zone 1, 2 & 4 Townhouses

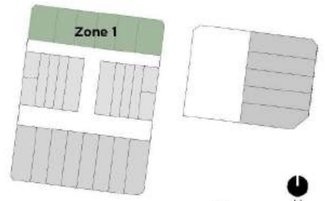
REVISION
03

DRAWING
TP17.2



Ground
1:150

Level 1
1:150



N

TYPE 1 - NORTH		
	GARAGE	28
	GROUND	65
	LEVEL 1	75
	POS	48
	SPOS	32
TYPE 2 - MIDDLE 1 BED NORTH		
	GROUND	37
	LEVEL 1	25
	POS	34
	SPOS	21
TYPE 3 - MIDDLE 1 BED		
	GROUND	74
	LEVEL 1	25
	POS	72
	SPOS	50
TYPE 4 - MIDDLE 2 BED		
	GARAGE	29
	GROUND	61
	LEVEL 1	48
	SPOS	28
TYPE 5 - MIDDLE 3 BED		
	GARAGE	46
	GROUND	71
	LEVEL 1	70
	POS	44
	SPOS	40
TYPE 6 - SOUTH		
	GARAGE	28
	GROUND	71
	LEVEL 1	88
	POS	100
	SPOS	11
TYPE 7 - EAST		
	GROUND	65
	LEVEL 1	145
	SPOS	35

Area Code

E	ENTRY
ST	STORAGE
K	KITCHEN
L	LIVING
D	DINING
POS	PRIVATE OPEN SPACE
SPOS	SECLUDED PRIVATE OPEN SPACE
V	VOID
LR	LAUNDRY
B#	BEDROOM #
BR	BATHROOM
WIR	WALK-IN ROBE
WC	WASH CLOSET
G	GARAGE
P	PARKING
S	SERVICES
BS	BIN STORE
T	WATER TANK

General Arrangement Legend

NOTES

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH PROJECT SPECIFICATION & SCHEDULES.

2. ABUTTING WALLS TO BE CONSTRUCTED SEPARATELY

NEW WALL

ELEMENT ABOVE/BELOW

STATIC DIMENSION

BREATHE ARCHITECTURE
THE COMMONS
515, ORCHARD ST
BRUNSWICK 3056
VIC AUSTRALIA
+61 3 9381 2007

TOWN PLANNING

REV	ISSUE TITLE	COMMENT	DATE
01	Town Planning - Rev 01		17/8/2022
02	Town Planning - Rev 02		16/9/2022
03	Town Planning - Rev 03	Changes as discussed	19/9/2022

LOCATION
17 Smith Street Daylesford VIC 3460

PROJECT TITLE
Daylesford Eco-Village

JOB	PLOT DATE	ARCHITECT	CAD	SCALE
2121	23/11/2022	JM	AA	@ A1

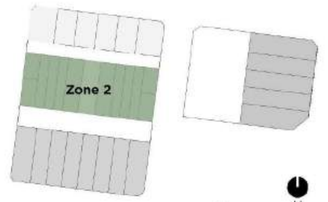
DRAWING TITLE
Proposed Floor Plan - Zone 1

REVISION
03

DRAWING
TP19

Ground
1:150

Level 1
1:150



TYPE 1 - NORTH		
	GARAGE	26
	GROUND	65
	LEVEL 1	75
	POS	48
	SPOS	32
TYPE 2 - MIDDLE 1 BED NORTH		
	GROUND	37
	LEVEL 1	25
	POS	34
	SPOS	21
TYPE 3 - MIDDLE 1 BED		
	GROUND	74
	LEVEL 1	25
	POS	72
	SPOS	50
TYPE 4 - MIDDLE 2 BED		
	GARAGE	29
	GROUND	61
	LEVEL 1	48
	SPOS	28
TYPE 5 - MIDDLE 3 BED		
	GARAGE	46
	GROUND	71
	LEVEL 1	70
	POS	44
	SPOS	40
TYPE 6 - SOUTH		
	GARAGE	28
	GROUND	71
	LEVEL 1	88
	POS	100
	SPOS	11
TYPE 7 - EAST		
	GROUND	65
	LEVEL 1	145
	SPOS	35

Area Code

E	ENTRY
ST	STORAGE
K	KITCHEN
L	LIVING
D	DINING
POS	PRIVATE OPEN SPACE
SPOS	SECLUDED PRIVATE OPEN SPACE
V	VOID
LR	LAUNDRY
B#	BEDROOM #
BR	BATHROOM
WIR	WALK-IN ROBE
WC	WASH CLOSET
G	GARAGE
P	PARKING
S	SERVICES
BS	BIN STORE
T	WATER TANK

General Arrangement Legend

NOTES

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH PROJECT SPECIFICATION & SCHEDULES.

2. ABUTTING WALLS TO BE CONSTRUCTED SEPARATELY

NEW WALL

ELEMENT ABOVE/BELOW

STATIC DIMENSION

BREATHE ARCHITECTURE
THE COMMONS
515, ORCHARD ST
BRUNSWICK 3056
VIC AUSTRALIA
+61 3 9381 2007

TOWN PLANNING

REV	ISSUE TITLE	COMMENT	DATE
01	Town Planning - Rev 01		17/8/2022
02	Town Planning - Rev 02		18/8/2022
03	Town Planning - Rev 03	Changes as discussed	15/11/2022

LOCATION
17 Smith Street Daylesford VIC 3460

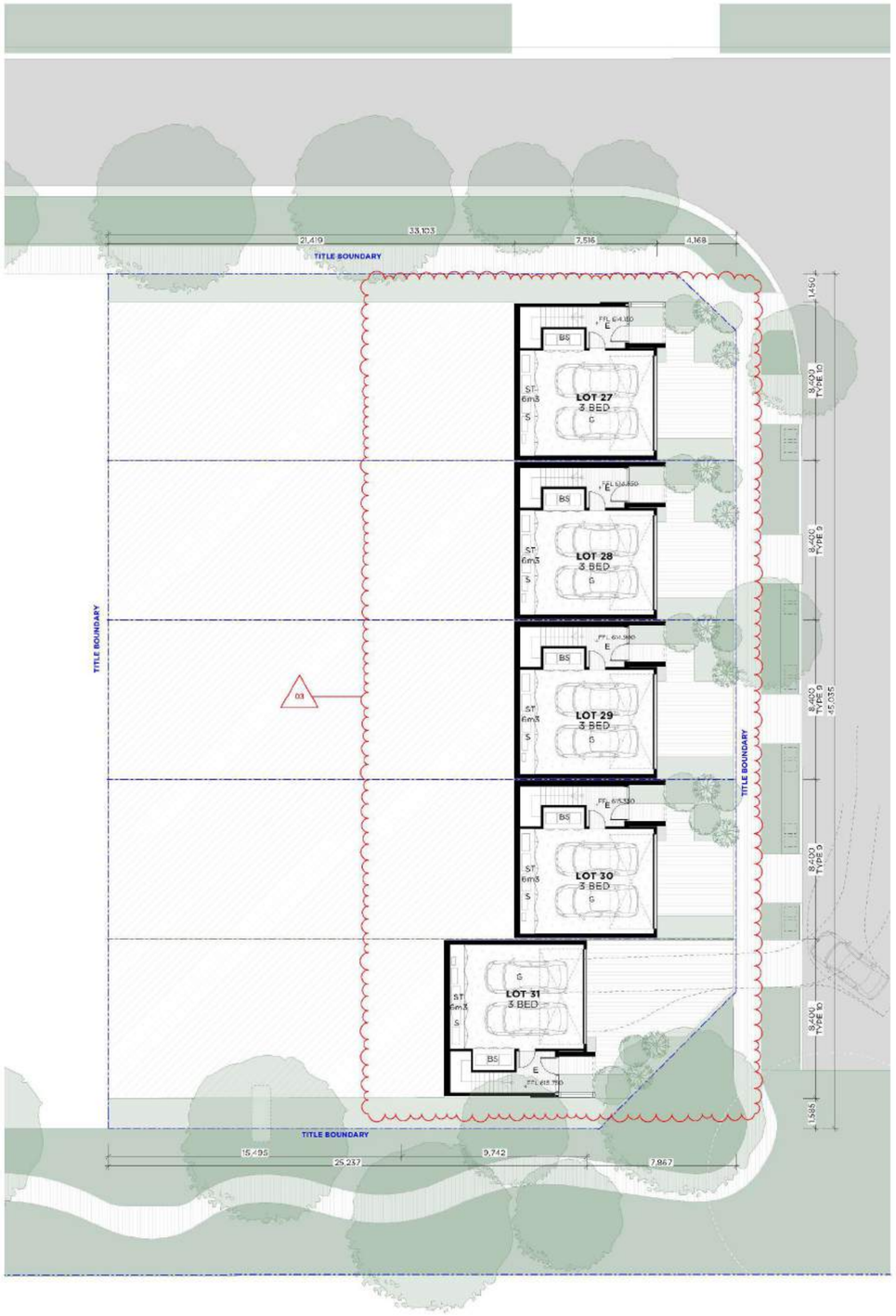
PROJECT TITLE
Daylesford Eco-Village

JOB	PLOT DATE	ARCHITECT	CAD	SCALE
2121	23/11/2022	JM	AA	@ A1

DRAWING TITLE
Proposed Floor Plan - Zone 2

REVISION
03

DRAWING
TP20



TYPE 1 - NORTH		
	GARAGE	28
	GROUND	65
	LEVEL 1	75
	POS	48
	SPOS	32
TYPE 2 - MIDDLE 1 BED NORTH		
	GROUND	37
	LEVEL 1	25
	POS	34
	SPOS	21
TYPE 3 - MIDDLE 1 BED		
	GROUND	74
	LEVEL 1	25
	POS	72
	SPOS	30
TYPE 4 - MIDDLE 2 BED		
	GARAGE	29
	GROUND	61
	LEVEL 1	48
	SPOS	28
TYPE 5 - MIDDLE 3 BED		
	GARAGE	46
	GROUND	71
	LEVEL 1	70
	POS	44
	SPOS	40
TYPE 6 - SOUTH		
	GARAGE	28
	GROUND	71
	LEVEL 1	88
	POS	100
	SPOS	11
TYPE 7 - EAST		
	GROUND	65
	LEVEL 1	145
	SPOS	35

Area Code

E	ENTRY
ST	STORAGE
K	KITCHEN
L	LIVING
D	DINING
POS	PRIVATE OPEN SPACE
SPOS	SECLUDED PRIVATE OPEN SPACE
V	VOID
LR	LAUNDRY
B#	BEDROOM #
BR	BATHROOM
WIR	WALK-IN ROBE
WC	WASH CLOSET
G	GARAGE
P	PARKING
S	SERVICES
BS	BIN STORE
T	WATER TANK

General Arrangement Legend

NOTES

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH PROJECT SPECIFICATION & SCHEDULES.

2. ABUTTING WALLS TO BE CONSTRUCTED SEPARATELY

NEW WALL

ELEMENT ABOVE/BELOW

STATIC DIMENSION

Ground
1:150

BREATHE ARCHITECTURE
SUITE 2, ORMOND 57
BRUNSWICK 3056
VIC AUSTRALIA
+61 3 9388 3007
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TOWN PLANNING

REV	ISSUE TITLE	COMMENT	DATE
01	Town Planning - Rev 01		15/7/2022
02	Town Planning - Rev 02		19/8/2022
03	Town Planning - Rev 03	Changes as discussed	15/11/2022

LOCATION
17 Smith Street Daylesford VIC 3460

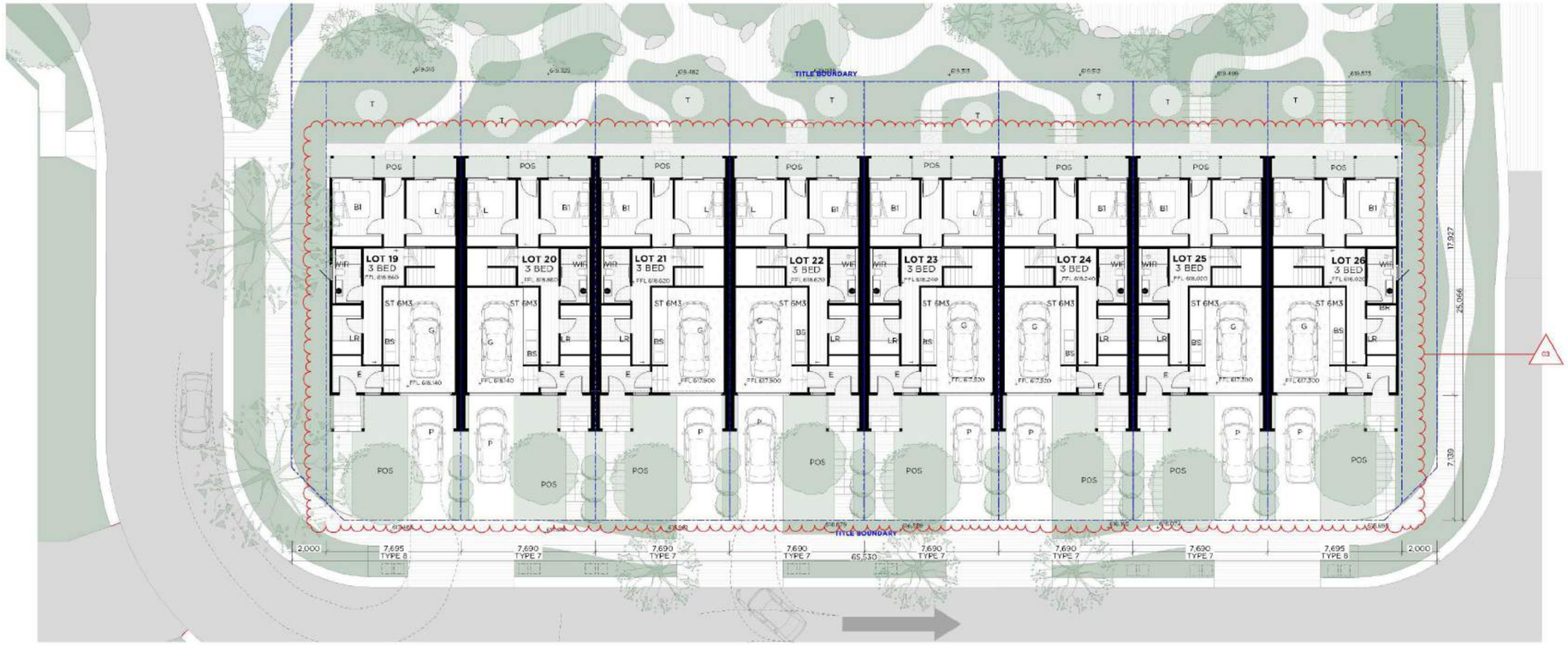
PROJECT TITLE
Daylesford Eco-Village

JOB	PLOT DATE	ARCHITECT	CAD	SCALE
2121	23/11/2022	JM	AA	@ A1

DRAWING TITLE
Proposed Floor Plan - Zone 3

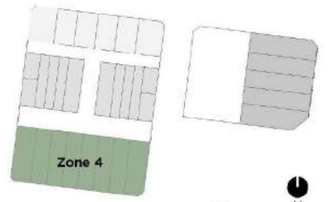
REVISION
03

DRAWING
TP21



Ground
1:150

Level 1
1:150



TYPE 1 - NORTH		
	GARAGE	26
	GROUND	65
	LEVEL 1	75
	POS	48
	SPOS	32
TYPE 2 - MIDDLE 1 BED NORTH		
	GROUND	37
	LEVEL 1	25
	POS	34
	SPOS	21
TYPE 3 - MIDDLE 1 BED		
	GROUND	74
	LEVEL 1	25
	POS	72
	SPOS	50
TYPE 4 - MIDDLE 2 BED		
	GARAGE	29
	GROUND	61
	LEVEL 1	48
	SPOS	28
TYPE 5 - MIDDLE 3 BED		
	GARAGE	46
	GROUND	71
	LEVEL 1	70
	POS	44
	SPOS	40
TYPE 6 - SOUTH		
	GARAGE	28
	GROUND	71
	LEVEL 1	88
	POS	100
	SPOS	11
TYPE 7 - EAST		
	GROUND	85
	LEVEL 1	145
	SPOS	35

Area Code

E	ENTRY
ST	STORAGE
K	KITCHEN
L	LIVING
D	DINING
POS	PRIVATE OPEN SPACE
SPOS	SECLUDED PRIVATE OPEN SPACE
V	VOID
LR	LAUNDRY
B#	BEDROOM #
BR	BATHROOM
WIR	WALK-IN ROBE
WC	WASH CLOSET
G	GARAGE
P	PARKING
S	SERVICES
BS	BIN STORE
T	WATER TANK

General Arrangement Legend

NOTES

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH PROJECT SPECIFICATION & SCHEDULES.

2. ABUTTING WALLS TO BE CONSTRUCTED SEPARATELY

NEW WALL

ELEMENT ABOVE/BELOW

STATIC DIMENSION

BREATHE ARCHITECTURE
THE COMMONS
515 DRYSDALE ST
BRUNSWICK 3056
VIC AUSTRALIA
+61 3 9381 2007

TOWN PLANNING

REV	ISSUE TITLE	COMMENT	DATE
01	Town Planning - Rev 01		17/8/2022
02	Town Planning - Rev 02		18/8/2022
03	Town Planning - Rev 03	Changes as discussed	15/11/2022

LOCATION
17 Smith Street Daylesford VIC 3460

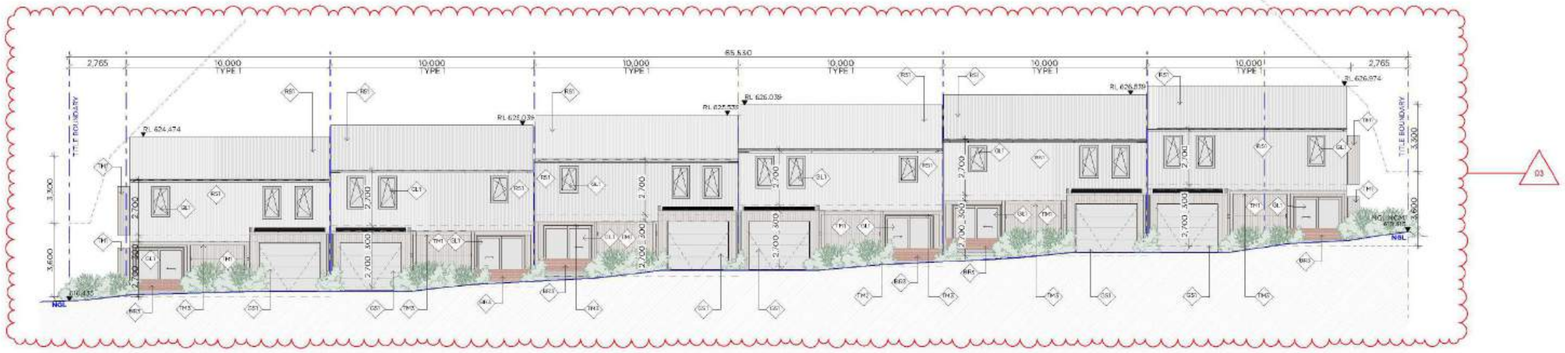
PROJECT TITLE
Daylesford Eco-Village

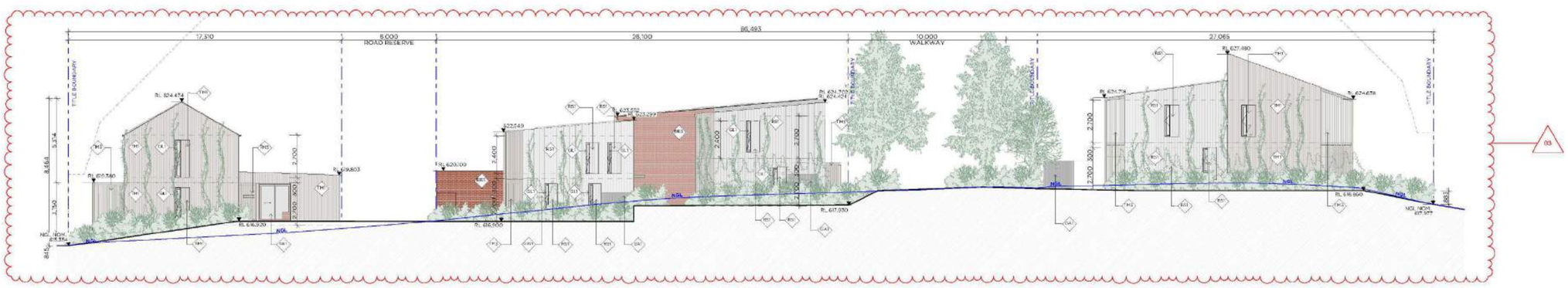
JOB	PLOT DATE	ARCHITECT	CAD	SCALE
2121	23/11/2022	JM	AA	@ A1

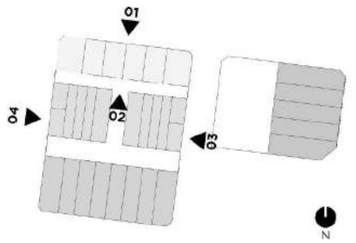
DRAWING TITLE
Proposed Floor Plan - Zone 4

REVISION
03

DRAWING
TP22







Material Schedule

BR1	LIGHT CARBON NEUTRAL BRICK FACADES & RETAINING WALLS
BR2	LIGHT CARBON NEUTRAL HIT & MISS BRICK
BR3	CARBON NEUTRAL BRICK
BW1	CONCRETE BLOCKWORK
GA1	GALVANISED WATER TANKS
GL1	CLEAR DOUBLE GLAZING
GP1	COMMUNITY GREENWAY GRAVEL PATH
GS1	GALVANISED STEEL GARAGE DOO
RS1	ZINCALUME
TM1	TIMBER CLADDING OR SIMILAR
TM2	TIMBER BATTEN OR SIMILAR SCREENS & FENCES OR SIMILAR
TM3	TIMBER OR SIMILAR PERGOLA WITH GROW WIRES
TM4	TIMBER DOOR OR SIMILAR
TM5	TIMBER DECKING
PA1	PAVED SURFACE
S1	SOLAR PLANELS
GW1	GREEN WALL

General Arrangement Legend

STATIC DIMENSION

MATERIAL CODE

BREATHE ARCHITECTURE

TOWN PLANNING

REV	ISSUE TITLE	COMMENT	DATE
01	Town Planning - Rev 01		17/8/2022
02	Town Planning - Rev 02		15/9/2022
03	Town Planning - Rev 03	Chanes as docuted	15/11/2022

LOCATION: 17 Smith Street Daylesford VIC 3460

PROJECT TITLE: Daylesford Eco-Village

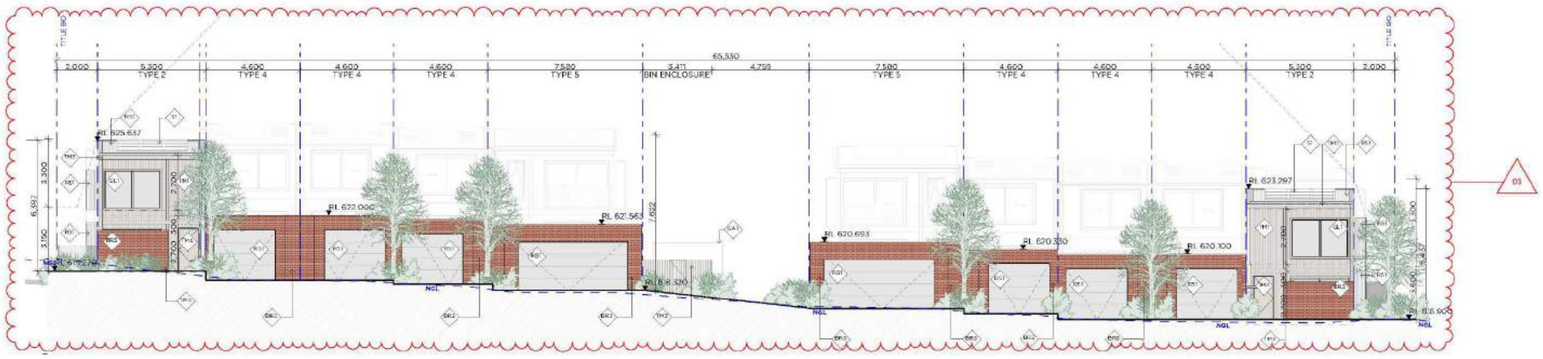
JOB	PLOT DATE	ARCHITECT	CAD	SCALE
2121	23/11/2022	JM	AA	@ A1

DRAWING TITLE: Proposed Elevations

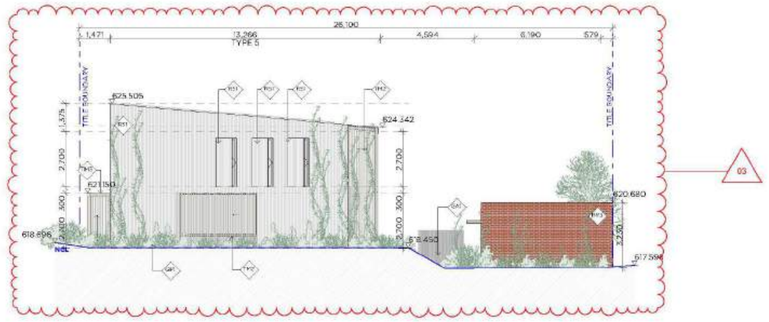
REVISION: 03

DRAWING: TP23

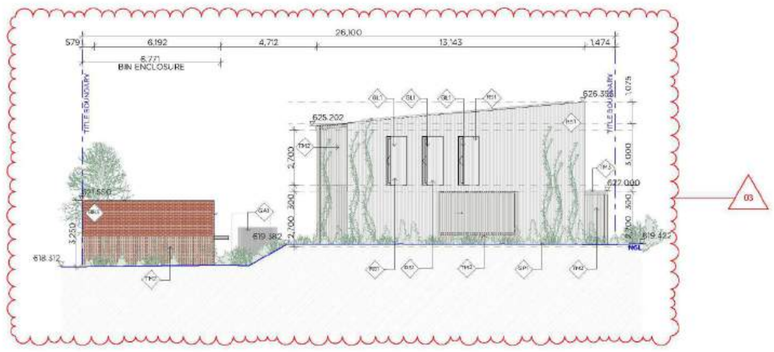
Middle - South Elevation
1:150



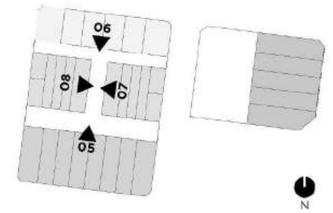
Middle - North Elevation
1:150



Middle - Community Garden East Elevation
1:150



Middle - Community Garden West Elevation
1:150



Material Schedule

BR1	LIGHT CARBON NEUTRAL BRICK FACADES & RETAINING WALLS
BR2	LIGHT CARBON NEUTRAL HIT & MISS BRICK
BR3	CARBON NEUTRAL BRICK
BW1	CONCRETE BLOCKWORK
GA1	GALVANISED WATER TANKS
GL1	CLEAR DOUBLE GLAZING
GP1	COMMUNITY GREENWAY GRAVEL PATH
GS1	GALVANISED STEEL GARAGE DOO
RS1	ZINCALUME
TM1	TIMBER CLADDING OR SIMILAR
TM2	TIMBER BATTEN OR SIMILAR SCREENS & FENCES OR SIMILAR
TM3	TIMBER OR SIMILAR PERGOLA WITH GROW WIRES
TM4	TIMBER DOOR OR SIMILAR
TM5	TIMBER DECKING
PA1	PAVED SURFACE
S1	SOLAR PLANELS
GW1	GREEN WALL

General Arrangement Legend

STATIC DIMENSION

03 MATERIAL CODE

BREATHE ARCHITECTURE
THE COMMONS
5/5, ORCHARD ST
BRUNSWICK 3056
VIC AUSTRALIA
+61 3 9381 2007

TOWN PLANNING

CHECK ALL DIMENSIONS PRIOR TO COMMENCEMENT OF WORK. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DOCUMENTS, CONSULTANTS DOCUMENTS AND SPECIFICATIONS. ERR. CLARIFICATION OF ARCHITECTURAL DISCREPANCIES FROM ARCHITECT IS REQUIRED BEFORE TAKING PRECEDENCE. DO NOT SCALE DRAWINGS.

REV	ISSUE TITLE	COMMENT	DATE
01	Town Planning - Rev 01		17/8/2022
02	Town Planning - Rev 02		18/8/2022
03	Town Planning - Rev 03	Changes as discussed	15/11/2022

LOCATION
17 Smith Street Daylesford VIC 3460

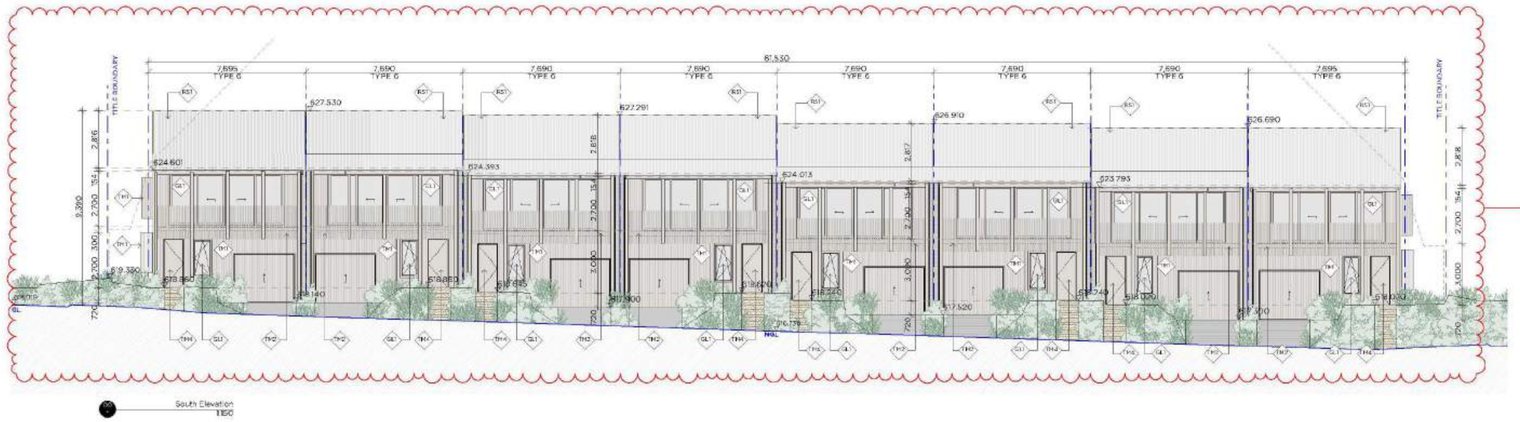
PROJECT TITLE
Daylesford Eco-Village

JOB	PLOT DATE	ARCHITECT	CAD	SCALE
2121	23/11/2022	JM	AA	@ A1

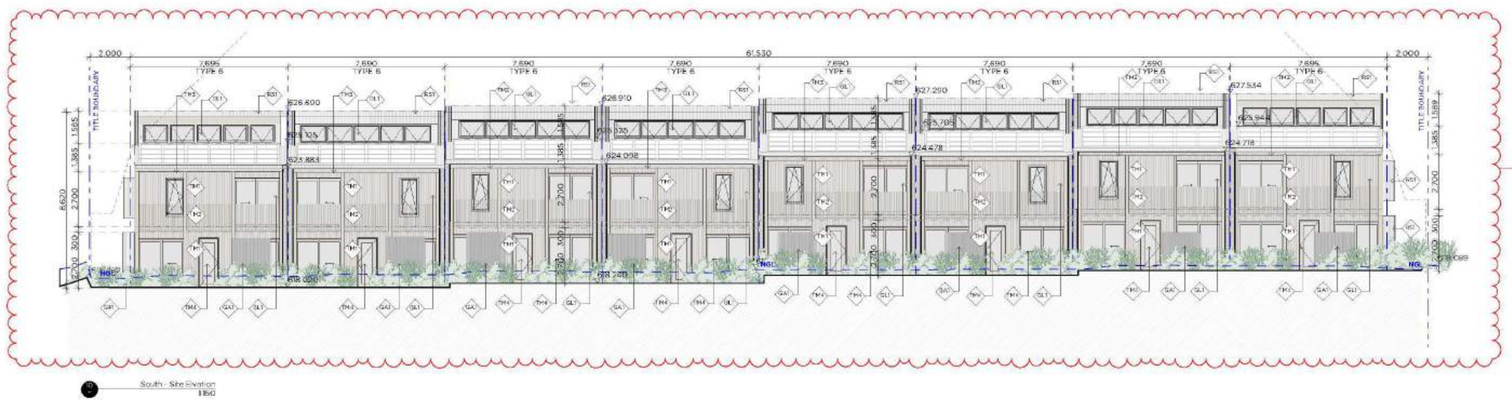
DRAWING TITLE
Proposed Elevations

REVISION
03

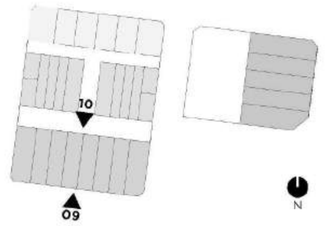
DRAWING
TP24



South Elevation
1:150



South - Site Elevation
1:150



03

Material Schedule

BR1	LIGHT CARBON NEUTRAL BRICK FACADES & RETAINING WALLS
BR2	LIGHT CARBON NEUTRAL HIT & MISS BRICK
BR3	CARBON NEUTRAL BRICK
BW1	CONCRETE BLOCKWORK
GA1	GALVANISED WATER TANKS
GL1	CLEAR DOUBLE GLAZING
GP1	COMMUNITY GREENWAY GRAVEL PATH
GS1	GALVANISED STEEL GARAGE DOO
RS1	ZINCALUME
TM1	TIMBER CLADDING OR SIMILAR
TM2	TIMBER BATTEN OR SIMILAR SCREENS & FENCES OR SIMILAR
TM3	TIMBER OR SIMILAR PERGOLA WITH GROW WIRES
TM4	TIMBER DOOR OR SIMILAR
TM5	TIMBER DECKING
PA1	PAVED SURFACE
S1	SOLAR PLANELS
GW1	GREEN WALL

General Arrangement Legend

STATIC DIMENSION

MATERIAL CODE

BREATHE ARCHITECTURE
THE C DIMENSION
3/15, ORCHARD ST
BRUNSWICK 3056
VIC AUSTRALIA
+61 3 9381 3007
WWW.BREATHEARCHITECTURE.COM.AU

TOWN PLANNING

REV	ISSUE TITLE	COMMENT	DATE
01	Town Planning - Rev 01		17/8/2022
02	Town Planning - Rev 02		19/8/2022
03	Town Planning - Rev 03	Changes as discussed	15/11/2022

LOCATION
17 Smith Street Daylesford VIC 3460

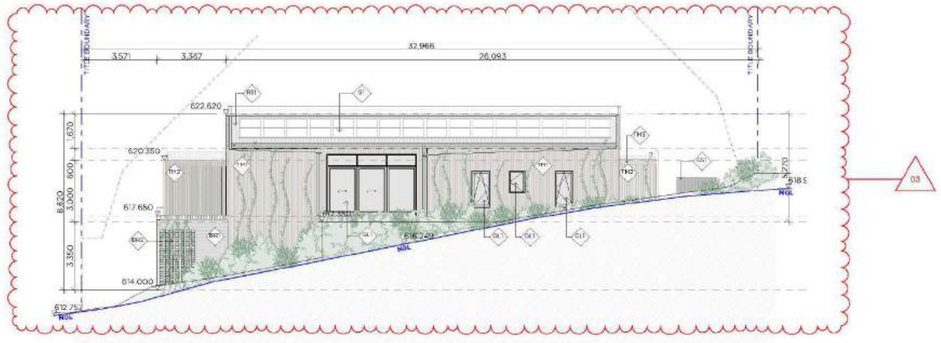
PROJECT TITLE
Daylesford Eco-Village

JOB	PLOT DATE	ARCHITECT	CAD	SCALE
2121	23/11/2022	JM	AA	@ A1

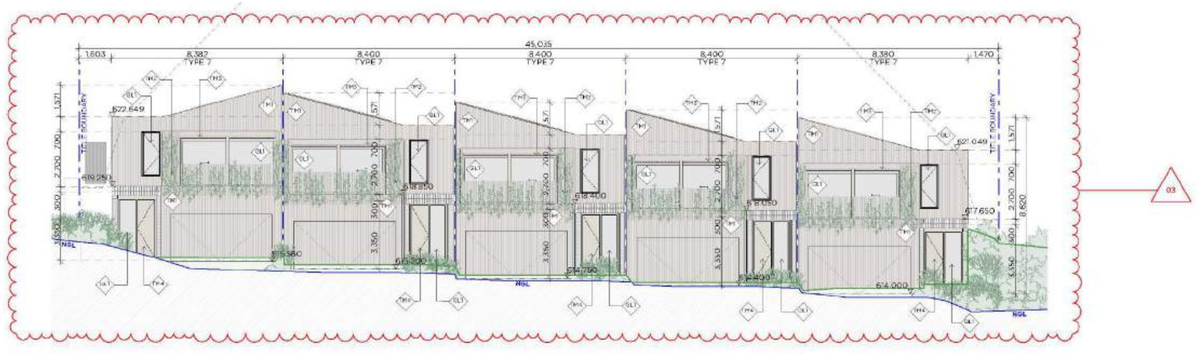
DRAWING TITLE
Proposed Elevations

REVISION
03

DRAWING
TP25

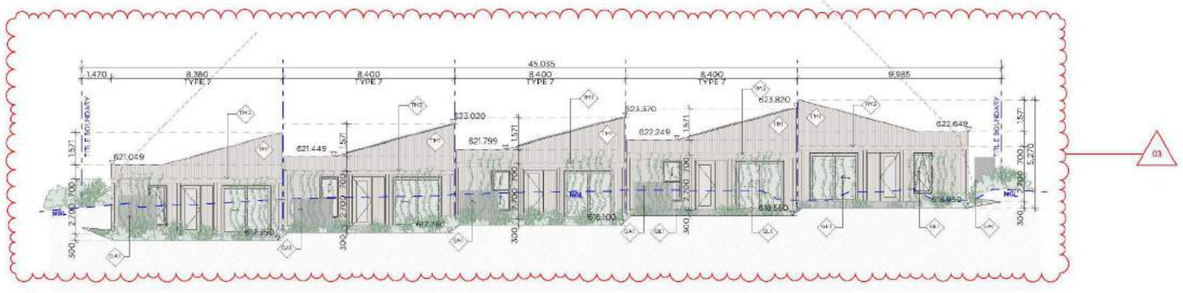


03 — East - North Elevation 1:150



03 — East - East Elevation 1:150

03 — East - South Elevation 1:150



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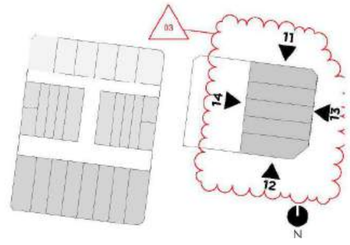


03

Material Schedule

BR1	LIGHT CARBON NEUTRAL BRICK FACADES & RETAINING WALLS
BR2	LIGHT CARBON NEUTRAL HIT & MISS BRICK
BR3	CARBON NEUTRAL BRICK
BW1	CONCRETE BLOCKWORK
GA1	GALVANISED WATER TANKS
GL1	CLEAR DOUBLE GLAZING
GP1	COMMUNITY GREENWAY GRAVEL PATH
GS1	GALVANISED STEEL GARAGE DOO
RS1	ZINCALUME
TM1	TIMBER CLADDING OR SIMILAR
TM2	TIMBER BATTEN OR SIMILAR SCREENS & FENCES OR SIMILAR
TM3	TIMBER OR SIMILAR PERGOLA WITH GROW WIRES
TM4	TIMBER DOOR OR SIMILAR
TM5	TIMBER DECKING
PA1	PAVED SURFACE
S1	SOLAR PLANELS
GW1	GREEN WALL

General Arrangement Legend

STATIC DIMENSION

MATERIAL CODE

BREATHE ARCHITECTURE
SYDNEY OFFICE
3/5 ORCHARD ST
BRUNSWICK 3056
VIC AUSTRALIA
+61 3 9381 3007

TOWN PLANNING

REV	ISSUE TITLE	COMMENT	DATE
01	Town Planning - Rev 01		17/8/2022
02	Town Planning - Rev 02		15/9/2022
03	Town Planning - Rev 03	Changes as shouted	15/11/2022

LOCATION: 17 Smith Street Daylesford VIC 3460

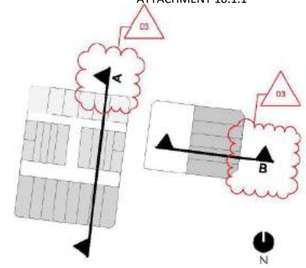
PROJECT TITLE: Daylesford Eco-Village

JOB	PLOT DATE	ARCHITECT	CAD	SCALE
2121	23/11/2022	JM	AA	@ A1

DRAWING TITLE: Proposed Elevations

REVISION: 03

DRAWING: TP26



BREATHE ARCHITECTURE
THE COMMONS
9/11 ORRONG ST
BRUNSWICK 3056
VIC AUSTRALIA
+61 3 9381 3007

TOWN PLANNING

REV	ISSUE TITLE	COMMENT	DATE
01	Town Planning - Rev 01		11/7/2022
02	Town Planning - Rev 02		15/8/2022
03	Town Planning - Rev 03	Chanes as discussed	15/11/2022

LOCATION:
17 Smith Street Daylesford VIC 3460

PROJECT TITLE					
Daylesford Eco-Village					
JOB	PLOT DATE	ARCHITECT	CAD	SCALE	
2121	23/11/2022	JM	AA	@ A1	

DRAWING TITLE: Proposed Sections
REVISION: 03
DRAWING: TP27


RS1 GS1


GW1


TM1


TM2


GP1


BR3


BR1


PA1


TM5


TM3


TM5


GA1


GL1


BR2


BW1


S1

Material Schedule

BR1	LIGHT CARBON NEUTRAL BRICK FACADES & RETAINING WALLS
BR2	LIGHT CARBON NEUTRAL HIT & MISS BRICK
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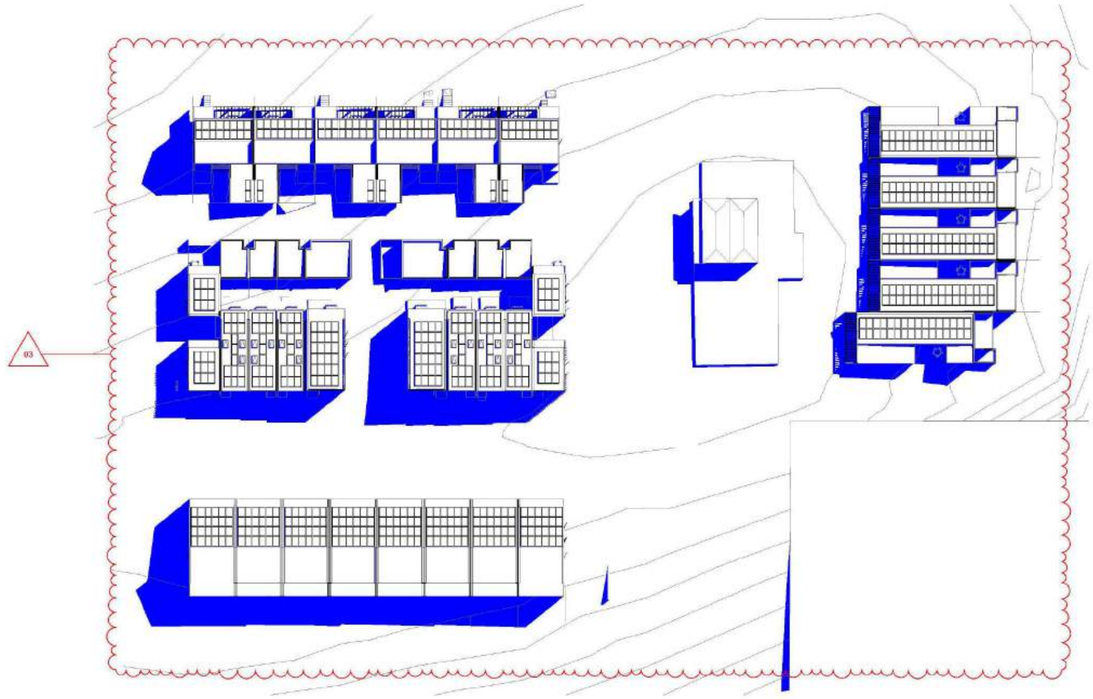

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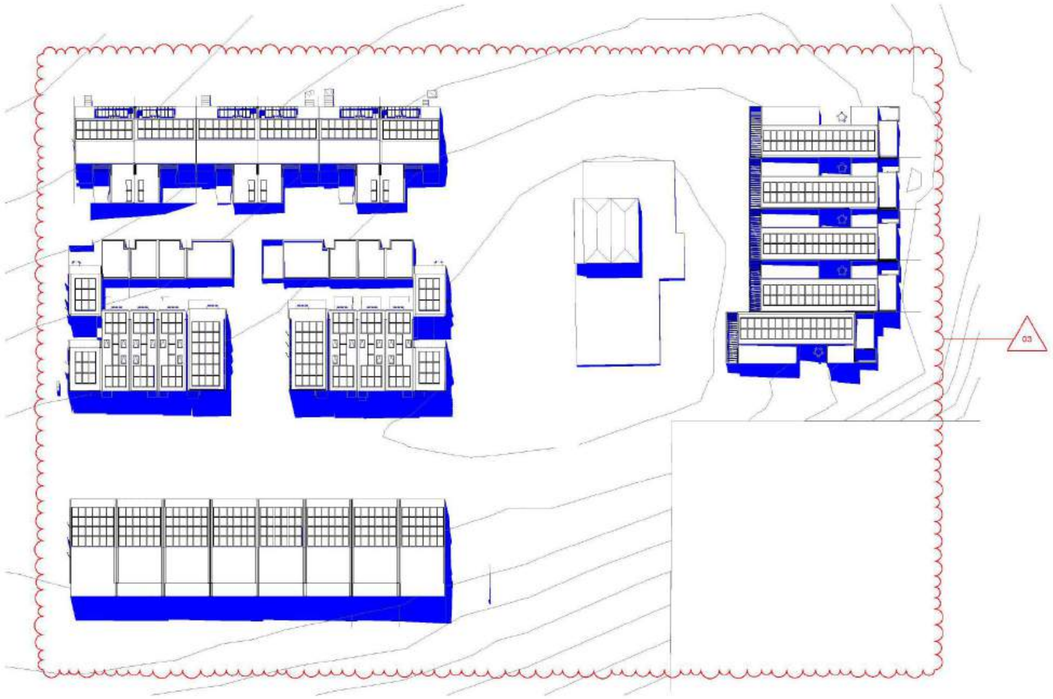

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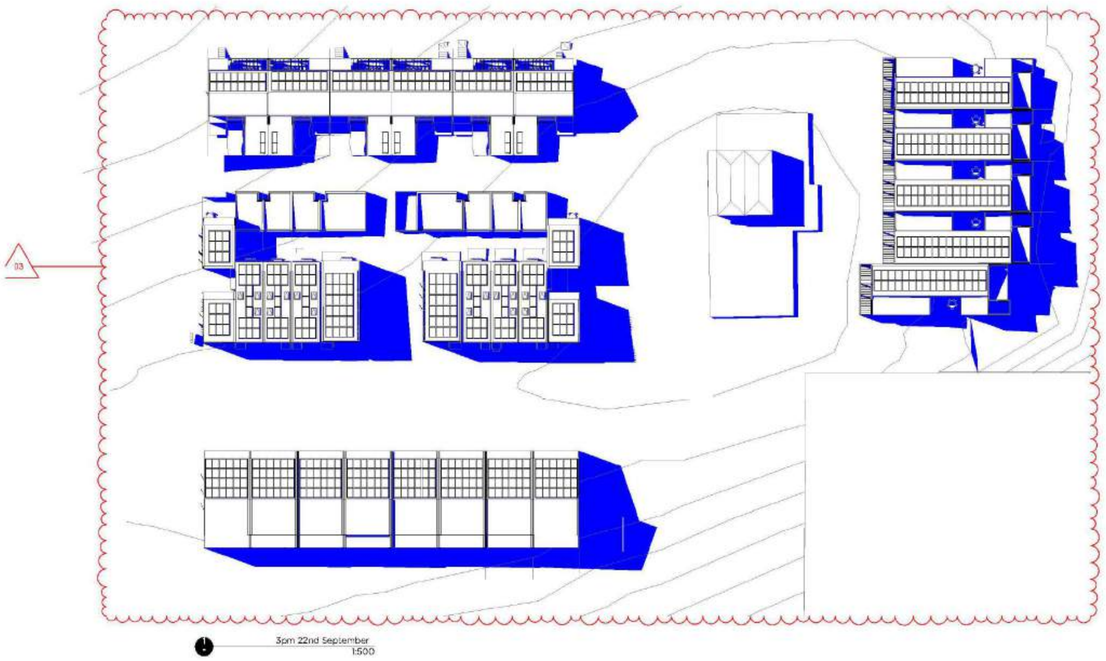

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BREATHE ARCHITECTURE
SUITE DIMENSION
3/15, ORCHARD ST
BRUNSWICK 3056
VIC, AUSTRALIA
+61 3 9381 3007

TOWN PLANNING

FILE PATH: [Redacted] - [Redacted] Sent for Archive\24 Dalefield Rd_02.pln

REV	ISSUE TITLE	COMMENT	DATE
01	Town Planning - Rev 01		17/8/2022
02	Town Planning - Rev 02		16/9/2022
03	Town Planning - Rev 03	Changes as clouded	15/11/2022

LOCATION
17 Smith Street Daylesford VIC 3460

PROJECT TITLE
Daylesford Eco-Village

JOB	PLOT DATE	ARCHITECT	CAD	SCALE
2121	23/11/2022	JM	AA	@ A1

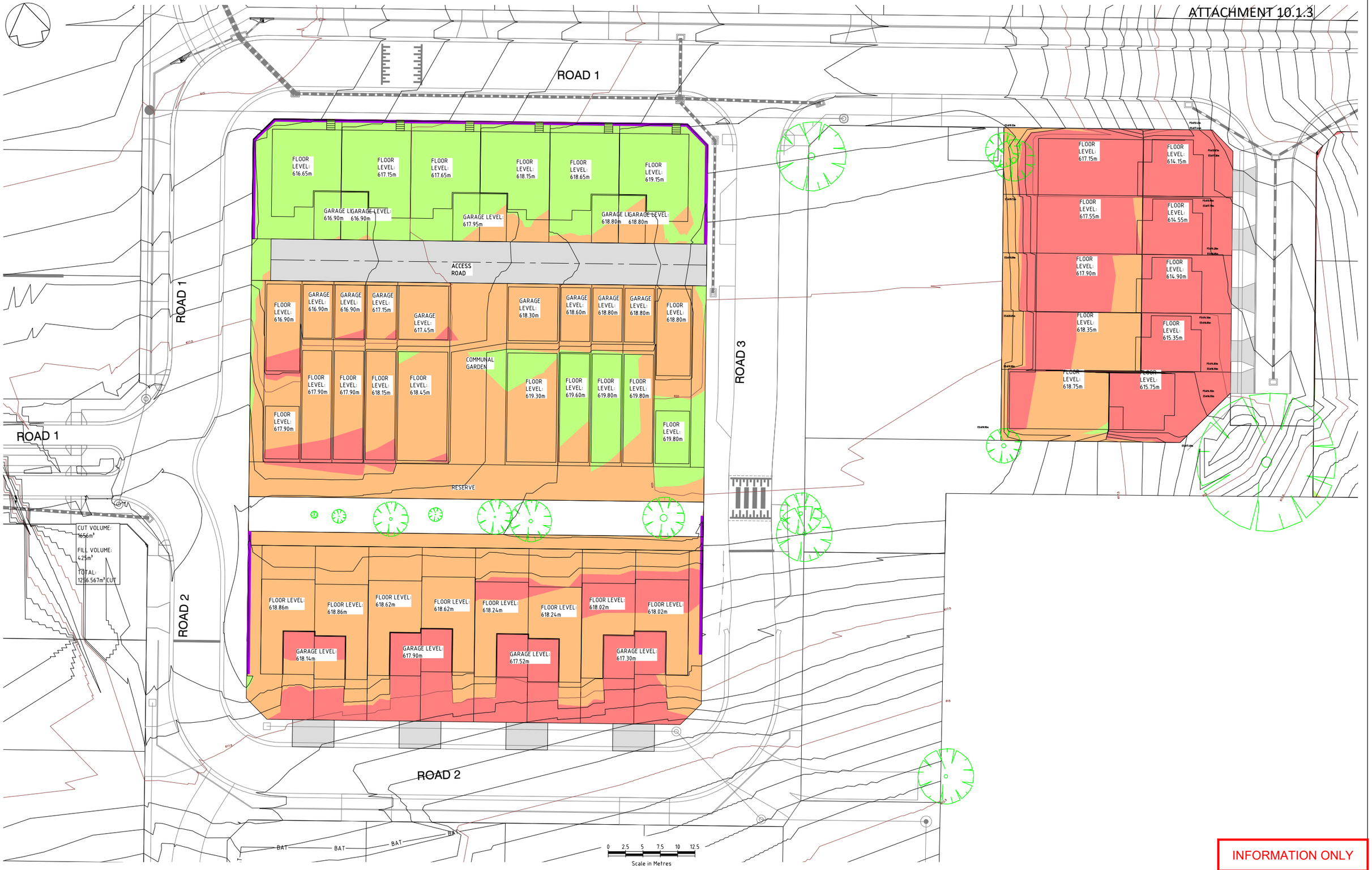
DRAWING TITLE
Shadow Diagram

REVISION
03

DRAWING
TP29

Indicative illustration - not to be scaled

ATTACHMENT 10.1.3



INFORMATION ONLY

ISSUE	DESCRIPTION	DATE
A	ISSUED FOR INFORMATION	04/07/2022
B	ISSUED FOR INFORMATION	13/07/2022
C	ISSUED FOR INFORMATION	14/07/2022
D	ISSUED FOR INFORMATION	15/07/2022
E	ISSUED FOR INFORMATION	26/07/2022
F	ISSUED FOR INFORMATION - EASTERN PRECINCT INLCUDED	30/08/2022
G	ISSUED FOR INFORMATION - EARTHWORKS SHADING UPDATED	18/10/2022

LEGEND

- MAJOR CONTOUR
- MINOR CONTOUR
- PREVIOUS STAGE STORMWATER DRAINAGE
- PREVIOUS STAGE SEWER
- PROPOSED RETAINING WALL
- SITE CUT +1m
- SITE CUT +1m
- SITE FILL
- PROPOSED INTERNAL ROAD AND VEHICLE CROSSOVERS
- EXISTING TREE TO BE RETAINED

ISO 9001 certified Equal Assurance

Quality Certified Company ISO9001:2008

REGISTRATION No. COU001-CC001

DESIGNED: M SHNAKO	SCALE: 1:250
CHECKED: M PARKER	SHEET SIZE: A1
AUTHORISED: C COUGHLAN	DATE: 18/10/2022

AXIOM CONSULTING ENGINEERS

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6 Webster Street,
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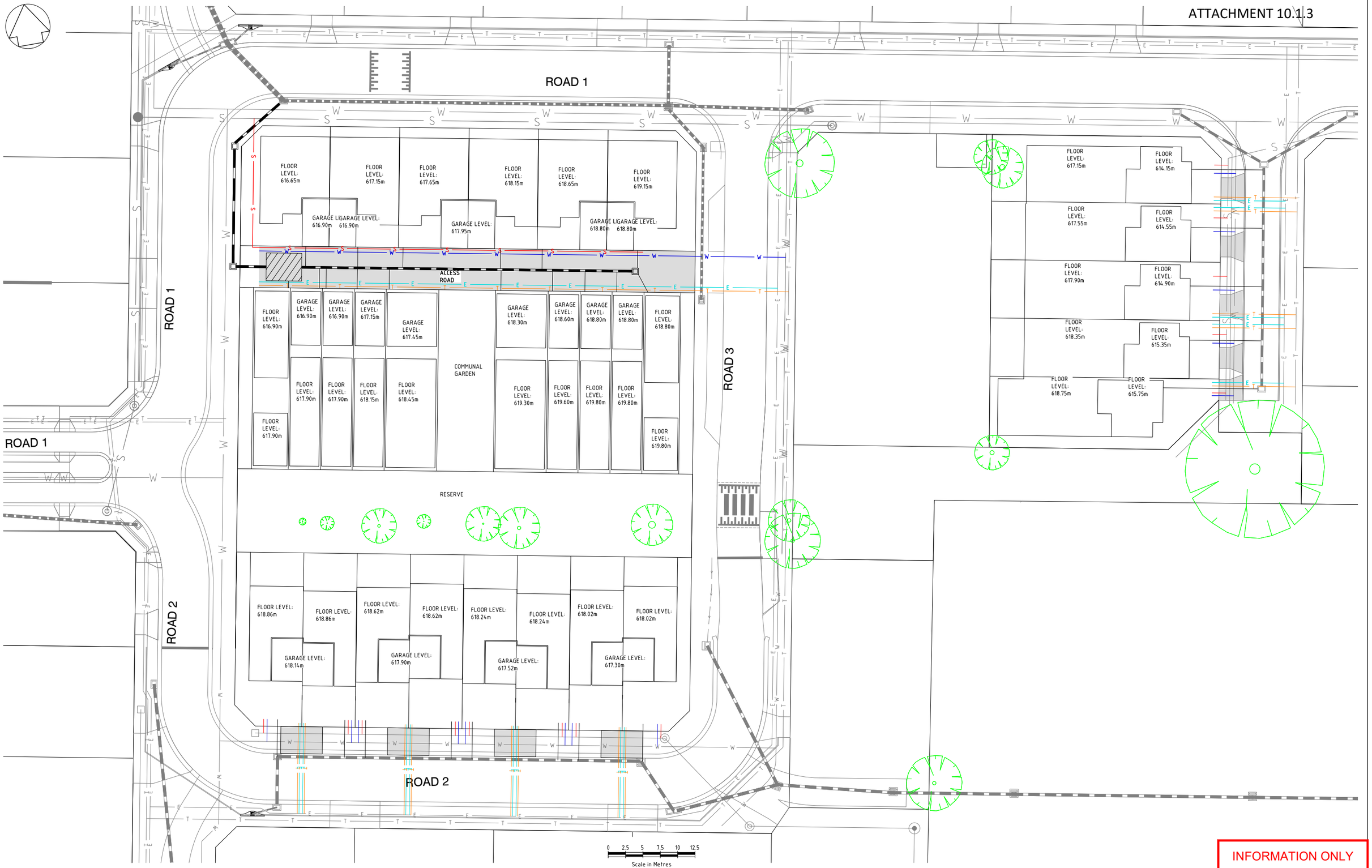
PROJECT: SMITH STREET ECO-VILLAGE DAYLESFORD

CLIENT: HYGGE PROPERTY

CCIVIL REF. No.: 1004RD-101 | SHEET: 1 | REV: G

DRAWING TITLE: FLOOR LEVEL PLAN

ATTACHMENT 10.1.3



INFORMATION ONLY

ISSUE	DESCRIPTION	DATE
A	ISSUED FOR INFORMATION	17/08/2022
B	ISSUED FOR INFORMATION	18/10/2022

LEGEND

- PREVIOUS STAGE STORMWATER DRAINAGE
- PROPOSED STORMWATER DRAINAGE
- PREVIOUS STAGE SEWER
- PREVIOUS STAGE WATER
- PREVIOUS STAGE ELECTRICAL
- PREVIOUS STAGE TELECOMMUNICATIONS
- PROPOSED SEWER
- PROPOSED WATER
- PROPOSED ELECTRICAL
- PROPOSED TELECOMMUNICATIONS
- PROPOSED UNDERGROUND STORMWATER HARVESTING TANK
- EXISTING TREE TO BE RETAINED
- PROPOSED INTERNAL ROAD AND CROSSOVERS

Quality Certified Company ISO9001:2008
REGISTRATION No. COU001-CC001

DESIGNED: M SHNAKO	SCALE: 1:250
CHECKED: M PARKER	SHEET SIZE: A1
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6 Webster Street,
Ballarat Victoria 3350

PROJECT: SMITH STREET ECO-VILLAGE DAYLESFORD

CLIENT: HYGGE PROPERTY

CCIVIL REF. No.:	SHEET:	REV:
1004RD-102	2	B

DRAWING TITLE: SERVICING PLAN

NICHE PLANNING STUDIO

Level 2, 896 Canning Highway,
APPLECROSS, WA 6153

Level 1, The Gallery, 286 Ferrars Street
SOUTH MELBOURNE, VIC 3205

Ballarat Tech Park, Lydiard St Sth
BALLARAT, VIC 3350

Level 1, 14 Molle Street
HOBART, TAS 7000

Ecovillage, 17 Smith Street, Daylesford

Dja Dja Wurrung Country

Permit application for staged subdivision, development of 31 townhouses

V. 2

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Figure 1: View to east of site

EXECUTIVE SUMMARY

This planning report outlines the proposed subdivision, building and works to develop an ecovillage at 17 Smith Street, Daylesford, Dja Dja Wurrung Country.

The proposed ecovillage at 17 Smith Street complements the future surrounding residential area. It comprises part of the Middleton Field Estate, providing 31 architecturally designed and highly sustainable new homes in one, two, and three bedroom typologies, significantly increasing housing supply and diversity in Daylesford. On completion, the four one-bedroom homes will be owned and operated as affordable housing by Women's Property Initiatives, fulfilling an essential requirement of the original permit for the site.

The site is within the approved Middleton Field community and provides sustainable housing and the physical framework for ongoing social practices in line with eco village principles.

Homes in the proposed ecovillage will be highly sustainable, designed by architects specialising in socially and environmentally focused design outcomes.

The ecovillage will include affordable housing to improve equitable access to housing in an area experiencing severe housing stress. The homes will be owned and operated as affordable housing by the Women's Property Initiative, specifically targeted to older women in need.

The development will facilitate fossil fuel free living, with all buildings to achieve a minimum 7.5*NatHERS rating, which will minimise energy bills in the future. The development has been designed to minimise the ongoing environmental footprint of residential areas by contributing:

- No gas
- No carbon
- No waste
- All electric

Features of the development include:

- Cohesive and considered landscaping response integrating the site with surrounding green spaces
- Communal garden
- EV charging station (for community use) on the road reserve adjacent to the site, subject to Council support
- Small footprint, low-maintenance living
- Landscaping and facilities will be maintained by an owner's corporation, ensuring a high level of ongoing presentation and efficient operation, and designed to facilitate continuous community interaction within the ecovillage.

Commented [JP1]: @Naomi Beck to confirm

The development is proposed to be a land and home package development (subdivision with subsequent development), facilitating more accessible financing for purchasers and reducing the overall cost price for homes.

1. INTRODUCTION

Niche Planning Studio has prepared this report on behalf of the applicant, Smith Development Partnership. This report supports the development of land at 17 Smith Street, Daylesford (Lot 5 LP090304) within the Shire of Hepburn, herein referred to as the subject site.

This application supports a staged subdivision, buildings and works associated with 31 dwellings, a communal open space, requiring a site cut greater than 300 sqm in area and site cut areas deeper than 1m, and installation of a community EV charging station. Outside the subject area, but relevant to this application, the integration of a linear public open space area and landscaped verge and oak tree entrance to Middleton Field will contribute to the overall settling of the ecovillage within the Middleton Field estate.

Council's assessment and approval of this application will facilitate the development of a highly sustainable small footprint community within a soft landscaped surrounding.

The report's purpose is to provide an analysis of the development area and a strategic justification for the proposed residential development. It also provides an assessment for planning approval for the site's subdivision and development.

Specifically, the report covers the following:

- Provides background context to the project, including existing approvals in the Middleton Field Estate.
- Identifies the development area within the context of the Daylesford township and its eastern entrance.
- Information about how the design response addresses key eco village principles.
- Provides planning support for approving a planning permit to allow residential development of the site.

This report will have regard to the following documents:

- Hepburn Planning Scheme
- Site-specific background studies and reports supporting this application (appendices)

This report focuses on the Zone, Overlays and particular provisions applicable to the land, the proposal, and the relevant Planning Policy Framework.

2. APPLICATION SUMMARY

Site Address:	17 Smith Street, Daylesford, Dja Dja Wurrung Country
Title Details:	Lot 5 LP090304
Zoning:	Neighbourhood Residential Zone – Schedule 1 (NRZ1)
Overlays:	Environmental Significance Overlay – Schedule 1 (ESO1) Environmental Significance Overlay – Schedule 2 (ESO2)
Proposal:	Planning permit for staged subdivision, building and works associated with 31 dwellings, works requiring site cut of one metre or more in-depth, works requiring site cut 300 sqm in area.
Permit Triggers:	NRZ1: - To construct two or more dwellings on a lot. - To subdivide land. ESO1: - Subdivide land - Construct a building or construct or carry out works if any site cut required is 300 square metres or more in area ESO2: - Construct a building or construct or carry out works.

Figure 2: Site location

3. PROPOSAL

The ecovillage proposal consists of 31 townhouse dwellings across 3 super lots created as part of PA2504. Lot sizes will range from 91.2sqm to 320.9sqm. The ecovillage will include a communal garden, compost and shared potting/meeting facilities, and a community EV charging station for use by the wider public (on the adjacent road reserve, subject to Council support). The ecovillage design concept has been informed by high levels of landscaping within and surrounding the subject site, including integration with the public open space between super lots and the oak tree entrance to Middleton Field. To emphasise this and promote an open community environment, landscaping has been designed to encourage neighbourly interactions rather than fencing.

The proposed ecovillage will facilitate a high-amenity residential development in the Daylesford Township, with affordable housing provision in partnership with the Women's Property Initiative and targeted to older women in need. The future development will ultimately offer carbon-neutral living, including house designs prepared by leading sustainable architecture firm Breathe Architecture, which specialises in creating places prioritising people and the environment.

It is proposed to develop:

- Staged multi-lot subdivision of Superlots A, B and C into 31 lots plus common areas (to be delivered across three stages).
- Lots will be subdivided prior to construction and be a part of an owner's corporation (one for each stage and one for the overall ecovillage), allowing for delivery of housing in a more efficient and economical format.
- Staged development of 31 dwellings (to be delivered across three stages). Houses will be required to be delivered in accordance with plans submitted with this application.
- Landscaping associated with the communal garden, as well as streetscape treatments and integration with the public open space linear park.

To facilitate the development, some areas are required to incorporate more than 1m of site cut, with a total site cut area of approximately 3803sqm.

3.1 Ecovillage Model

The ecovillage will encompass the four key tenets of ecovillage models: economic, environmental, social and cultural development (https://www.cape.consulting/what-is-an-ecovillage/). The overall vision for the landscaping of the site is to 'encourage useable space which enlivens the site through community relationships, comfort and togetherness, while achieving a stylisation of landscape which strengthens occupants' and visitors' connection to nature, by harmonising timeless architectural detailing with local vegetation and ecologically minded design' (please refer to the landscape concept in Appendix 2 for further detail).

3.1.1 Economic development

- Equitable housing through the provision of community housing via a Registered Housing Agency (Women's Property Initiative), with affordable housing specifically targeted at older women in need.
- Smaller lot sizes with associated architect-designed homes provide housing diversity, without compromising urban design and character outcomes.
- Given their more efficient sizes and layouts, homes in the ecovillage will present a housing outcome that is potentially more affordable than housing associated with larger lots elsewhere across Middleton Field, and which also deliver a low maintenance outcome not frequently delivered elsewhere in Daylesford.
- Delivering homes to a minimum 7.5*NatHERS rating minimises the cost of heating and cooling.

3.1.2 Environmental Philosophy

- Housing has been designed to incorporate electric utilities with no reticulated gas. In addition, an embedded energy network is being investigated to provide 100% green power across the ecovillage to ensure the operational future is fossil fuel free. This will also be reinforced through Owner's Corporation rules.
- Landscaping and housing have been designed to accommodate heavy rain flows and allow for creative stormwater treatment opportunities that integrate water features into the setting. These measures go above and beyond the best-practice detention and treatment facilities already provided for Middleton Field as a whole.
- An organic communal garden, organised and maintained by the residents and supported by the Owner's Corporation, will provide opportunities to increase nutrient density and food security therefore reducing food miles.

3.1.3 Social Philosophy

- While the community for this ecovillage is yet to be formed, initial opportunities for community creation include the potential for a paid gardener to service the community garden, run events and assist in educating local residents.
- Landscaping treatments and lack of fencing to backyards has been intentionally used to encourage social interaction between neighbours and increase the opportunity for incidental meetings. This is a deliberate approach to community building through design.
- Communal facilities, such as communal waste area and the communal garden have been designed to increase likelihood of neighbourly incidental interaction, and increased potential for community formation, bonding and subsequent building of community capacity and mental health and wellbeing.

3.1.4 Cultural development

- The addition of this ecovillage to the Daylesford community, with its unique outlook, place-based community forming opportunities, and opportunities for connection to nature and the local food system, provides a platform for future cultural development. It is expected that residents of the eco village will make a significant contribution to the broader Daylesford community in events, relationships and networks arising from this development.
- The eco village also significantly improves opportunities for 'ageing in place' as Daylesford's resident population becomes older by providing a local alternative to smaller, lower maintenance housing with increased security, and stronger community interaction than would typically be possible in more standardised subdivision outcomes.

3.2 Timing and Staging (land and homes package)

Subdivision is proposed to occur in three stages. Subdivision is also proposed to occur prior to construction of dwellings in each development stage, as outlined in Table 1 (below):

Table 1: Staging

Staging			
Stage	**1**	**2**	**3**
Subdivision	Superlot A	Superlot B	Superlot C
Development	Zone 1 and 2	Zone 4	Zone 3

It is proposed to apply a land and homes package approach to the dwellings, whereby the purchaser signs both a land contract and a building/development/construction contract. The following points (see following page) provides an explanation of the proposed subdivision staging strategy, which whilst not strictly a planning issue, has important implications for how the conditions need to be included on any planning permit resulting from this application:

- This approach requires the separation of subdivision conditions from development conditions in the permit so that Statement of Compliance can be achieved prior to commencement of construction of dwellings. This will mean that feasibly, a lot can be purchased and developed independently of another lot in the same development.
- The purpose of separating development and subdivision via a two-part contract is to enable the developer to develop more quickly on a lower margin and debt, allowing them to reduce the purchase price of the house and land package for purchasers and to remove the risk of construction costs and lending costs delaying or preventing a development, thus allowing for a more affordable housing product to be delivered.

In addition, in the present construction climate, development financing pressure is higher due to building labour and materials shortages and increasing prices. By introducing two-part (House and Land) contract options, purchasers can expect the same level of quality with a more cost-effective financing model.

Therefore, the application proposes that subdivision staging will be undertaken in three separate stages for each superlot A, B and C. Development staging will be undertaken in three separate stages, for superlot A, B and C. Each stage is proposed to be subdivided prior to building the homes in each stage. We propose a condition is inserted into the permit that introduces a s173 agreement requirement that provides Council with the certainty that all dwellings will be constructed in accordance with the approved development plans (and staging plans). This will facilitate the individual purchaser contracts that will be structured around separate financing, and a single developer and builder will then deliver the project.

On this basis, we would like to request that any conditions on the planning permit are separated to relate to either the Subdivision or Development, to allow for the Subdivision of the land to occur prior to the development/construction of the dwellings. We would also formally request draft conditions be provided prior to any permit being issued to ensure that these conditions allow for subdivision to occur separate/prior to the development of the site.

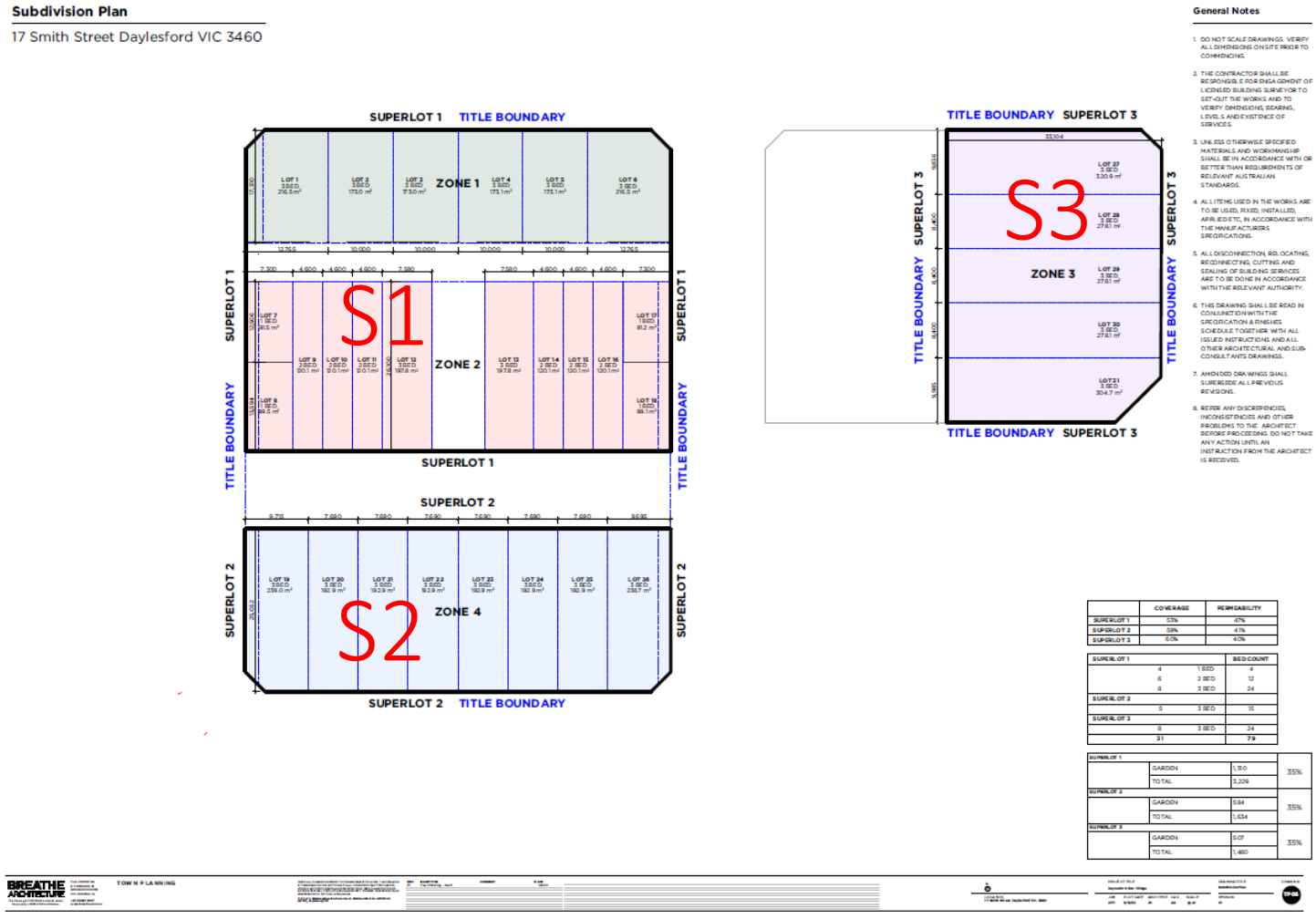

Figure 3: Subdivision Layout Plan

3.3 Land Use Budget Table

Ecovillage, 17 Smith Street, Daylesford					
Proposed Land Use Budget					
Gross Area (GA)	Non Residential Land Uses (NRLU)	NDA (GA - NRLU)	Public Open Space (5% req)	Public Open Space Provided	Developable Area
0.145ha	0 ha	0.145ha	N/A	0 ha	0.0145ha

4. DESIGN RESPONSE PLAN

The ecovillage is designed to reduce environmental impacts and enhance the identity and cultural development of Daylesford. It will also facilitate the future delivery of high-quality, sustainable and diverse housing to the Daylesford township. In response to the analysis of the existing site conditions, surrounding character and strategic direction for the area, a Design Response Plan has been prepared (see overleaf).

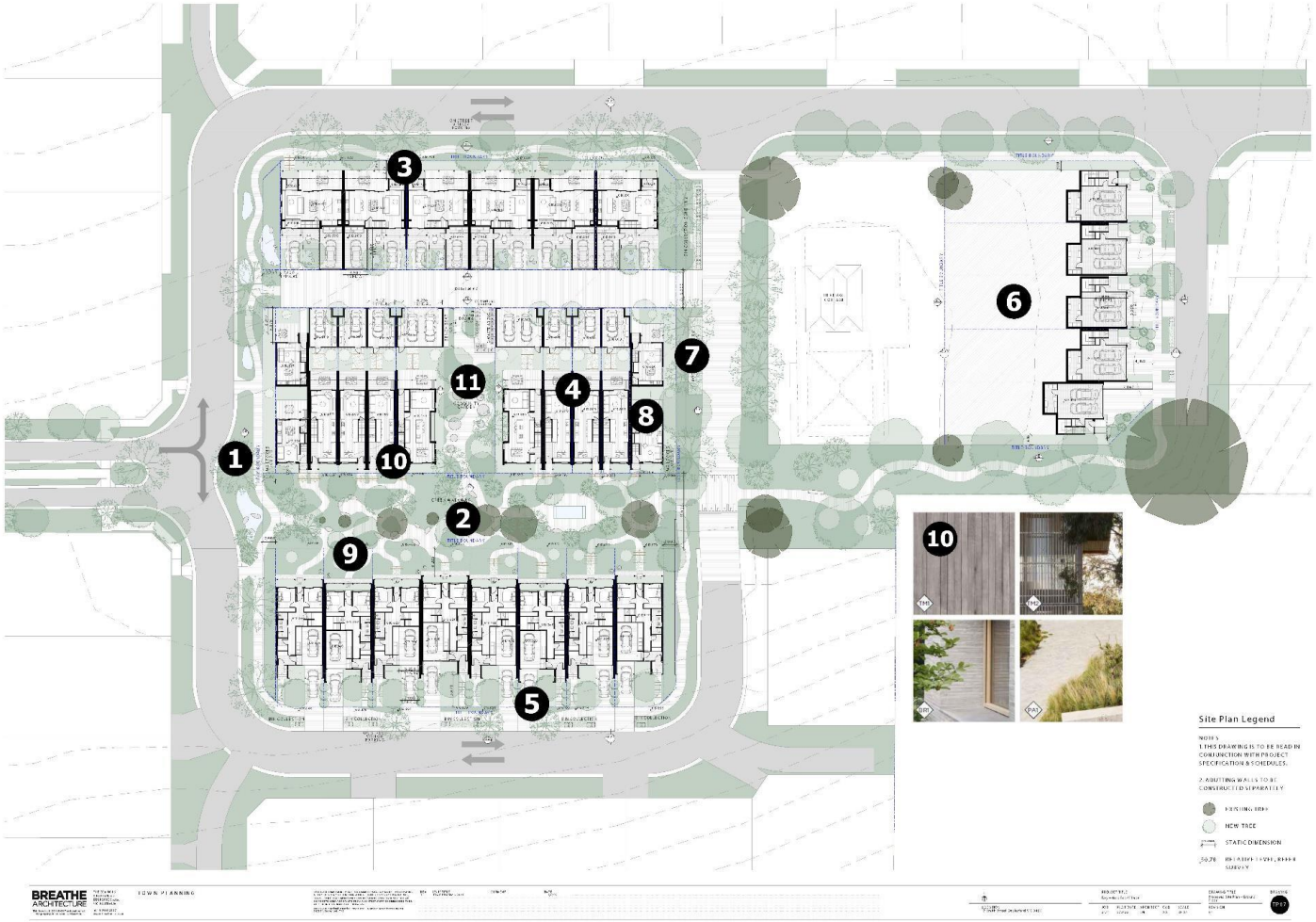

Figure 4: Design Response Plan

	MAP ITEM / LEGEND	ANALYSIS
1	Landscaping, Tree planting and nature strips	The ecovillage will be set within a softly encompassing landscape, with landscaping on individual lots seamlessly blending with the nature strip. The oak tree entrance to 17 Smith will provide for a walkway leading along the main road, through the public open space area to the start of the downslope of the hill to the east of the site.
2	Open Space	The development is proposed to integrate with the public open space between the northern and southern blocks, facilitating an open and safe linear park lined by houses. The trees retained as part of permit PA2504 will form edging along the park's meandering path. The open space outside the subject area is important to the proposal, given the open nature of the development as a whole.
3	Open garden setting and privacy	The ecovillage is proposed to include an open garden setting, carefully placed and considered vegetation, sloping view lines and water tanks providing privacy to secluded private open space areas. The open setting is an important element of the village concept, encouraging strong social and natural connections and enhancing the prioritisation of design for people and the environment over cars.
4	Sustainability	The ecovillage will facilitate carbon-neutral living as it will not include reticulated gas. Future homes will achieve a minimum 7.5*NathHERS rating to reduce the energy required for heating and cooling and reduce bills on an operational basis. Green energy is proposed to be provided via an embedded network supported by Hepburn Wind, ensuring fossil fuel-free utilities. In addition, carefully considered materials will be implemented to provide a safer and healthier living environment.
5	Connection to Daylesford and the Middleton field estate	The development will face outwards at superlot boundaries to facilitate connection to the broader Middleton Field estate, with front doors oriented towards these interfaces. Garages will be located internally where possible and where not limiting internal amenities. Public access between the village blocks will provide for public access through the village and to the communal garden when events are held.

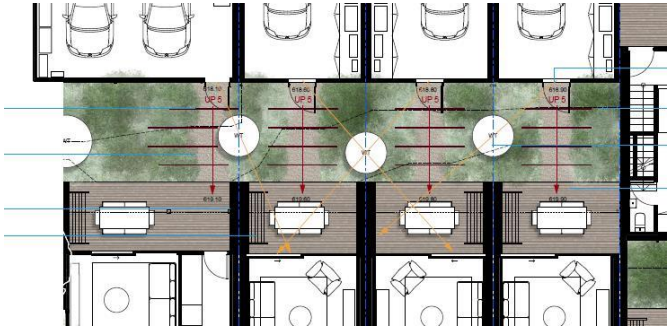

Figure 4: Illustration of viewlines described in item 3 and 9

6	**Viewlines**	Dwellings have been designed with reverse living arrangements to take advantage of the village's location at the highest point at 17 Smith Street, affording views of surrounding farmland and Wombat Hill. Views of the village will retain a vegetated appearance with traditional roof forms and suitable materials to blend the village into its surroundings.
7	**EV charging station**	A potential EV charging station is located next to the northern block to be available for public use. The EV station is to be provided subject to feasibility at the time of development and Council agreement.
8	**Housing diversity**	The smaller lots and dwellings in the ecovillage will provide much needed housing diversity to the Daylesford township through contribution to various housing types across the Middleton Field estate. Leading architects have designed the ecovillage to achieve attractive, liveable and functional homes that will positively contribute to affordability and the surrounding area's visual amenity and heritage character. In addition, 4 dwellings will be transferred to a Registered Housing Agency, providing equitable housing opportunities in a town experiencing severe housing stress.
9	**Water Tanks**	Water tanks will be provided to townhouses where practicable. Vertical tanks will be installed to border Secluded Private Open Space areas and capture stormwater for garden use while providing increased privacy between dwellings.
10	**Materials Use**	Materials used in dwellings will be low or no VOC, local where possible and sustainably sourced.
11	**Communal garden**	The communal garden will be an organic garden and meeting place where residents (and potentially the wider community, if future residents decide) can come together, learn new skills, socialise and process organic waste in compost bins. The garden is intended to be climate appropriate and contribute to lower food miles for ecovillage residents.

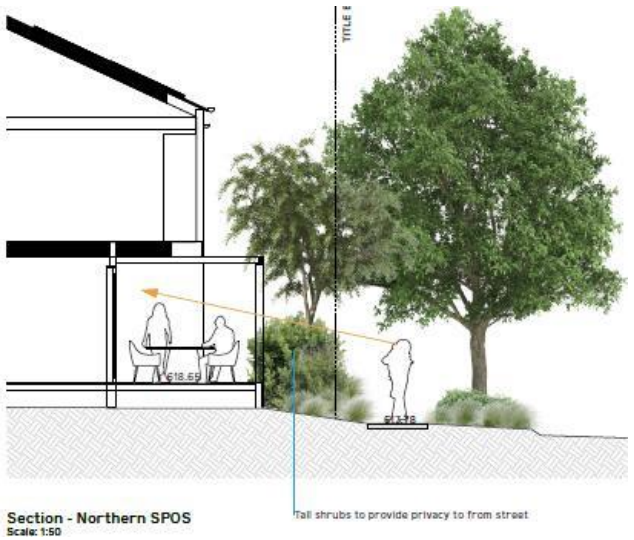

Figure 5: Section illustrating SPOS privacy to northern dwellings (item 3)

5. STRATEGIC CONTEXT

Hepburn Shire's Municipal Planning Strategy identifies Daylesford as one of its larger townships and a regional service hub. Daylesford's economy is driven by tourism, retail, offices, and limited manufacturing and industrial activities. Its history of farming, gold mining and mineral springs contributes to its built form and heritage values, while its natural scenic landscape contributes to its value as a place to live and as a tourism hub. Hepburn's Municipal Planning Strategy emphasises the heritage significance of the township and Avenue of Honour Trees.

The town of Daylesford is nestled directly to the east of various regional parks and conservation areas. Daylesford has good access to Ballarat, Bendigo and Melbourne via major highways and freeways.

The ecovillage sits on land that has been set within the recently approved subdivision 17 Smith Street which is currently under construction.

In recent years, Daylesford's housing supply has been adversely impacted by the demand for short-stay accommodation, which has reduced housing availability for residents. Moreover, Hepburn Shire's population is ageing, and these residents require smaller, more affordable accommodation to allow them to age in place. As a result of these trends, housing affordability, diversity and choice have become significant issues for Daylesford. Niche Planning Studio understands that Hepburn Shire Council has adopted an Affordable Housing Policy which recognises this pressure on the community and commits to developing an affordable housing policy and strategy to be implemented through planning controls.

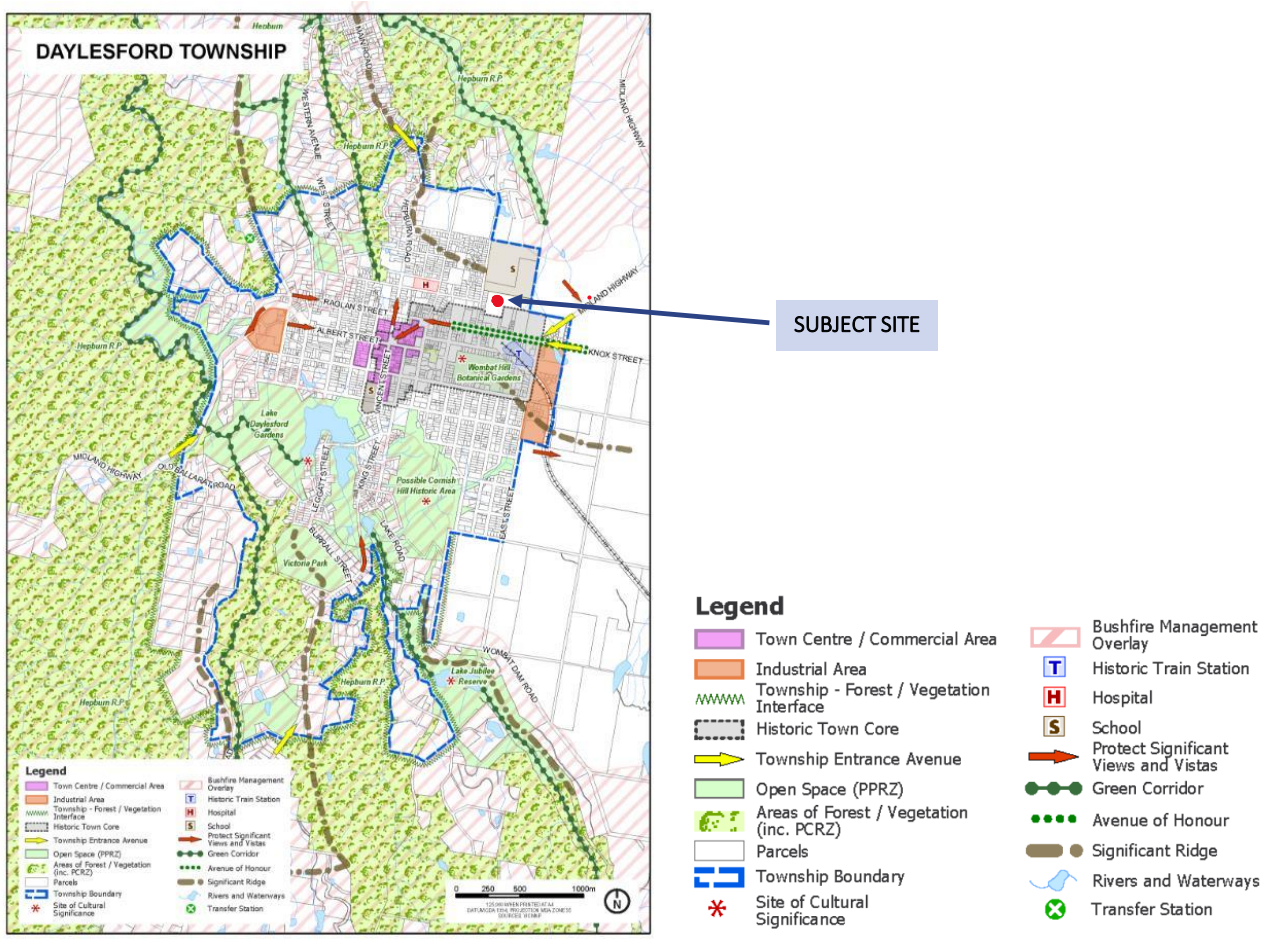

Figure 6: Daylesford Township Map

6. SUBJECT SITE AND CONTEXT

6.1 Background Overview

Regarding the broader strategic setting, this section details the site and its features according to which the development and accompanying design response have been created.

The proposed ecovillage is nested within an approved subdivision of 39 larger residential lots at 17 Smith Street. The 17 Smith Street site is bound by low-density residential development to the east and south, St Michaels Catholic Primary School directly north, and farming land to the east. Further south of the site is Raglan Street which provides an eastern entry into the Daylesford township. The site is directly north of a proposed subdivision at 9 Raglan Street, south of a proposed subdivision at 29 Smith, and west of a proposed subdivision at Lot 2, 4719 Midland Highway.

The planning process across the current planning applications have facilitated the equitable planning for infrastructure and services across the Middleton Field estate.

6.2 Subject Site

The three super lots proposed to be developed for residential dwellings sit within the more significant 17 Smith Street subject site. The combined area of the three super lots is approximately 0.0145ha of vacant land.

The subject site will be accessed via a road to be delivered as part of the approved 17 Smith Street subdivision application (PA2504) from the west and a north-south street as part of the current application at 9 Raglan Street.

The site's key features are shown in Figure 4, and a feature survey is provided with this application (see Appendix 1).

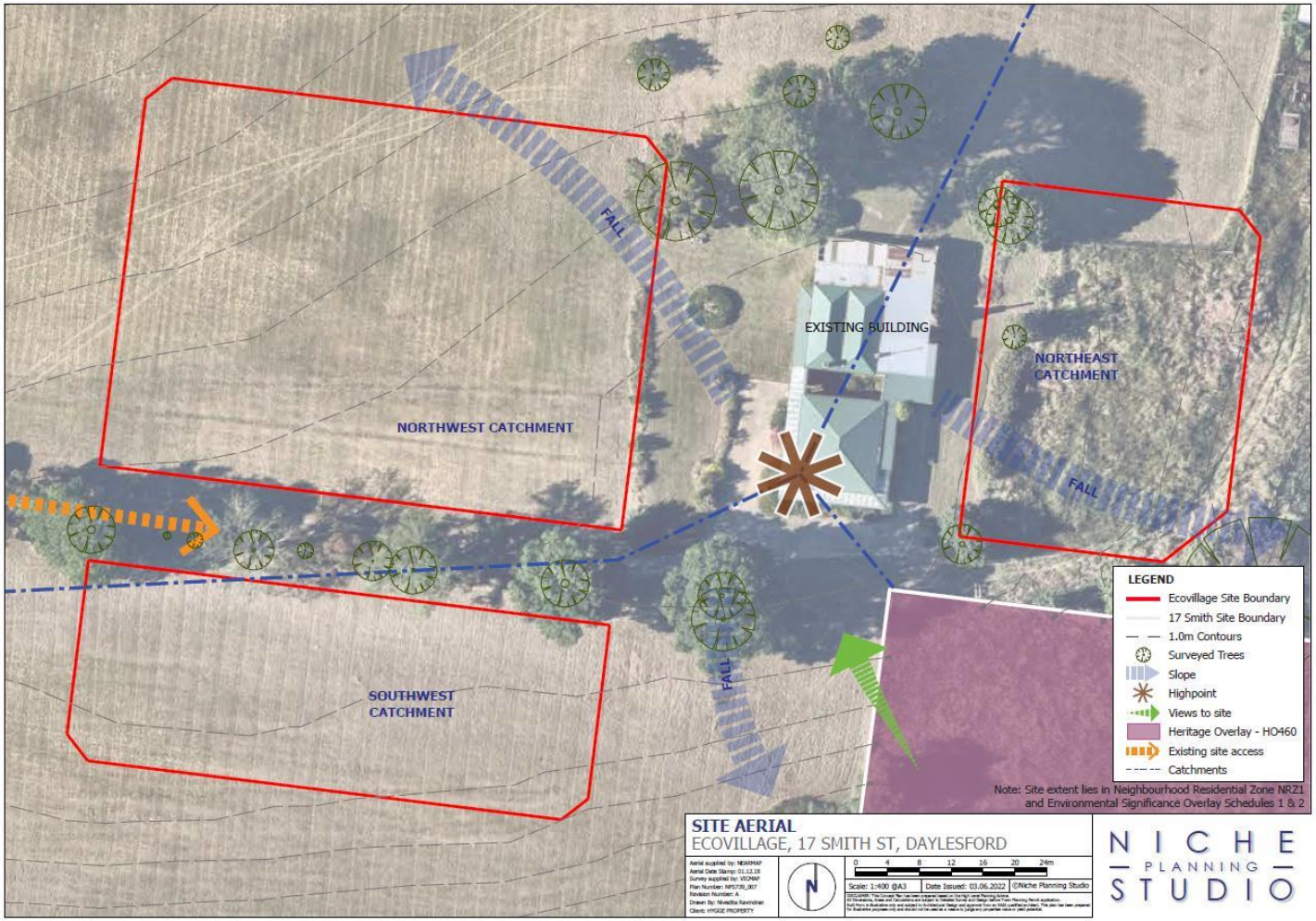

Figure 7: Site Analysis

		ANALYSIS
1	**Current use**	The site will be enveloped in the approved development at 17 Smith Street, which includes 39 low-density residential lots that are currently under construction. Moreover, the site is mainly vacant except for an existing dwelling that is located between Super Lot 1 and 2 and Super Lot 3. Access is granted through 17 Smith Street.
2	**Eastern interface**	The ecovillage will connect to the wider development of 17 Smith Street, which is currently under construction. It will be connected through a boundary interface and ultimately overlook the dwellings and off onto farmland.
3	**Southern interface**	The ecovillage site area is bordered by the recently approved development of 17 Smith Street, comprising a two-lane road along the lot boundaries. The old Daylesford Railway station is located roughly 230m to the south and Wombat Hill approximately 370m south of the Eco Village.
4	**Northern interface**	The ecovillage will be enveloped by the wider development of 17 Smith Street and beyond that is the St Michael's Primary School approximately 100m to the north.
5	**Western interface**	17 Smith Street encompasses the Eco Village to the west. In this direction will be the currently approved main thoroughfare that connects 17 Smith and the Eco Village to the larger Daylesford community.
6	**Existing drainage lines**	Due to the land's topography, which slopes down towards the northeast, natural drainage channels run through and feed into a catchment. The drainage lines are to be conserved as recreation reserves and will serve a primary function within the overall drainage system of the site. A water catchment area has been set aside as part of the approval for 17 Smith Street.
8	**Viewlines**	The town centre is located to the west. The site's eastern boundary offers views of Wombat Park and distant farmlands and the surrounding landscape to the east. The south eastern homes overlook the Wombat Hill Botanical Gardens. Community access to these view lines has been considered as part of the subdivision design.

7. PLANNING POLICY FRAMEWORK

7.1 Planning Policy Framework

The Planning Policy Framework sets the high-order strategic guidance for planning and land-use outcomes across Victoria.

The proposed subdivision is consistent with what is set out within the Central Highlands Regional Growth Plan. Daylesford is highlighted as a key tourism precinct and an area that should 'contain growth'. The proposed residential subdivision allows for growth to be contained within site, as it is within the township urban growth boundary.

The regional Planning Policy Framework sets out strategic guidance for planning and land-use outcomes across the regional context of Hepburn Shire and the wider Central Highlands area. Relevant to the subject site, these regional policies aim to ensure that services and sub-services be provided in regional towns, including Daylesford. Additionally, it seeks to ensure that Daylesford's growth is maintained in the township boundary and respects landscape and resource values.

The proposed residential development is consistent with the policy framework for the Central Highlands area, providing housing at an appropriate density within a dedicated area identified for future residential land use.

Within the Local Planning Policy Framework, the Strategic Framework Plans at Clause 02.04 identify Daylesford as a township identified for consolidation and within the Mineral Springs Protection Area.

7.2 Settlement, Growth and Distinctive Places

7.2.1 Clause 02.2 – Vision

To protect and enhance the district's unique social, cultural, environmental and heritage characteristics by preserving the heritage character and strong sense of place in the townships; protecting valued landscapes from unsympathetic development, and carefully managing the development of housing in keeping with the heritage and rural feel of those areas.

The proposed development will support the long-term vision for Hepburn Shire by delivering high-quality, environmentally sensitive and diverse housing stock that will not negatively impact views of the surrounding environment. The proposal's architectural response will ensure the proposed housing complements Daylesford's existing rural and township character and will support Daylesford's current and future housing needs. The proposed development is responsive to the environmental values of the site as designated by the Mineral Springs Protection Area, as it will provide reticulated sewerage and treat stormwater (as part of the Middleton Field estate) to ensure any negative impact is avoided.

7.2.2 Clause 02-03 – Strategic Direction

This clause outlines the strategic directions for Hepburn Shire.

The following clauses are relevant to this application and are addressed in the Local Planning Policy Framework assessments in this section: 02.03-1 – Settlement; 02.03-2 Environmental and landscape values; 02.03-3 – Environmental risks and amenity; 02.03-4 Natural resource management; 02.03-5 – Built environment and heritage; 02.03-6 Housing; 02.03-9 – Infrastructure.

7.2.3 11.01-1R – Settlement – Central Highlands

Limit outward growth of Daylesford to minimise environmental impacts and exposure to natural hazards and maintain a clear settlement break between Metropolitan Melbourne.

As the proposed development is within the township boundary (refer Figure 6)it is consistent with this clause's purpose to limit Daylesford's outward growth and maintain a clear settlement break between Metropolitan Melbourne.

7.2.4 Clause 11.01-1L – Township and Settlements

This policy applies to land identified within townships and the municipality's settlements. The objective of this clause is to achieve a sustainable urban form for townships by containing future development within the township boundaries shown on the township structure plan.

The site is located within the township boundary identified on the Daylesford township map (Figure 6) and thereby supports the objective of this clause by containing development within that boundary.

7.2.5 Clause 11.02-3S – Sequencing of development

The purpose of this policy is to manage the sequence of development in growth areas so that services are available early in the life of new communities.

This development supports this clause's objectives as it will ensure that planning for water supply, sewerage and drainage works receives high priority in early planning for areas of growth.

7.2.6 11.03-6S – Regional and Local Places

To facilitate integrated place-based planning.

Architects have designed the ecovillage with a strong sense of Daylesford's built form, environmental values, and a strong community focus. Therefore, the proposed development will be a considered, place-based design response to the Daylesford township's distinctive characteristics and the surrounding area's rural character. Moreover, the proposed development is responsive to the area's future land use and development direction as it will facilitate necessary residential housing diversity to accommodate Daylesford's future growth.

7.2.7 Clause 15.01-3L Subdivision in Hepburn Shire

This policy applies to subdivision within township boundaries and aims to produce context-based subdivision outcomes that consider surrounding environmental characteristics.

The proposal will deliver a subdivision layout and lot sizes that consider the surrounding landscape, existing grid-based subdivision patterns and rural lot sizes. The larger lot sizes proposed in the subdivision design serve to maintain the rural character of the township entrance Clause 19.03-2S and 19.03-2S - Infrastructure design and provision.

7.2.8 Clause 19.02-6L - Open Space

The purpose of this policy is to develop open space networks in towns based on creeks, drainage lines, existing native vegetation, parks and recreation areas; develop safe and accessible walking pathways/trails within public open space networks with links to key community facilities and icons in towns.

The proposed subdivision will provide an open space network through a break between Super Lot 1 and 2. The reserves will be located in a parcel of land, home to several trees that have been proposed to be retained in the development. It will connect through the centre of the proposed development running east to west seating, and shelter will be provided in these reserves to enhance community access to these landscaped areas and encourage outdoor activities. The subdivision will also provide safe and accessible shared paths between the recreation and drainage reserves, providing a critical community link to the broader development. In addition, a communal garden has been proposed to bring the space together where people can have the opportunity to meet and for the community to develop organically.

7.3 Significant Environments and Landscapes

7.3.1 Clause 12.05-2S - Landscapes – Central Highlands

To provide clear boundaries and maintain distinctive breaks and open rural landscapes between settlements

The proposed development is in accordance with the objectives of this clause, as it serves to contain growth within the township boundary, thereby avoiding the incursion of development on open rural landscapes.

7.3.2 Clause 12.05-2L – Landscape Management

This clause outlines priorities for specific landscape management within the Shire. Specifically, the municipality's Goldfields, Uplands and Western Volcanic Plain areas.

The location is inside the Uplands landscape character area, so protecting agricultural characteristics and vegetation is essential for this type of development. The concept assures that future development can be developed along topographical lines and preserves vegetation when possible.

7.4 Environmental Risks and Climate Change Mitigation

7.4.1 13.01-1S – Natural Hazards and Climate Change

Directing population growth towards appropriate areas to reduce climate change impacts on lives, property and the environment.

The site is within a Designated Bushfire Prone Area. However, the proposal appropriately directs development within the existing township's lower risk and defensible area. Further, the proposal ensures all lots provide vehicular access to proposed internal roads, which provide access to and from the site in accordance with road safety standards.

A Bushfire Impact Statement can be prepared if required by Council.

7.4.2 13.02-1S – Bushfire Planning

This clause aims to strengthen the resilience of settlements and communities to bushfires through risk-based planning that prioritises the protection of human life.

As noted, the site is within a Bushfire Prone Area. However, the proposal directs development within the existing township's lower risk and defensible area. Moreover, as noted above, the proposal dwellings will provide vehicular access to proposed internal roads that comply with road safety standards to ensure appropriate access and exit.

7.4.3 15.02-1S – Energy and Resource Efficiency

The purpose of this LPP is to encourage efficient ongoing use of energy, waste and water throughout the built form and create an environment that supports active transport and reduction in urban heat island effects.

In accordance with this policy, the proposed subdivision provides for planting and open spaces to reduce the urban heat island effect for future development. The subdivision will facilitate fossil-fuel-free living once developed, with no reticulated gas and the requirement for any buildings to achieve a minimum 7.5*NatHERS rating. Further, the proposed subdivision will provide shared paths to encourage active transport modes. In addition to providing planting and open spaces, Compost bins will be located within the development to minimise the waste going to landfill. It has been chosen to provide Compostable bins because Hepburn Shire does not have an organics collection service.

7.4.4 Clause 14.02-1S – Catchment Planning and Management

The purpose of this clause is to ensure the protection and restoration of catchments and other waterways/waterbodies.

The subject site is identified within the Mineral Springs/Mineral Springs Protection Area. All stormwater generated by future development on the site is to be treated and returned to natural flow corridors at a pre-development quality. This system will serve to detain and regulate the flow of stormwater from the site. See the Stormwater Strategy (Appendix 3) for further detail on how this proposal will ensure the protection of the surrounding catchment and waterways.

7.4.5 Clause 14.02-1L – Catchment and Land Protection

This clause ensures that the use and development in a special water supply catchment protects, restores and enhances the quality and quantity of the natural resources and environmental systems for the long term supply of quality water for future generations

As noted above, the subject site is identified within the Mineral Springs/Mineral Springs Protection Area. The proposal will have a reticulated sewerage and stormwater treatment system in accordance with the objective of this policy, as outlined in detail in the Stormwater Strategy (Appendix 3) and Servicing Report (Appendix 8).

7.4.6 Clause 14.02-2L - Mineral Springs and Fresh Water Springs Protection – Hepburn

To enhance and protect the quality and quantity of mineral springs and freshwater springs water and not compromise aquifer integrity through the development

As discussed in the Stormwater Strategy (Appendix 3), the proposed development will not negatively impact the quality or supply of water to a mineral or freshwater spring. The proposal ensures all stormwater and drainage associated with future development is directed away from the eye of a mineral spring or freshwater spring. It will also prevent effluent disposal from entering groundwater sources: all stormwater generated by future development on the site is to be treated and returned to natural flow corridors at a pre-development quality.

7.4.7 Clause 19.03-3S Integrated water management

This policy aims to ensure the sustainable management of water supply, water resources, wastewater, drainage and stormwater through an integrated water management approach.

As discussed in the Stormwater Strategy (Appendix 3), the proposed subdivision will deliver an integrated approach to water management. The proposed layout considers the catchment context by identifying the existing drainage lines and corresponding placement of the recreation and drainage reserves. Moreover, the stormwater, wastewater and drainage approach outlined in the Stormwater Strategy will ensure downstream environments and waterways are protected, in accordance with this clause as well as Clause 14.02-2L and 14.02-1L. This will be achieved via the on-site (Middleton Field estate) treatment of stormwater generated by future development, which will then be returned to natural flow corridors at a pre-development quality.

7.5 Built Environment

7.5.1 15.01-1S – Urban Design

This policy serves to ensure development creates safe, functional and enriching places that contribute to a sense of place and cultural identity.

In accordance with this policy, the proposed development will effectively contribute to creating a safe, healthy and functional environment that is integrated with its surrounding context. The ecovillage will be comprised of high-quality, architect-designed dwellings that will facilitate safe, functional and high-amenity living that will generate a strong sense of place. The development will also contribute to a green link that will provide a landscaped pedestrian connection between the east and west of the subject site.

The design guidelines that control the development of the site will ensure that housing design, material and energy efficiency standards are met to achieve high-quality development and heritage-sympathetic outcomes.

7.5.2 Clause 15.01-1L – Urban Design

This clause provides support for good urban design outcomes relevant to a rural area with a gold rush history, specifically for Daylesford, which is included within the Strategic Framework Plan.

Decision Guideline	Response
Protect and enhance the gold rush heritage built form, tourism and the landscape setting of townships.	The proposed development in the ecovillage will pay tribute to the rich gold rush heritage throughout Daylesford mainly through the landscape design. Clever homages have been placed throughout the development, including water tanks reminiscent of the ones used in the period huts. Materials such as timbers similar to those used to construct the works huts will be used in the facade of the new modern dwelling. What has been proposed is a 21st-century take on the gold rush era community whilst paying tribute to the Daylesford rich history.
Ensure development respects the low scale, vegetated and natural and rural character of townships	The proposed ecovillage fits into the larger context of the 17 Smith St development but offers housing diversity for the residents of Daylesford that respects the vegetated, natural and rural character of Daylesford.

Ensure that development respects and enhances notable features and landmarks of townships such as building form, volume, low scale height, setbacks, spacing, streetscapes, tree lined streets, intact heritage places and existing vegetation.	The proposed ecovillage has incorporated a heritage-style house within the development by preserving the house for future use. Furthermore, indigenous trees to the area have been proposed to be retained as well as further planting of additional indigenous trees. To promote the township atmosphere of the new community, community gardens will be located in the middle of the development, creating a sense of place and connectivity to the surrounding area.
Preserve the township streetscape features by maintaining and providing, where appropriate: • *Grass verges.* • *Open barrel drains.* • *Bluestone kerbs and channels.* • *Streetscape layout and proportions.* • *Walking and cycling paths, where necessary, for improved accessibility.*	To ensure connectivity to the larger development at 17 Smith Street, several walking and cycling paths have been proposed to be created throughout the development to connect the Superlots of the ecovillage and the outside community. To further promote township streetscape, ample grass verges have been set aside while ensuring streetscape layout through clever landscape design.
Ensure that development protects and enhances features important to the visual amenity and identity of townships including: • *Landform.* • *Avenues of trees.* • *Approaches and entries.* • *Tree lined streets.* • *Parks and reserves.* • *Lakes, creeks and main drainage lines.*	The ecovillage uses the topography of the land by incorporating the gradient of the land to influence the design of the dwellings, creating a better outcome for the future residents of the community. In addition, several parks and reserves will be provided to enhance the development while ensuring there is ample chance for successful drainage of the area.
Incorporate landscaping in front setbacks to soften the address to the street.	Ample front setbacks have been proposed for the development.

Provide a clear delineation of pedestrian access and circulation in development.	Through the use of landscape design, clear pedestrian accessways have been proposed that will envelope the ecovillage. In addition, pedestrian access has been proposed to traverse through the centre of the ecovillage.

7.5.3 15.01-3S – Subdivision design and 15.01.3L - Subdivision in Hepburn Shire

These provisions serve to ensure the design of subdivisions achieves attractive, safe, accessible, diverse and sustainable neighbourhoods broadly, and is also reflective of the local Daylesford township.

The proposed subdivision will also ensure the provision of utilities, services, and a larger urban structure that ensures integrated water management and adherence to sustainability principles such as energy and resource efficiency and reduced waste and air pollution, as detailed in the Stormwater Strategy (Appendix 3) and Servicing Report (Appendix 8).

At the local level, the proposed subdivision layout provides lots that respect the neighbourhood character of the area, which is a transitional rural-township character. The subdivision will meet the growing needs of Daylesford by offering safe, functional and attractive lots in which the residents can flourish. It further complements the context for the development of 17 Smith Street, providing an alternative lot size from the already approved low-density houses.

7.5.4 15.01-4S – Healthy Neighbourhoods

The purpose of this clause is to achieve neighbourhoods that foster healthy and active living and community wellbeing.

As previously stated, the landscaped roadway and shared path network that will connect to the recreation reserves will boost the uptake of active transport modes and a dynamic public realm, making it easier to offer a high-amenity, safe, and accessible neighbourhood.

Through deliberate physical design and resident behaviour choices, the ecovillage seeks to have as little negative influence on the environment as possible. The ecovillage offers small-scale communities with regenerative or low ecological effects as an option. It envisioned that these communities frequently work together in their networks with neighbouring settlements. The proposed subdivision will facilitate a neighbourhood that encourages active transport modes and a lively public realm that fosters safety and community connectedness: the proposed shared path network will encourage active transport uptake by future residents as well as access for the broader community to the Wombat Park viewlines.

7.5.5 15.01-5S - Neighbourhood Character

This clause serves to support development that recognises, supports and protects neighbourhood character, cultural identity, and sense of place.

The proposed subdivision and development offer a highly considered response to the surrounding area's existing rural and township character. The varied lot sizes proposed in the subdivision layout reflect the site's rural and gold rush style housing with a small footprint. The shared path network provides an essential connection to 17 Smith Street, which ensures a strong sense of place and connection to the surrounding farming areas and natural environment that shape the identity of Daylesford. Furthermore, using natural materials and clever use of ground levels and topography will soften the appearance of the development assisting the homes to fit within the environment effortlessly. The street trees will reflect the leafy, vegetated character of the existing area.

7.5.6 Clause 15.01-5L – Neighbourhood Character in Daylesford

This clause reinforces preferred character in various precincts throughout Daylesford, with particular emphasis on views and landmarks.

While the subject site is not located within a precinct designated by this policy, the Daylesford-wide strategies are still applicable.

The concept has been developed to minimise tree removal in the superlots. Additionally, it has been proposed to plant a large mix of appropriate exotic and indigenous trees in the area of the planned development, matching in with the wider Daylesford character. A communal garden for the locals has also been recommended. Lots front internally where practical to prevent crossings and improve neighbourhood walkability.

Figure 8: View out to the east

8. ZONING

8.1 Clause 32.09 – Neighbourhood Residential Zone (NRZ1)

The site is zoned Neighbourhood Residential Zone (NRZ1) (see Figure 8).

> *The Neighbourhood Residential Zone to support areas of predominantly single and double-storey residential development; to manage and ensure development respects the identified neighbourhood character, heritage, environmental or landscape characteristics; and to support a limited number of non-residential uses to serve local community needs in appropriate locations.*

The permit triggers under the NRZ relevant to this proposal are as follows:

- Clause 32.09-3 – to subdivide the land
- Clause 32.09-6 – to construct two or more dwellings on a lot

In addition to the permit triggers, Clause 32.09-10 specifies that building height in the NRZ1 must not exceed 9 metres, and a building must not contain any more than two (2) storeys at any point.

Clause 32.09 - Discussion

The proposal reflects the purpose of the NRZ, as it proposes dwellings that respect the preferred neighbourhood character of the surrounding area. The proposal will deliver diverse dwelling types that conform to the single and double-storey built form and maximum building heights required by the NRZ. The housing delivered will serve to meet Hepburn Shire's housing needs within the established township area.

8.2 Decision Guidelines

Pursuant to Clause 32.09-6, a permit is required to construct two or more dwellings on a lot. The proposed development will create thirty-one (31) new residential dwellings. Clause 32.09-13 of the NRZ sets out the decision guidelines to be considered part of a subdivision application. A response to the decision guidelines is provided below:

Decision Guideline	Response
The Municipal Planning Strategy and the Planning Policy Framework.	**Complies –** see Section 7.1 of this report.
The purpose of this zone.	**Complies –** see Section 8 of this report.
The Objectives set out in a schedule to this zone.	**Complies –** the development achieves the identified preferred neighbourhood character of Daylesford.
The impact of overshadowing on existing rooftop solar energy systems on dwellings on adjoining lots in a General Residential Zone, Mixed Use Zone, Neighbourhood Residential Zone, Residential Growth Zone and Township Zone.	**Complies –** see Clause 55 Assessment at Appendix 9 of this report.
For the construction and extension of two or more dwellings on a lot, dwellings on common property and residential buildings, the objectives, standards and decision guidelines of Clause 55.	**Complies –** see Clause 55 Assessment at Appendix 9 of this report.

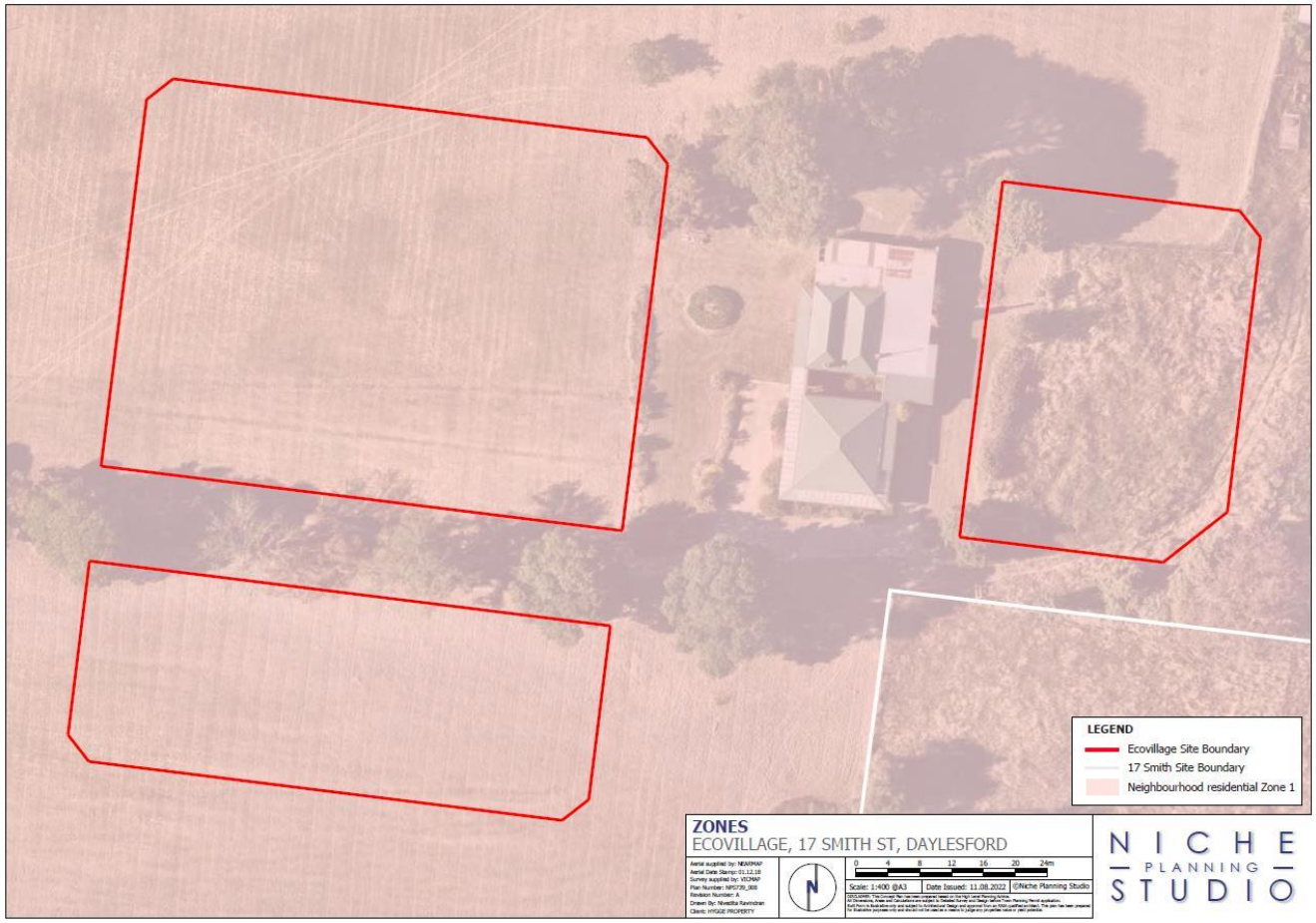

Figure 9: Zoning

9. OVERLAYS

9.1 Clause 42.01 0 – Environmental Significance Overlay

The site is affected by the ESO and the following schedules:

- Schedule 1 (ESO1): specifically regarding water catchment protection
- Schedule 2 (ESO2): specifically referring to the Hepburn Springs and groundwater protection (see Figure 9).

Pursuant to Clause 42.01-2, a permit is required to construct a building or construct or carry out works.

The permit requirements triggered by the ESO1 and ESO2 are outlined in the following section.

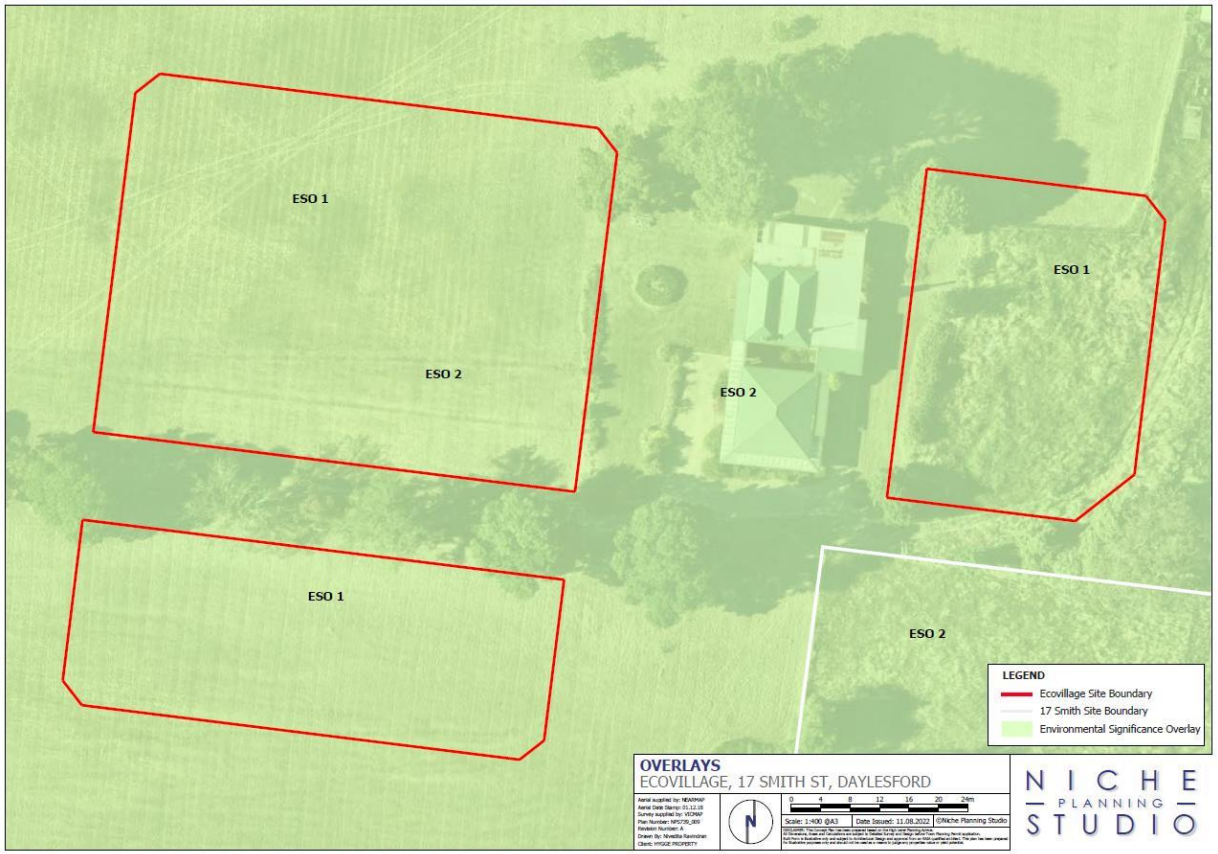

Figure 10: Overlays

9.1.1 Schedule 1 to the ESO

The purpose of the ESO1 is to ensure development seeks to eliminate detrimental impacts on the quality and quantity of water in the catchment and to ensure the plentiful long-term supply of quality water.

The ESO1 does not require a permit to construct a building or carry out works for a dwelling that is connected to a reticulated system and located more than 30 metres from a waterway. As the site is located more than 30 metres from a waterway, it does not trigger a permit to construct a building or carry out works for a dwelling.

The proposal has been designed to ensure compliance with the requirements of the ESO1: all on-site wastewater will be managed with deep sewer infrastructure (i.e. reticulated) and not via on-site septic systems. All the objectives of the ESO1 are addressed in the Stormwater Strategy at Appendix 3.

The proposal does trigger permit requirements under the ESO1 for the following:

- To construct a building that generates additional wastewater
- To construct a building or construct or carry out works if any site cut required is one metre or more in-depth
- To construct or carry out works for a fence that is a temporary fence of post and wire construction being used to protect any vegetation or worksite where it will not remain in place for longer than 12 months
- Construct a building or construct or carry out works that are located more than 30 metres away from a waterway

ESO1 lists the following decision guidelines:

Decision Guideline	Response
Before deciding on an application, the Responsible Authority must consider:	
The Municipal Planning Strategy and Planning Policy Framework	**Complies –** see Section 9 of this report
The statement of environmental significance and the environmental objective contained in a schedule to this overlay.	**Complies –** The development will be undertaken in a manner that seeks to eliminate detrimental impacts on the quality and quantity of water in the catchment to ensure the long-term plentiful supply of quality water. Please refer Stormwater Strategy in Appendix 3.
The need to remove, destroy or lop vegetation to create a defendable space to reduce the risk of bushfire to life and property.	**Complies –** No vegetation is required to be removed to create defendable space to reduce bushfire risk to life and property.

The proximity of the development to waterways, drainage lines and water supply reservoirs in the catchment.	**Complies –** The proposed development is not in close proximity to a waterway or water supply reservoir, however the on-site stormwater treatment system provided will detain and regulate stormwater flows and restore water quality to pre-development levels. See Stormwater Strategy at Appendix 3.
The possible impact and effect of the development on the quantity and quality of water in waterways, drainage lines, water supply reservoirs and springs.	**Complies –** See Stormwater Strategy at Appendix 3.
The need and measures to: - *Provide buffers for or separation from waterways, drainage lines, gullies, property boundaries and any existing disposal areas or systems.* - *Minimise and reduce nutrient loads, turbidity and siltation in waterways, drainage lines and water supply reservoirs.* - *Decrease or reduce the velocity of stormwater into waterways, drainage lines and water supply reservoirs.* - *Prevent erosion of natural features, including banks, streambeds and adjoining land.* - *Improve filtration and infiltration of water.* - *Retain and increase native vegetation to prevent or limit adverse effects on waterways, drainage lines and water supply reservoirs.*	**Complies –** The proposed development provides adequate buffers from waterways, drainage lines, gullies, and property boundaries. The subdivision will not decrease the water quality or quantity in surrounding areas or waterways. The on-site drainage and water treatment system will ensure increased stormwater run-off is treated to pre-development levels and adequately integrated into the water system. Further, the on-site drainage and stormwater treatment system will also detain stormwater flows to decrease the velocity of stormwater into waterways, drainage lines and water supply reservoirs. This will also mitigate the possible erosion of natural features. Please refer Stormwater Strategy at Appendix 3. The application will not result in the removal of native vegetation.
The means of treatment and disposal of all sewage, sullage, stormwater and other wastes on site which is consistent with a geotechnical report or land capability report having regard to the slope, soil type and other environmental factors including the potential for pollution of waterways and ground water.	**Complies –** The proposed subdivision will provide reticulated sewerage. Furthermore, it will treat stormwater on-site as outlined in the Stormwater Strategy in Appendix 3.

9.1.2 Schedule 2 to the ESO

The ESO2 relates to the protection of the mineral springs and groundwater in the Shire from the impacts of effluent and drainage.

Pursuant to the ESO2, the proposal triggers a permit requirement for the following:

The proposal has been designed to ensure compliance with the requirements for the overlay, noting that all on-site wastewater will be managed with deep sewer infrastructure (i.e. reticulated) and not via on-site septic systems. Stormwater will be managed through the subdivision drainage system, which will detain stormwater flows and improve the quality of water to pre-development levels before it is released to catchments beyond

- To carry out major works
- To construct or carry out works that will result in changes to surface or groundwater run-off

the subdivision area. As the objectives of the ESO1 are addressed in the Stormwater Strategy at Appendix 3, an environmental management plan and geotechnical report have not been included as part of this application.

ESO2 lists the following decision guidelines:

Decision Guideline	Response
Before deciding on an application, the Responsible Authority must consider as appropriate:	
The means of treatment and disposal of all sewage, sullage, stormwater and other wastes where connection to a reticulated sewage system is not available consistent with a geotechnical report.	**Not applicable:** Reticulated sewerage will be provided.
The possible effect of the development on the quality and quantity of the mineral spring or freshwater resource, including impacts on nutrient levels, and whether this is consistent with any environmental management plan for the proposal.	**Complies -** The proposed development has been designed to ensure that there is no negative effect on the quality and quantity of mineral spring and freshwater – please refer Stormwater Strategy at Appendix 3.
The impact of development on drainage and stormwater run-off, waste water disposal, stream bed erosion, solid waste disposal, commercial waste disposal, storage of fuel, pesticide and fertiliser and hazardous materials.	**Complies –** The development will not have a negative impact on drainage or stormwater run-off and will not introduce pollutants into the surrounding environment. Please refer Stormwater Strategy at Appendix 5.

The slope, soil type and other environmental factors including the potential for pollution of the mineral spring and freshwater and the impact this may have on the quality and yield of water from the spring.	**Complies –** The slope, soil type and environmental conditions have been considered in the subdivision design and integrated into the stormwater and waste management approaches to avoid pollution of surrounding waterways. Please refer Stormwater Strategy at Appendix 3.
The preservation of and impact on soils and the need to prevent erosion.	**Complies - The** subdivision design integrates with the topography of the land to ensure there is minimal impact. The subdivision drainage system will detain and regulate stormwater run-off so as to avoid causing erosion.
The need to prevent or reduce the concentration of wastewater or stormwater.	**Complies –** The subdivision drainage system will detain stormwater run-off and regulate flows into surrounding catchments.
Whether development for chemical or liquid fuel storage is located within 200 metres of the eye of a mineral or freshwater spring.	**Not applicable**
The protection of the area for its recreational value.	**Complies –** The subject site is zoned for residential purposes, and therefore the development of residential dwellings is considered appropriate.
Potential threats to mineral springs water quality.	**Complies –** The proposed development will not pose a threat to the mineral springs water quality, as it will provide reticulated sewerage and the drainage system will restore run-off to pre-development flows before it is released beyond the catchment.
The need to retain vegetation to prevent or limit adverse effects on the mineral spring or freshwater.	**Complies -** The development proposes minimal removal of vegetation. Any vegetation to be removed will not have a negative impact on the mineral springs or freshwater.

10. PARTICULAR PROVISIONS

10.1 Clause 52.17 – Native Vegetation

This application does not propose to remove, destroy or lop native vegetation. Trees to be retained have been shown with Tree Protection Zones (TPZ) and buildings will not encroach on the health of these trees.

11. CONCLUSION

The proposed subdivision is considered appropriate as it will provide for a sensitively designed and high-amenity residential development, in keeping with Council's intended strategy for the land and its adjacent uses. The subdivision aligns with the strategic direction of the Planning Policy Framework regarding the provision of increased housing within the township boundaries. It is in accordance with the zoning and overlay provisions of the site.

The multi-lot subdivision is considered a positive initiative for the site by releasing land for viable and appropriate use and development. In preparing this subdivision design, the subdivision paves the way for future development on the site.

The proposed 31 lot residential development will set a benchmark on what can be achieved by exploring new sustainable and social living concepts. It will be a beacon for the surrounding community by showing what can happen when developers and Council work in agreement for the best possible outcome for Daylesford.

Appendix 1 – Architect Plans

Appendix 2 – Landscape Concept

Appendix 3 – Stormwater Management Strategy

Appendix 4 – Traffic Impact Assessment

Appendix 5 – Waste Management Plan

Appendix 6 – ESD Report

Appendix 7 – Arborist Report

Appendix 8 – Servicing Report

Appendix 9 – Clause 55 Assessment

Appendix 10 – Clause 56 Assessment

Appendix 11 – Combined Title Documents

terramatrix

Bushfire Development Report

for Middleton Field at
17 Smith Street, 9 Raglan Street and
4719 Midland Highway
Daylesford VIC 3460

Report prepared for
Smith Development Partnership Pty Ltd

November 2022

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Report prepared by Terramatrix on behalf of Smith Development Partnership Pty Ltd

Cover photo – Looking west into 4719 Midland Highway from the highway.

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1. Summary

Smith Development Partnership Pty Ltd are proposing to develop the Middleton Field residential estate in Daylesford VIC 3460. This report deals with that part of the estate on 17 Smith Street, 9 Raglan Street and 4719 Midland Highway.

The land is zoned Neighbourhood Residential Zone – Schedule 1 (NRZ1) and is on the north-eastern edge of the established township area of Daylesford, north of and opposite the Daylesford Railway Station. The proposed development is consistent with the current zoning. The site is exposed to a bushfire hazard in the form of Grassland (pasture) to the north and east. The closest Forest is a narrow strip along Bund Creek approximately 500m to the north-east, with more extensive areas of Forest beyond, to the east of Hepburn Springs.

The site is wholly within a Bushfire Prone Area (BPA) but not covered by the Bushfire Management Overlay (BMO). As the development comprises accommodation in a BPA, the development must respond to the objective and applicable strategies of Clause 13.02-1S *Bushfire Planning* (Hepburn Planning Scheme, 2018).

Key points:

- The entire site is within a designated BPA but not covered by the BMO.
- The site is on the north-eastern edge of the established township area of Daylesford, with well-established low threat residential and commercial properties to the west and south and farmland to the north-east.
- Future buildings on the site can achieve a BAL-12.5 construction standard.
- Adequate access and egress for emergency management vehicles can be provided by the existing and proposed road network, that will access Midland Highway to the east, Raglan Street to the south and Smith Street to the west.
- A reliable water supply for fire fighting can be provided via a reticulated hydrant system.
- There is easy egress, for future occupants of the site, to areas of Daylesford that would be rated as BAL-LOW using the AS 3959-2018 site assessment methodology.
- Development of the site will not increase the bushfire risk to existing and future residents, property or community infrastructure.

2. Introduction

This Bushfire Development report has been prepared for Smith Development Partnership Pty Ltd, to assess how the Middleton Field[1] residential development at 17 Smith Street, 9 Raglan Street and 4719 Midland Highway, Daylesford VIC 3460 ('the site') can respond to the bushfire risk and the applicable Victorian planning and building controls that relate to bushfire, in particular the objective and applicable strategies of the Planning Policy Framework (PPF) at Clause 13.02-1S *Bushfire Planning* (Hepburn Planning Scheme, 2018a) and the requirements of the Building Regulations.

The site is currently in a designated Bushfire Prone Area (BPA). BPAs are those areas subject to or likely to be subject to bushfires, as determined by the Minister for Planning. Higher hazard land within a BPA that may be subject to extreme bushfire behaviour is covered by the Bushfire Management Overlay (BMO); however, no part of the site is affected by the BMO and the closest BMO area is approximately 300m to the north.

The site comprises undeveloped land on the north-eastern outskirts of the established township area of Daylesford, between Smith Street to the west and the Midland Highway to the east (see Figure 1). It abuts urban area on all sides, other than the north-east where the neighbouring land is pasture in the Farm Zone (FZ).

[1] Note this report does not include 29 Smith Street.

3. Proposed development

The Middleton Field estate comprises 71 residential lots (two of which will retain existing homesteads), three areas of Eco Village housing and associated roads and public open space (see Figure 1). All but the four northernmost lots on 29 Smith Street, are the subject of this report.

This report assesses the bushfire hazard in relation to the site. It identifies how development of the site can appropriately mitigate any bushfire risk by responding to and complying with the applicable bushfire planning and building controls. It has been prepared in accordance with applicable guidance for the assessment of, and response to, bushfire risk provided in:

- *Planning Permit Applications Bushfire Management Overlay Technical Guide*[2] (DELWP, 2017); and
- AS 3959-2018 *Construction of buildings in bushfire prone areas* (Standards Australia, 2020).

[2] Although the area and surrounding land is not affected by the BMO, DELWP's BMO technical guide provides useful descriptors and guidance for assessing the bushfire risk at the landscape scale.

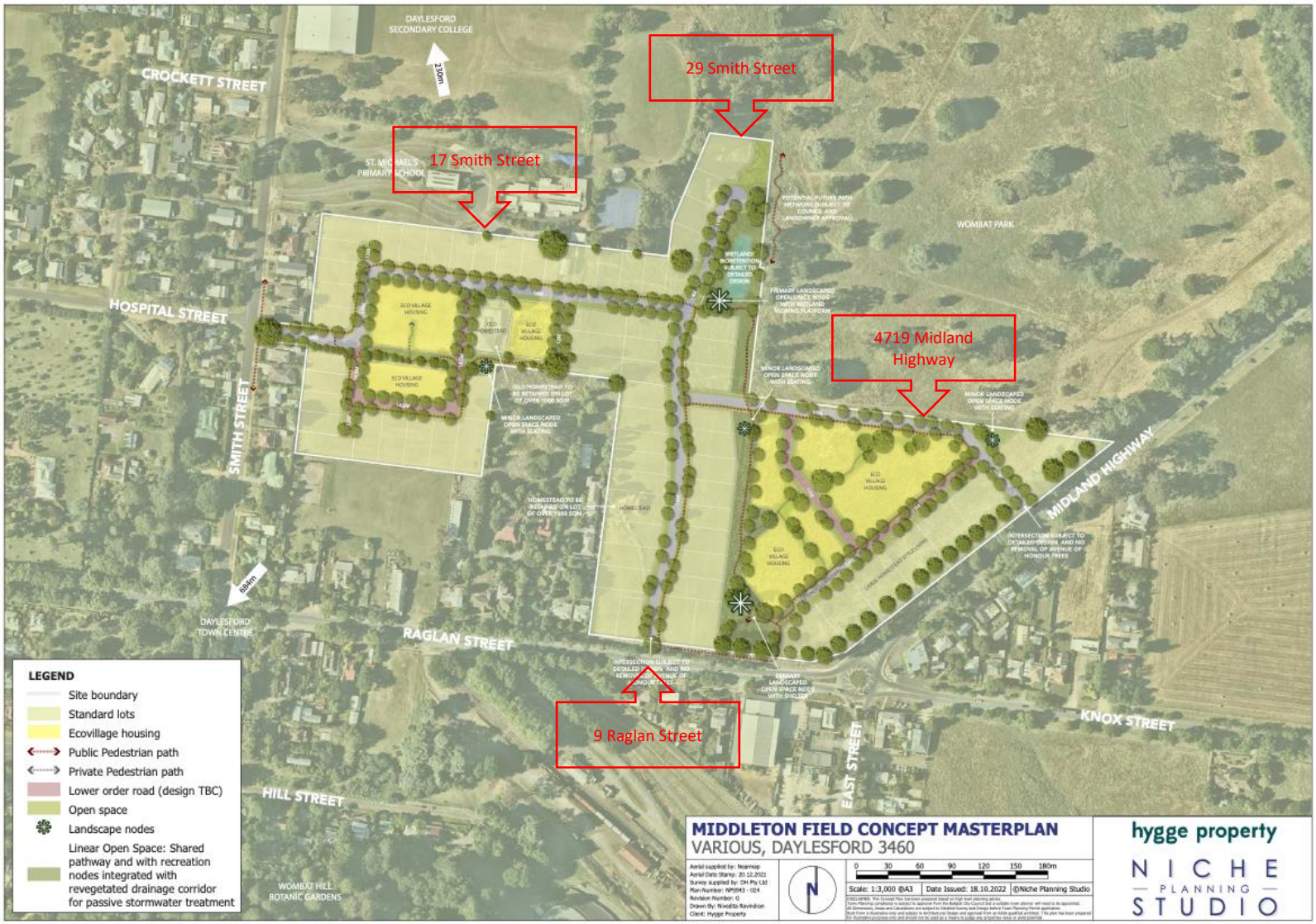


Figure 1 – Middleton Field Concept Masterplan (Niche, 2022) (note that the northern 29 Smith St component is not addressed in this report).

4. Bushfire planning and building controls

This section summarises the applicable planning and building controls that relate to bushfire. Sections 8 and 9 describe how planning and design of the site can respond to and comply with the controls.

4.1. Claus 71.02-3 Integrated Decision Making

Clause 71.02-3 states that planning and responsible authorities should endeavour to integrate policies and balance conflicting objectives in favour of net community benefit and sustainable development. However, in bushfire affected areas, the protection of human life must be prioritised over all other policy considerations (Hepburn Planning Scheme, 2018b).

4.2. Clause 13.02-1S Bushfire Planning

The State Planning Policy at Clause 13.02-1S *Bushfire Planning* requires that bushfire risk be considered for strategic planning, planning scheme amendments and planning applications involving a range of uses including development in a BPA that involves accommodation, subdivisions of more than 10 lots and that will result in people congregating in large numbers (Hepburn Planning Scheme, 2018a).

The proposed development of Middleton Field will need to address the policy objective and the applicable strategies.

Objective – To strengthen the resilience of settlements and communities to bushfire through risk-based planning that prioritises the protection of human life.

Strategies:

- *Protection of human life*
- *Bushfire hazard identification and assessment*
- *Settlement planning*
- *Areas of biodiversity conservation value*
- *Use and development control in a Bushfire Prone Area*

Clause 13.02-1S requires priority to be given to the protection of human life by:

- *'Prioritising the protection of human life over all other policy considerations.*
- *Directing population growth and development to low risk locations and ensuring the availability of, and safe access to, areas where human life can be better protected from the effects of bushfire.*
- *Reducing the vulnerability of communities to bushfire through consideration of bushfire risk in decision-making at all stages of the planning process'* (Hepburn Planning Scheme, 2018a).

Key strategies are stipulated in Clause 13.02-1S, which require that strategic planning documents, planning scheme amendments and development plan approvals properly assess bushfire risk and

include appropriate bushfire protection measures. This also applies to planning permit applications for:

- Subdivisions of more than 10 lots;
- Accommodation;
- Child care centre;
- Education centre;
- Emergency services facility;
- Hospital;
- Indoor recreation centre;
- Major sports and recreation facility;
- Place of assembly; and
- Any application for development that will result in people congregating in large numbers.

Development should not be approved where '*…a landowner or proponent has not satisfactorily demonstrated that the relevant policies have been addressed, performance measures satisfied or bushfire protection measures can be adequately implemented*' (Hepburn Planning Scheme, 2018a).

The manner in which the proposed development will respond to these strategies is documented in this Bushfire Development Report in Section 9.

4.3. Other planning controls

4.3.1.Zoning

The site is currently Neighbourhood Residential Zone Schedule 1 (NRZ1) and no re-zoning is intended.

4.3.2.Overlays

17 Smith Street, 9 Raglan Street and 4719 Midland Highway are affected by the Environmental Significance Overlay, Schedule 1 *Special Water Supply Catchment Protection* (ESO1) (Hepburn Planning Scheme, 2022a) and Schedule 2 *Mineral Springs and Groundwater Protection* (ESO2) (Hepburn Planning Scheme, 2022b). These overlays have no implications for bushfire planning for the site.

9 Raglan Street and the western part of 4719 Midland Highway are also affected by the Heritage Overlay and Schedule 698 *Daylesford Railway Heritage Precinct* (HO698) (Hepburn Planning Scheme, 2022c). This overlay has no implications for bushfire planning for the site.

No part of the site is covered by the Bushfire Management Overlay (BMO). The nearest BMO coverage is more than 300m to the north.

4.3.3.Local planning policy

The site is in Daylesford Neighbourhood Character Precinct Eleven, which has the objective of maintaining the spaciousness of the dwelling settings and strengthening the definition of the

entrance to the town (Hepburn Planning Scheme, 2022d). This policy appears to have no implications for bushfire planning for the site.

4.4. Bushfire Prone Area

BPAs are those areas subject to, or likely to be subject to bushfire, as determined by the Minister for Planning. Those areas of highest bushfire risk within the BPA are designated as BMO areas.

In a BPA, the Building Act 1993 and associated Building Regulations 2018, through application of the National Construction Code (NCC), require bushfire protection standards for class 1, 2 and 3[3] buildings, 'Specific Use Bushfire Protected Buildings'[4] and associated class 10A buildings[5] or decks. The applicable performance requirement in the NCC is:

> *'A building that is constructed in a designated bushfire prone area must, to the degree necessary, be designed and constructed to reduce the risk of ignition from a bushfire, appropriate to the —*
>
> *(a) potential for ignition caused by burning embers, radiant heat or flame generated by a bushfire; and*
>
> *(b) intensity of the bushfire attack on the building'* (ABCB, 2020).

A BAL is a means of measuring the severity of a building's potential exposure to ember attack, radiant heat, and direct flame contact. There are six BALs defined in AS 3959-2018, which range from BAL-LOW, which has no bushfire construction requirements, to BAL-FZ (Flame Zone) where flame contact with a building is expected.

[3] Class 1, 2 and 3 buildings are defined in the NCC and are generally those used for residential accommodation, including houses and other dwellings, apartments, hotels and other buildings with a similar function or use.

[4] Specific Use Bushfire Protected Buildings are defined in the Victorian *Building Regulations 2018,* they generally comprise 'vulnerable' uses and include schools, kindergartens, childcare facilities, aged care facilities and hospitals.

[5] Class 10a buildings are defined in the NCC as non-habitable buildings including sheds, carports, and private garages.

5. Regional bushfire risk assessments and plans

5.1. Grampians Bushfire Management Strategy

The Bushfire Management Strategy recognises Daylesford as a major population centre in the region and subject to a significant influx of tourists over weekends and holiday periods (DELWP, 2020a). Daylesford is identified as one of the settlements at greatest bushfire risk, with forest on public land to the north, west and south that allows a bushfire to become large and intense before impacting the township (DELWP, 2020). The Joint Fuel Management Program provides large areas of Asset Protection Zone and Bushfire Moderation Zone to the north, west and south of the township where planned burning is used to reduce the bushfire risk, supported by mechanical clearing (FFMV, online).

5.2. Regional Bushfire Planning Assessment (RBPA) Grampians Region

As part of the response to the 2009 Victorian Bushfires Royal Commission, Regional Bushfire Planning Assessments (RBPAs) were undertaken across six regions that covered the whole of Victoria. The RBPAs provide information about 'identified areas' where a range of land use planning matters intersect with a bushfire hazard to influence the level of risk to life and property from bushfire. The RBPAs state that '*This information should be addressed as part of strategic land use and settlement planning at the regional, municipal and local levels*' (DPCD, 2012).

The *Regional Bushfire Planning Assessment – Grampians Region* covers the Hepburn LGA. It identified the following areas at Daylesford:

- Sailors Falls to Daylesford – Rural-residential lots from Sailors Falls to Hepburn, including around Daylesford are in a bushfire hazard are associated with the Hepburn Regional Park and surrounding vegetation. Existing vegetation includes areas of high and very high conservation significance (Identified Area Code 29-012);
- Daylesford – Residential lots in Daylesford are in the bushfire hazard area associated with surrounding Hepburn Regional Park (Identified Area Code 29-017);
- Daylesford – Daylesford Structure Plan provides for rural-residential lots in close proximity to bushfire hazard. Existing vegetation includes areas of vegetation of high and very high conservation significance (Identified Area Code 29-032); and
- Hepburn Springs to Daylesford – Townships rely primarily on Main Road for access and egress from bushfire hazard area (Identified Area Code 29-038) (DPCD, 2012).

None of these issues particularly apply to the site, which has direct exposure to only a Grassland hazard.

5.3. Hepburn Shire Municipal Emergency Management Plan (MEMP) and Municipal Fire Management Plan (MFMP)

The MEMP details all hazards emergency management arrangements but does not specifically mention Daylesford or bushfire management, although bushfire is identified as having a High Risk Rating (Hepburn Shire Council, 2018).

Although listed in the MEMP as having been produced, the MFMP is not available on the Hepburn Shire Council web site.

6. Bushfire hazard landscape assessment

One of the bushfire hazard identification and assessment strategies in Clause 13.02-1S, is to use the best available science to identify the hazard posed by vegetation, topographic and climatic conditions (Hepburn Planning Scheme, 2018a). The basis for the hazard assessment should be:

- *'Landscape conditions - meaning the conditions in the landscape within 20 kilometres and potentially up to 75 kilometres from a site;*
- *Local conditions - meaning conditions in the area within approximately 1 kilometre from a site;*
- *Neighbourhood conditions - meaning conditions in the area within 400 metres of a site; and,*
- *The site for the development'* (Hepburn Planning Scheme, 2018a).

This section includes a bushfire assessment to describe the landscape conditions, local conditions and neighbourhood conditions. The assessment of the site is presented in Section 7 in accordance with AS 3959-2018 *Construction of buildings in bushfire prone areas*, which requires a site assessment of the vegetation and topography up to 100m around a building or site, for the purposes of determining the applicable BAL construction standard (Standards Australia, 2020).

6.1. Landscape conditions

6.1.1. Broader landscape hazard

As required by the Bushfire hazard identification and assessment at Clause 13.02-S, bushfire hazard has been considered at the landscape scale (up to 20km of the site).

Daylesford is located in an inherently flammable landscape, surrounded by large areas of forest extending from Maldon and Castlemaine, more than 30km to the north of Daylesford, to the outskirts of Bacchus Marsh approximately 40km to the southeast and to Mount Macedon more than 40km to the east.

Topography under much of the forest is complex, with some steep slopes.

Beyond the forest are large tracts of dry land farming susceptible to fast moving grass fires under elevated fire weather conditions.

There is potential for a large, landscape scale bushfire to develop in the hilly, forested terrain to the north or south of Daylesford, and approach the township under the influence of a north or north-westerly wind or a south-westerly following the passage of a cold front. These are the typical directions of approach of bushfire under Severe or higher fire danger ratings in Victoria (Long, 2006).

The area around Daylesford has a significant recent bushfire history, including the 2009 bushfire to the south of the town, and several smaller fires in the immediate surrounds since 2000. Further afield, large fires have occurred in the Wombat State Forest east of Blackwood and to the west around Creswick (see Map 1).

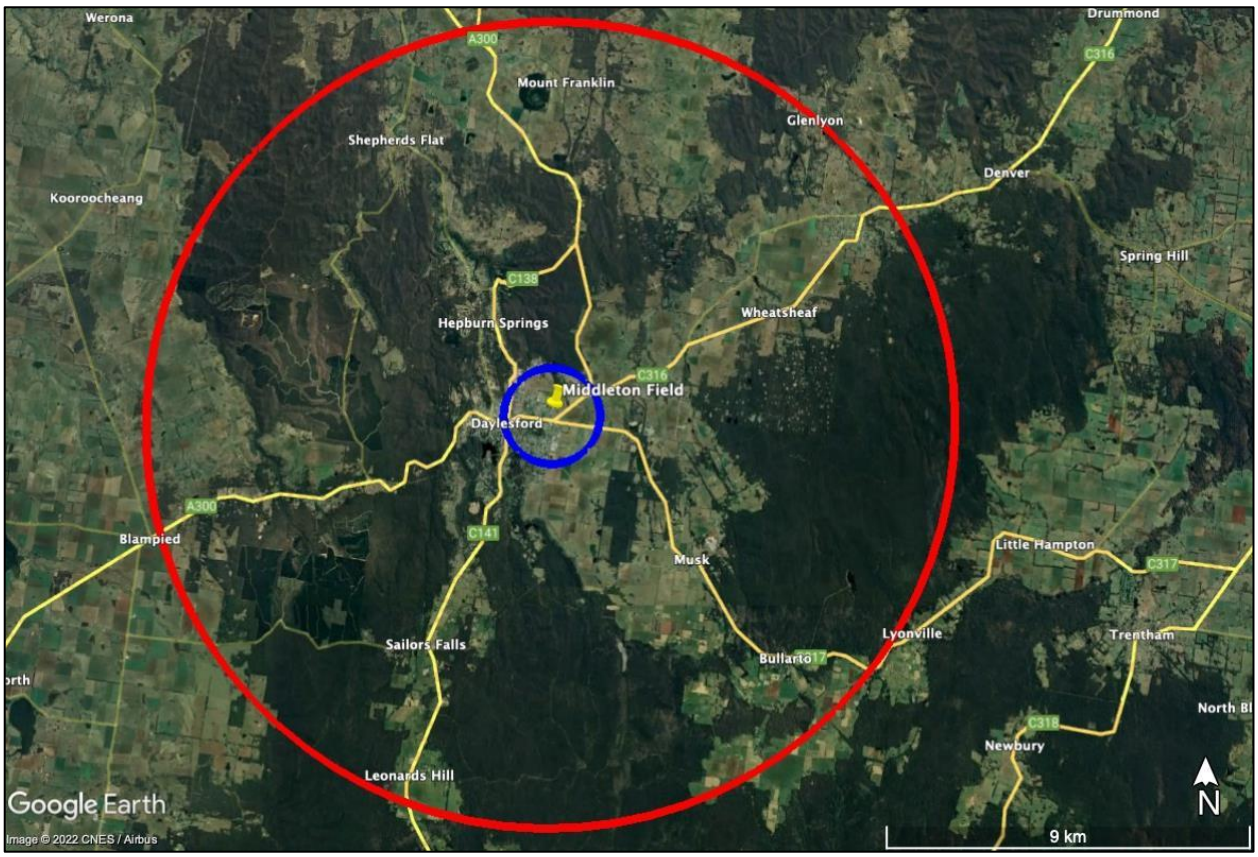


Figure 2 – Location of Middleton Field, Daylesford (site indicated by yellow pin, 1km buffer in blue outline, 10km buffer in red outline (Google Earth imagery 8/9/2021)).

6.1.2.Fire weather

The recently introduced Australian Fire Danger Rating System establishes four fire danger rating categories and a numerical Fire Behaviour Index (FBI) that applies to all fuel types across the country. The Victorian planning and building systems, however, still use the previous Forest Fire Danger Index (FFDI) and the Grassland Fire Danger Index (GFDI) to represent the level of bushfire threat based on weather (and fuel) conditions. An FFDI 100/GFDI 130 (equivalent to a Catastrophic fire danger rating under the new system) is applied in non-alpine areas of Victoria by the building system, to establish building setback distances from classified vegetation in accordance with AS 3959-2018. The potential fire behaviour and impact for Grassland under a Catastrophic fire danger rating is summarised in Table 1.

The new AFDRS and FBIs do not correlate directly with the FFDI/GFFDI indices that are still applied in the planning and building system. However, the benchmark FFDI 100 used to represent a 'one size fits all' model of extreme fire weather conditions (and the threshold for the previous ‘Code Red’ FDR), can be considered analogous to the new FBI 100 ‘Catastrophic’ FDR. Note that these extreme

conditions have been exceeded during some significant fire events, including in Victoria on 'Black Saturday' 2009. Therefore, it is important to note that this is not necessarily the *worst-case* conditions for any location, including the study area.

In southern Australia, since the 1950s there has been an increase in the length of the fire weather season and an increase in extreme fire weather. It is projected that there will be further increase in the number of dangerous fire weather days and a longer fire season for southern and eastern Australia (CSIRO/BOM, 2020). There is a 'high confidence' that climate change will result in a harsher fire weather climate for the Murray Basin sub-region that the study area is in, with 'high' or 'very high' confidence that there will be more hot days and warm spells and less rainfall (CSIRO/BMO, 2021).

Currently the CFA and DELWP have no published policy on FFDI/GFDI recurrence intervals. There is, therefore, no compelling rationale for applying a different FFDI/GFDI from the 'default' FFDI 100/GFDI 130 threshold currently used throughout non-Alpine areas of Victoria in the planning and building system.

Table 1 - Fire Danger Ratings (Source: Victoria State Government; BoM 2022).

Forest Behaviour Index	Fire Danger Rating (FDR)	Fire Behaviour	Action
>=100	Catastrophic	If a fire starts and takes hold, lives are likely to be lost.	○ These are the most dangerous conditions for a fire. ○ Your life may depend on the decisions on you make, even before there is a fire. ○ For your survival, do not be in bushfire risk areas. ○ Stay safe by going to a safer location early in the morning or the night before. ○ If a fire starts and takes hold, lives and properties are likely to be lost. ○ Homes cannot withstand fires in these conditions. You may not be able to leave and help may not be available.
50-99	Extreme	Fires will spread quickly and be extremely dangerous.	○ These are dangerous fire conditions. ○ Check your bushfire plan and that your property is fire ready. ○ If a fire starts, take immediate action. If you and your property are not prepared to the highest level, go to a safer location well before the fire impacts. ○ Reconsider travel through bushfire risk areas. ○ Expect hot, dry and windy conditions. ○ Leaving bushfire risk areas early in the day is your safest option.
24-49	High	Fires can be dangerous.	○ There is a heightened risk. Be alert for fires in your area. ○ Decide what you will do if a fire starts. ○ If a fire starts, your life and property may be at risk. The safest option is to avoid bushfire risk areas.
12-23	Moderate	Most fires can be controlled.	○ Stay up to date and be ready to act if there is a fire.

Map 1 – Bushfire hazard landscape assessment.

6.2. Local and neighbourhood conditions

As required by the Bushfire hazard identification and assessment strategies at Clause 13.02-1S, bushfire hazard has been considered at the local (within 1km) and neighbourhood (within 400m) scales. They are dealt with together as the nature of the hazard is consistent at the two scales.

The forest comes close to the western and southern edges of the town and borders the linear development of Hepburn Springs to the north. To the east, the town is abutted by grassland.

Middleton Field is an expansion of the built township area of Daylesford, and is zoned for residential use. The site is exposed to a Grassland hazard in the paddocks to the north-east but has no direct exposure to higher hazard Forest.

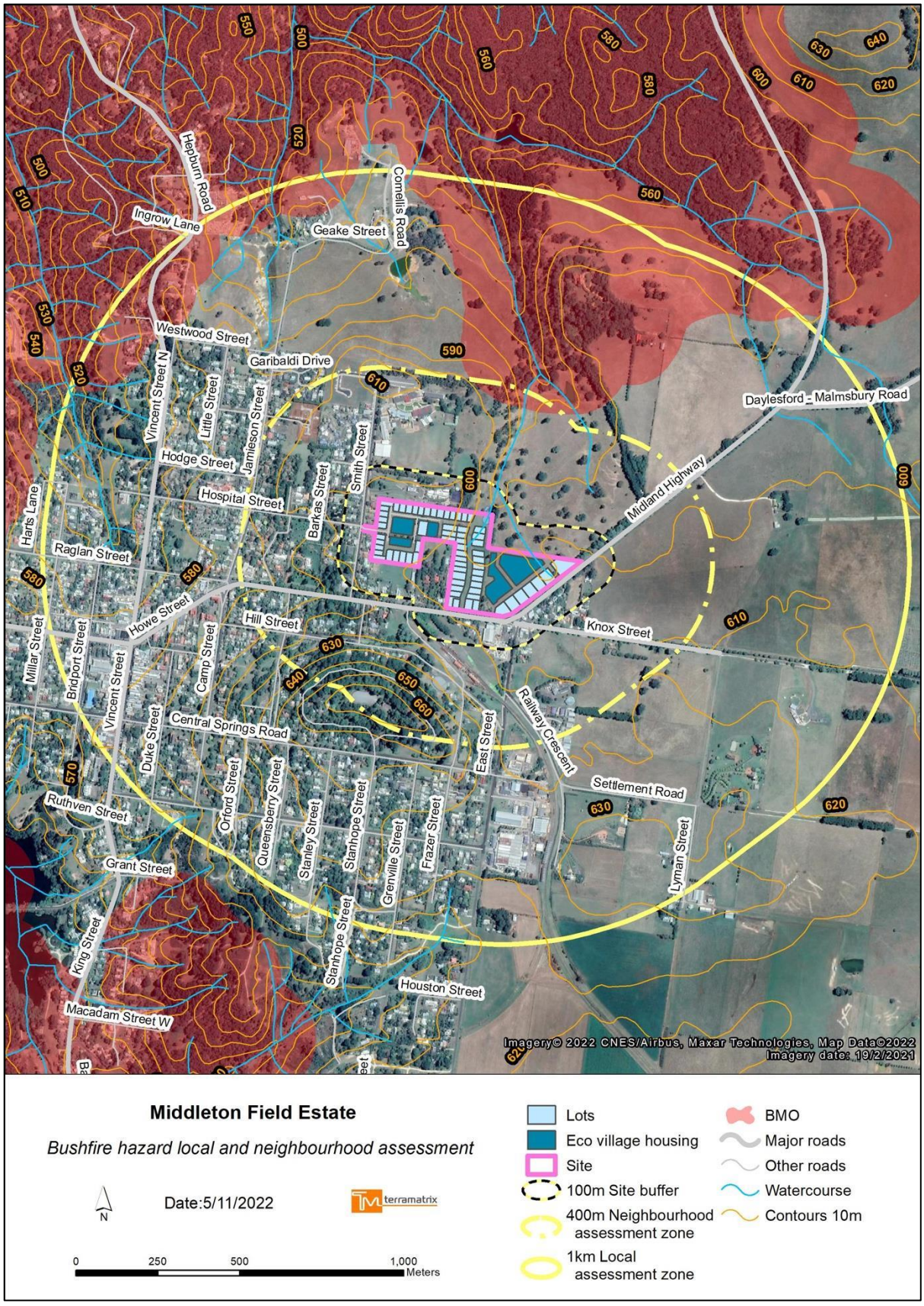
There will be easy egress from the site to the reliably low threat township area immediately adjacent, including the designated Neighbourhood Safer Place west of Camp Street.

To assist in defining landscape risk, four 'broader landscape types', representing different risk levels, are described in *Planning Permit Applications Bushfire Management Overlay* (DELWP, 2017). The typologies are useful descriptors of the risk beyond the site level and are intended to streamline decision-making and support more consistent decision-making based on the landscape risk. The four types range from low risk landscapes where there is little hazardous vegetation beyond 150m of the site and extreme bushfire behaviour is not credible, to extreme risk landscapes with limited or no evacuation options.

It is considered that whilst at a landscape scale Daylesford, as a whole, sits within Broader Landscape Type 3 (see Table 2), at a neighbourhood level Middleton Field fits Broader Landscape Type 2. This means that although an established bushfire could approach Daylesford from multiple directions, Middleton Field is on the edge of the township area and can only be credibly impacted from the north, and by a grassfire rather than a forest fire.

Table 2 - Landscape risk typologies (from DELWP, 2017).

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.
I N C R E A S I N G R I S K →			



Map 2 – Bushfire hazard local and neighbourhood assessment.

7. Bushfire hazard site assessment

7.1. Vegetation

Vegetation within a 100m BAL assessment zone around the site has been classified in accordance with the AS 3959-2018 methodology. Classified vegetation is vegetation that is deemed hazardous from a bushfire perspective.

The classification system is not directly analogous to Ecological Vegetation Classes (EVCs) but uses a generalised description of vegetation based on the AUSLIG (Australian Natural Resources Atlas: No. 7 - Native Vegetation) classification system. The classification is largely based on the structural characteristics of the vegetation at maturity, but the key determinant should be the likely fire behaviour that it will generate.

7.1.1.Grassland

Pasture to the north-east of Middleton Field has been classified as Grassland (see Map 3). Grassland is defined as all forms of vegetation (except Tussock Moorlands) including situations with shrubs and trees, if overstorey foliage cover is less than 10%. Includes pasture and cropland (Standards Australia, 2020).

Grassland vegetation is considered hazardous, and therefore classifiable, when it is not managed in a minimal fuel condition. Minimal fuel condition means there is insufficient fuel available to significantly increase the severity of the bushfire attack (e.g. short-cropped grass, to a nominal height of 100 mm) (Standards Australia, 2020).

Figure 3 – Looking east from 17 Smith Street to the Grassland in the paddock beyond.

7.1.2.Excluded vegetation and non-vegetated areas

Areas of low threat vegetation and non-vegetated areas can be excluded from classification in accordance with Section 2.2.3.2 of AS 3959-2018, if they meet one or more of the following criteria:

(a) 'Vegetation of any type that is more than 100m from the site.
(b) Single areas of vegetation less than 1 ha in area and not within 100m of other areas of vegetation being classified vegetation.
(c) Multiple areas of vegetation less than 0.25 ha in area and not within 20 m of the site, or each other, or of other areas of vegetation being classified vegetation.
(d) Strips of vegetation less than 20 m in width (measured perpendicular to the elevation exposed to the strip of vegetation) regardless of length and not within 20 m of the site or each other, or other areas of vegetation being classified vegetation.
(e) Non-vegetated areas, that is, areas permanently cleared of vegetation, including waterways, exposed beaches, roads, footpaths, buildings and rocky outcrops.
(f) Vegetation regarded as low threat due to factors such as flammability, moisture content or fuel load. This includes grassland managed in a minimal fuel condition[6], mangroves and other saline wetlands, maintained lawns, golf courses (such as playing areas and fairways), maintained public reserves and parklands, sporting fields, vineyards, orchards, banana plantations, market gardens (and other non-curing crops), cultivated gardens, commercial nurseries, nature strips and windbreaks' (Standards Australia, 2020).

Areas of low threat vegetation excluded from classification include adjacent residential areas, to the south-west beyond the Midland Highway, on both sides of Raglan Street (including the Daylesford Station area) and along Smith Street to the west of the site. The grounds and sporting facilities of St Michaels Primary School to the north are also low threat (see Map 3).

The buildings, driveways, car parks and the road network within the 100m site assessment zone comprise non-vegetated areas (see Map 3).

[6] Minimal fuel condition means there is insufficient fuel available to significantly increase the severity of the bushfire attack, recognisable as short-cropped grass for example, to a nominal height of 100mm (Standards Australia, 2020).

Figure 4 – Looking south along the western boundary of the site, with low threat residential properties along Smith Street in the right of image.

Figure 5 – Looking east along Raglan Street, south of the site, with low threat residential properties either side.

Figure 6 – Low threat grounds of St Michaels Primary School to the north of the site.

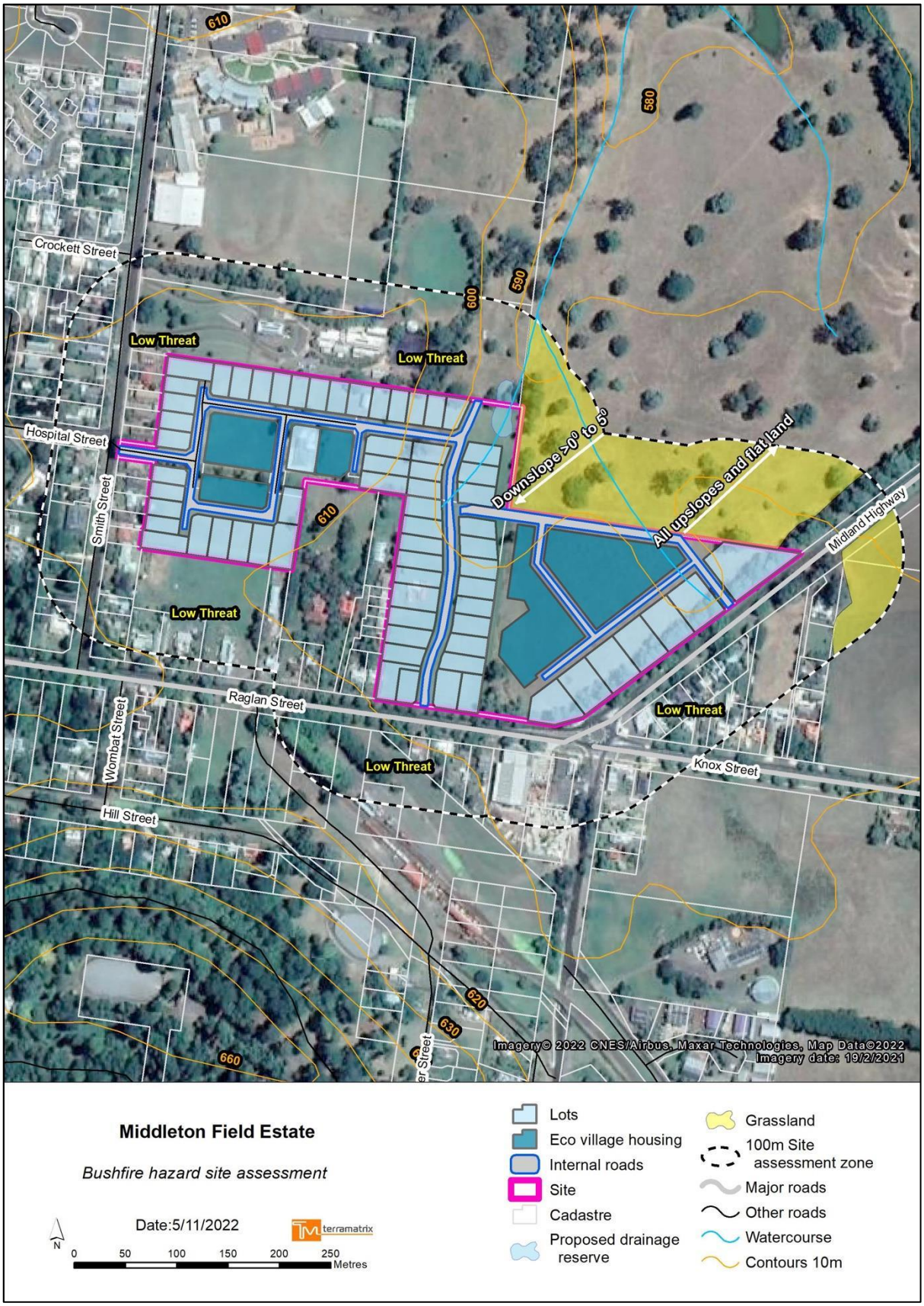
Figure 7 – Looking into the site from Smith Street.

7.2. Topography

The AS 3959-2018 methodology, called up by Clause 13.02-1S *Bushfire Planning* for assessment of bushfire hazard at the site scale, requires that the 'effective slope' be identified to determine the BAL and applicable defendable space or vegetation setback distances. This is the slope of land under the classified vegetation that will most significantly influence the bushfire attack on a building or other asset. Two broad types apply:

- Flat and/or Upslope - land that is flat or on which a bushfire will be burning downhill in relation to the development. Fires burning downhill (i.e. on an upslope) will generally be moving more slowly with a reduced intensity.
- Downslope - land under the classified vegetation on which a bushfire will be burning uphill in relation to the development. As the rate of spread of a bushfire burning on a downslope (i.e. burning uphill towards a development) is significantly influenced by increases in slope, downslopes are grouped into five classes in 5˚ increments from 0˚ up to 20˚.

The topography around the site is benign from a bushfire perspective, with no significant changes in elevation that would exacerbate bushfire behaviour. The classified Grassland to the north-east of the site is either on a gentle 'Downslope >0^{o}-5^{o}' or flat or upslope relative to the site.



Map 3 – Bushfire hazard site assessment.

8. Planning and design response

This section identifies how future development can respond to the bushfire risk, including the requirements of Clause 13.02-1S, published CFA and DELWP guidance and the building regulations applicable to construction in a BPA.

8.1. Analysis of BAL construction standard and setback options

Future dwellings in the residential area can achieve a BAL-12.5 rating by providing low threat setbacks of 22m or 19m in response to the presence of classified Grassland on a 'Downslope of >0°-5°' and 'All upslopes and flat land'.

Building setbacks are measured from the edge of the classified vegetation to the external wall of a building, excluding eaves, roof overhangs and some other building appurtenances[7] (Standards Australia, 2020) (see Figure 8).

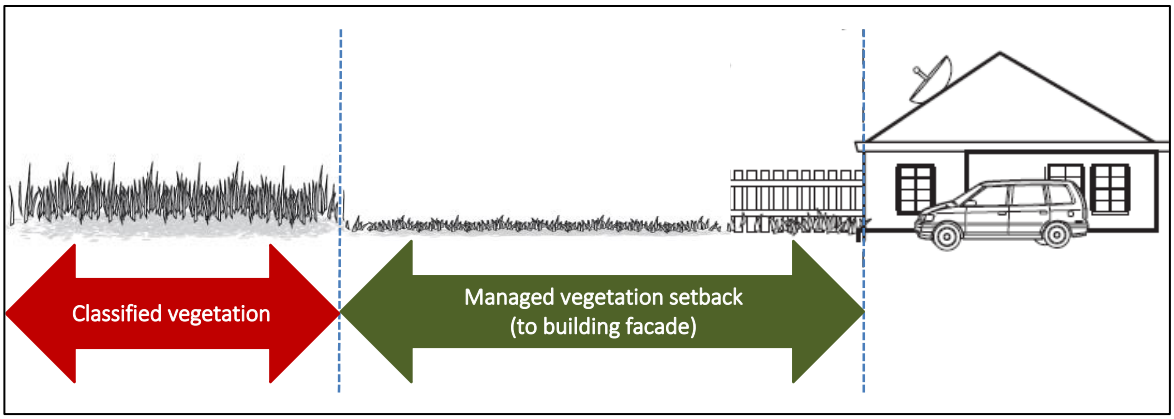
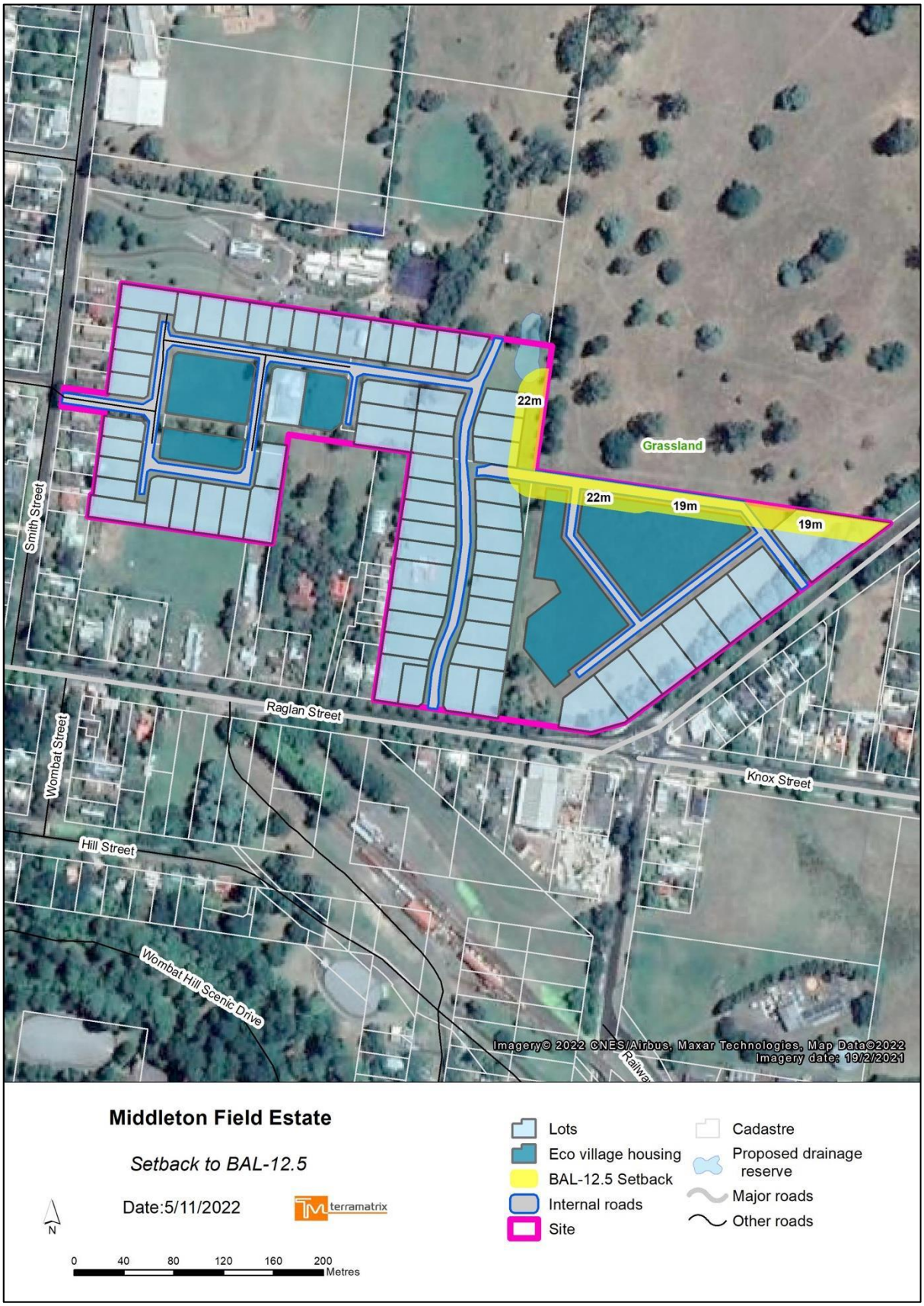


Figure 8 - Example of building-classified vegetation setback (adapted from CFA, 2013).

The BAL-12.5 setbacks are provided through low threat managed public open space east of the lots on 9 Raglan Street and a perimeter road north of the Eco Village at 4719 Midland Highway, supplemented by internal setback of buildings within their lots where required (see Map 4).

[7] The setback distance is measured from the edge of the classified vegetation to the external wall of the building, or for parts of the building that do not have external walls (including carports, verandas, decks, landings, steps and ramps), to the supporting posts or columns. The following parts of a building are excluded:

a) Eaves and roof overhangs.
b) Rainwater and domestic fuel tanks.
c) Chimneys, pipes, cooling or heating appliances or other services.
d) Unroofed pergolas.
e) Sun blinds (Standards Australia, 2020).



Map 4 - Low threat setbacks required to achieve a BAL-12.5 rating.

8.2. Perimeter roads

DELWP guidance for settlement planning at the bushfire interface states that '*Perimeter roads are the preferred design outcome on the settlement interface and where a site abuts or is near a bushfire hazard*' (DELWP, 2020b). A perimeter road will be provided between the Grassland hazard to the north and most of the residential areas of 4719 Midland Highway (see Figure 1 and Map 4).

8.3. Public open space

The DELWP guideline also commends the use of low threat public space to provide setbacks on the edge of settlements (DELWP, 2020b). The residential lots in the north-east corner of 9 Raglan Street will be buffered from the Grassland to their east by a drainage reserve that will be managed in a low threat condition (see Figure 1 and Map 4).

8.4. Water supply for fire fighting

The fire hydrants objective at Clause 56.09-3 (Hepburn Planning Scheme, 2014) will presumably apply to the precinct, which requires the provision of reticulated fire hydrants within 120m of the rear of each lot.

8.5. Access

Access and egress for emergency management vehicles can be provided by the existing and proposed road network, that will access Midland Highway to the east, Raglan Street to the south and Smith Street to the west.

This provides multiple roads leading away from the hazard edge in line with good practice (DELWP, 2020b).

9. Clause 13.02-1S Bushfire Planning

The applicable strategies at Clause 13.02-1S are detailed in the following sub-sections, and a summary response is provided about how the proposed development can respond to the strategies.

9.1. Protection of human life strategies

Priority must be given to the protection of human life.

Prioritising the protection of human life over all other policy considerations.

The site will form part of the well-established low threat township area of Daylesford. The site has a relatively low bushfire risk as it is directly exposed only to Grassland, with the nearest area of higher hazard Forest being a narrow strip along Bund Creek approximately 500m to the north-east. The presence of the urban area of Daylesford also shelters the site from an approach of bushfire from the north-west, west and south-west.

Future residents will have easy access to reliably low threat areas within the township area immediately to the west. The town centre of Daylesford, bounded by Camp Street in the east, is a designated Neighbourhood Safer Place. There is easy, safe egress from Middleton Field to the NSP.

There will be no increase in risk to nearby residents or community infrastructure from the proposed development.

Directing population growth and development to low risk locations and ensuring the availability of, and safe access to, areas where human life can be better protected from the effects of bushfire.

The site will form part of the well-established low threat township area of Daylesford. The site has a relatively low bushfire risk as it is directly exposed only to Grassland, with the nearest area of higher hazard Forest being a narrow strip along Bund Creek approximately 500m to the north-east.

There is easy, safe egress from Middleton Field to the NSP in the town centre of Daylesford, to the west of the site.

Reducing the vulnerability of communities to bushfire through consideration of bushfire risk in decision-making at all stages of the planning process.

This report provides the basis for incorporating bushfire risk into decision making associated with planning development of the site.

The fire authority considers that community resilience to bushfire will be strengthened (and hence, presumably, vulnerability to bushfire will be reduced) when a planning proposal demonstrates that Clause 13.02-1S strategies have been applied. The CFA provide principles to respond to Clause 13.02 -1S including that planning decisions should:

- *'Direct development to locations of lower bushfire risk.*

- *Carefully consider development in locations where there is significant bushfire risk that cannot be avoided.*
- *Avoid development in locations of extreme bushfire risk.*
- *Avoid development in areas where planned bushfire protection measures may be incompatible with other environmental objectives'* (CFA, 2015).

It is considered that the development of Middleton Field can appropriately implement the strategies in Clauses 13.02-1S that aim to prioritise protection of human life and will, therefore, meet the CFA strategic planning principles for bushfire.

9.2. Bushfire hazard identification and assessment strategies

The bushfire hazard must be identified, and an appropriate risk assessment be undertaken.

Applying the best available science to identify vegetation, topographic and climatic conditions that create a bushfire hazard.

This report identifies the hazard in accordance with the commonly accepted methodologies of AS 3959-2018 and, as appropriate, additional guidance provided in *Planning Permit Applications Bushfire Management Overlay Technical Guide*[8] (DELWP, 2017).

The type and extent of (hazardous) vegetation within, and up to 1km around, the site has been considered and, within 100m of the buildings, classified into AS 3959-2018 vegetation groups. Classification was based on the anticipated long-term state of the vegetation, aerial imagery, site assessment and published guidance on vegetation assessment for bushfire purposes.

The site assessment and publicly available contour data for the area determined slopes (see Map 3). In relation to climatic conditions and fire weather, the AS 3959-2018 default FFDI 100/GFDI 130 benchmark used in the Victorian planning and building system, has been applied.

Considering the best available information about bushfire hazard including the map of designated bushfire prone areas prepared under the Building Act 1993 or regulations made under that Act.

The extent of BPA coverage has been considered (see Section 4.4) and is shown in Map 2. This is based on the most recent BPA mapping for the area.

Applying the Bushfire Management Overlay in planning schemes to areas where the extent of vegetation can create an extreme bushfire hazard.

No part of the site area is covered by the BMO. The closest BMO area is approximately 300m to the north.

[8] Although the site is not affected by the BMO, DELWP's BMO technical guide provides useful descriptors and guidance for assessing the bushfire risk at the landscape scale, as discussed in Section 5.

Considering and assessing the bushfire hazard on the basis of:

- ***Landscape conditions - meaning the conditions in the landscape within 20 kilometres and potentially up to 75 kilometres from a site;***
- ***Local conditions - meaning conditions in the area within approximately 1 kilometre from a site;***
- ***Neighbourhood conditions - meaning conditions in the area within 400 metres of a site; and***
- ***The site for the development.***

The hazard has been assessed and described at the landscape, local, neighbourhood and site scales (see Section 5).

At the site scale, the assessment follows the AS 3959-2018 methodology applied in a BPA, of classifying vegetation and topography for 100m around the site (see Map 3).

At the broader landscape scale, 5km and 20km radii around the site has been applied (see Section 5).

Consulting with emergency management agencies and the relevant fire authority early in the process to receive their recommendations and implement appropriate bushfire protection measures.

The author is not aware of any consultation that may have occurred with CFA during the planning process for this site. It is anticipated that this report will be the basis of any consultation required.

Ensuring that strategic planning documents, planning scheme amendments, planning permit applications and development plan approvals properly assess bushfire risk and include appropriate bushfire protection measures.

DELWP advisory and practice notes and Clause 13.02-1S specify the general requirements and standards for assessing the risk. These have been applied in this report as appropriate and bushfire protection measures have been identified commensurate with the risk.

Not approving development where a landowner or proponent has not satisfactorily demonstrated that the relevant policies have been addressed, performance measures satisfied or bushfire protection measures can be adequately implemented.

If the objectives and strategies of Clause 13.02-1S are successfully implemented, as discussed in this report, then the risk can be deemed to be acceptably mitigated such that development can proceed.

The CFA specify that areas where development should not proceed could include:

- *'Isolated settlements where the size and/or configuration of the settlements will be insufficient to modify fire behaviour and provide protection from a bushfire.*
- *Where bushfire protection measures will not reduce the risk to an acceptable level.*
- *Where evacuation (access) is severely restricted.*

- *Where the extent and potential impact of required bushfire protection measures may be incompatible with other environmental objectives or issues, e.g. vegetation protection, land subject to erosion or landslip'* (CFA, 2015).

None of these criteria or characteristics are applicable to the site.

9.3. Settlement planning strategies

The proposed development of Middleton Field does not comprise 'Settlement planning' and, hence, these strategies are listed here but no response is provided. But is should be noted that future buildings on all lots can achieve a BAL-12.5 rating if appropriately sited.

Directing population growth and development to low risk locations, being those locations assessed as having a radiant heat flux of less than 12.5 kilowatts/square metre under AS 3959-2009 Construction of Buildings in Bushfire-prone Areas (Standards Australia, 2009).

Ensuring the availability of, and safe access to, areas assessed as a BAL-LOW rating under AS 3959-2009 Construction of Buildings in Bushfire-prone Areas (Standards Australia, 2009) where human life can be better protected from the effects of bushfire.

Ensuring the bushfire risk to existing and future residents, property and community infrastructure will not increase as a result of future land use and development.

Achieving no net increase in risk to existing and future residents, property and community infrastructure, through the implementation of bushfire protection measures and where possible reduce bushfire risk overall.

Assessing and addressing the bushfire hazard posed to the settlement and the likely bushfire behaviour it will produce at a landscape, settlement, local, neighbourhood and site scale, including the potential for neighbourhood-scale destruction.

Assessing alternative low risk locations for settlement growth on a regional, municipal, settlement, local and neighbourhood basis.

Not approving any strategic planning document, local planning policy, or planning scheme amendment that will result in the introduction or intensification of development in an area that has, or will on completion have, more than a BAL-12.5 rating under AS 3959-2009.

9.4. Areas of high biodiversity conservation value

Ensure settlement growth and development approvals can implement bushfire protection measures without unacceptable biodiversity impacts by discouraging settlement growth and development in bushfire affected areas that are of high biodiversity conservation value.

The site appears to have a history of disturbance and is not covered by a Vegetation Protection Overlay. No bushfire protection measures are proposed that would have additional biodiversity impacts.

9.5. Use and development control in a Bushfire Prone Area

Clause 13.02-1S requires that '*In a bushfire prone area designated in accordance with regulations made under the Building Act 1993, bushfire risk should be considered when assessing planning applications for the following uses and development:*

- *Subdivisions of more than 10 lots.*
- *Accommodation.*
- *Child care centre.*
- *Education centre.*
- *Emergency services facility.*
- *Hospital.*
- *Indoor recreation facility.*
- *Major sports and recreation facility.*
- *Place of assembly.*
- *Any application for development that will result in people congregating in large numbers'* (Hepburn Planning Scheme, 2018a).

It further states that:

'When assessing a planning permit application for the above uses and development:

- *Consider the risk of bushfire to people, property and community infrastructure.*
- *Require the implementation of appropriate bushfire protection measures to address the identified bushfire risk.*
- *Ensure new development can implement bushfire protection measures without unacceptable biodiversity impacts'* (Hepburn Planning Scheme, 2018a).

The residential development of Middleton Field at 17 Smith Street, 9 Raglan Street and 4719 Midland Highway responds to this strategy and achieves acceptable safety by:

- Buildings being sufficiently setback from classified vegetation to enable BAL-12.5 construction;
- Providing a perimeter road along part of the northern boundary;
- Providing multiple points of access and egress to nearby lower threat areas;
- Adequate access and egress for emergency management vehicles being provided by the internal road network, with links to Midland Highway, Raglan Street and Smith Street; and
- A reliable water supply for fire fighting being provided via a reticulated hydrant system.

10. Conclusion

This report has assessed the bushfire hazard in and around 17 Smith Street, 9 Raglan Street and 4719 Midland Highway, Daylesford in accordance with Clauses 13.02-1S in the Hepburn Planning Scheme, the AS 3959-2018 methodology and additional guidance regarding landscape risk provided in the DELWP technical guide *Planning Permit Applications Bushfire Management Overlay* (DELWP, 2017).

The site is in a designated BPA; but no part is covered by the BMO.

The type and extent of (hazardous) vegetation up to 100m around the site has been identified and classified into AS 3959-2018 vegetation groups, based on aerial imagery and site investigation. The classification is based on the current state of the vegetation and identifies that the bushfire hazard is confined to Grassland on gentle slopes to the north-east of the site.

The site will form part of the well-established low threat township area and have easy egress to that part of the town centre designated as an NSP.

Bushfire behaviour can reasonably be expected to be well within AS 3959-2018 presumptions and design parameters. Accordingly, it is considered that the risk can be mitigated to an acceptable level and the development can appropriately prioritise the protection of human life, if dwellings (and any other buildings that require a BAL) are built to a BAL-12.5 construction standard.

Good access and egress for emergency management vehicles and residents, in the event of a bushfire, can be achieved from the proposed road network.

A reliable water supply for fire fighting can be provided by a reticulated hydrant system.

This assessment of the development proposal indicates that bushfire protection measures can be practically applied commensurate to the level of bushfire risk.

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onemilegrid

17 Smith Street, Daylesford

Transport Impact Assessment

220413TIA001D-F

21 November 2022

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DOCUMENT INFORMATION

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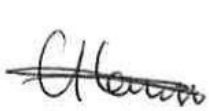
Signature		**Signature**	

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APPENDICES

APPENDIX A SWEPT PATH DIAGRAMS

1 INTRODUCTION

onemile**grid** has been requested by hygge property to undertake a Transport Impact Assessment of the proposed residential development at 17 Smith Street, Daylesford.

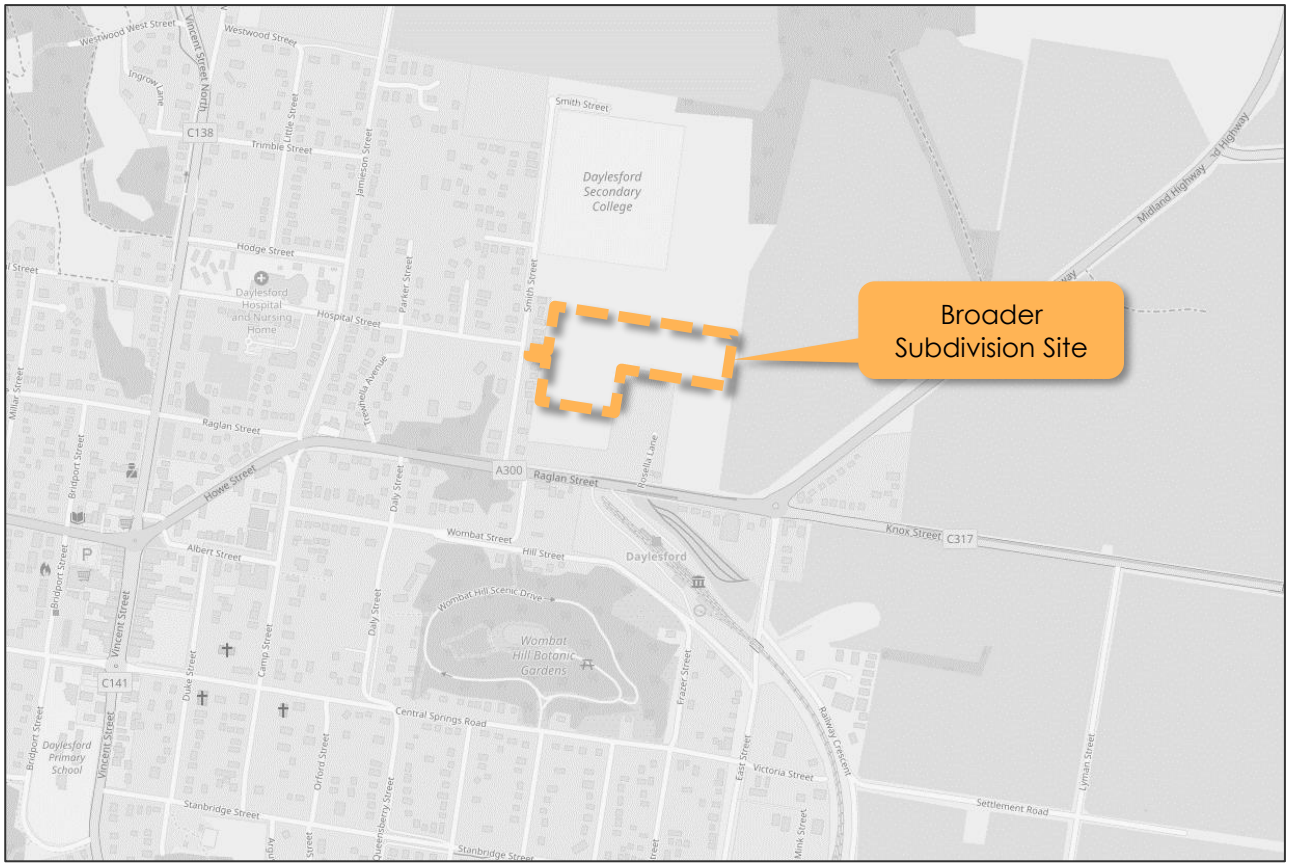
As part of this assessment the subject site has been inspected with due consideration of the development proposal, traffic data has been sourced and relevant background reports have been reviewed.

2 EXISTING CONDITIONS

2.1 Site Location

The subject site is located within part of a larger residential subdivision, at 17 Smith Street, Daylesford, as shown in Figure 1.

Figure 1 Site Location



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The overall site is largely unoccupied, with a single dwelling located within the site accessed via Smith Street to the west.

Land use in the immediate vicinity of the site is residential in nature or farming land.

An aerial view of the subject site is provided in Figure 2.

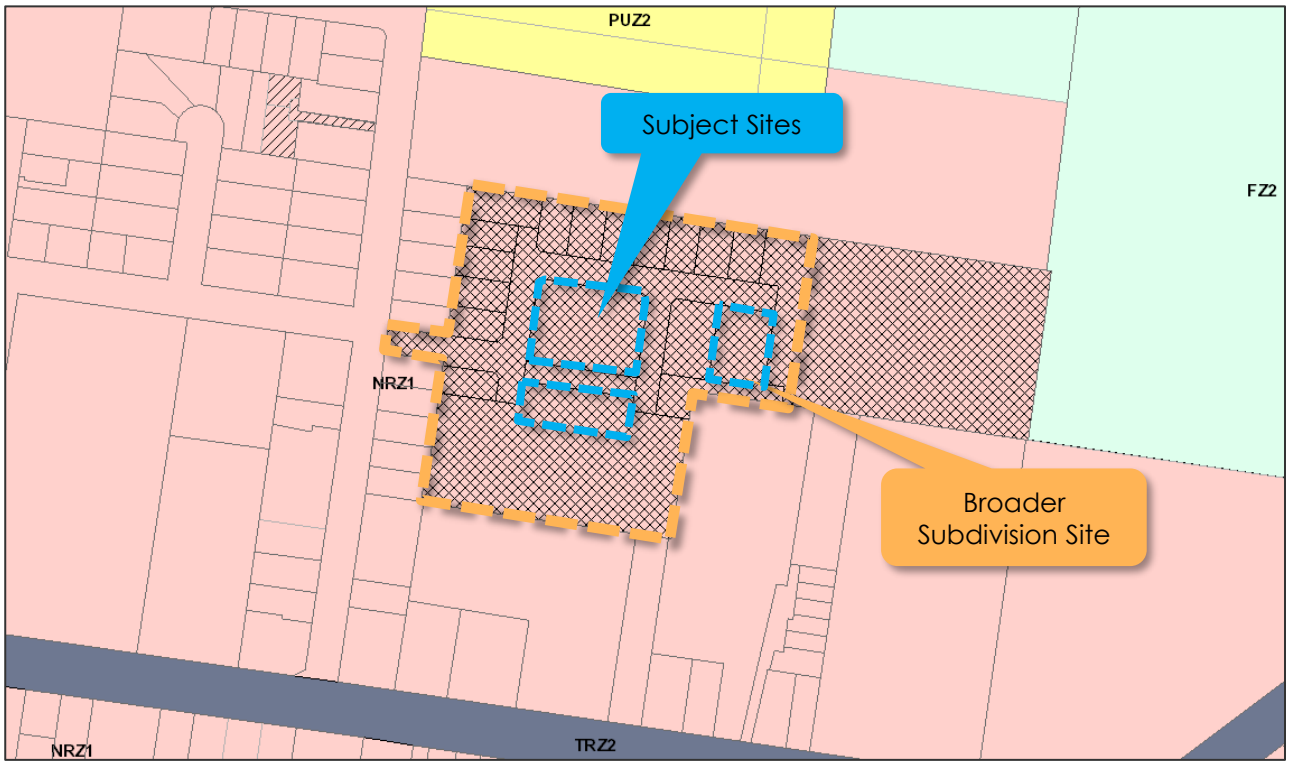
Figure 2 Site Context (20 December 2021)

Copyright Nearmap

2.2 Planning Zones and Overlays

It is shown in Figure 3 that the site is located within a Neighbourhood Residential Zone (NRZ).

Figure 3 Planning Scheme Zones



2.3 Road Network

Smith Street is a local road generally aligned north-south, running between Raglan Street in the south, and extending approximately 650 metres north. Smith Street provides a single traffic lane in each direction adjacent to the broader subdivision site.

At the intersection with Raglan Street, the shoulders have been sealed to provide for a passing opportunity for east and west bound traffic should it be required.

2.4 Approved Subdivision Design

A subdivision design for 17 Smith Street has previously been approved across 3 Stages, as shown in Figure 4, Figure 5, and Figure 6. The subdivision designs include lot locations and road reserves, with carriageway specifications provided in more detailed plans not shown below. The approved plans comprise a combined total of 39 lots, 3 superlots, and 3 reserves.

Figure 4 17 Smith Street – Stage 1

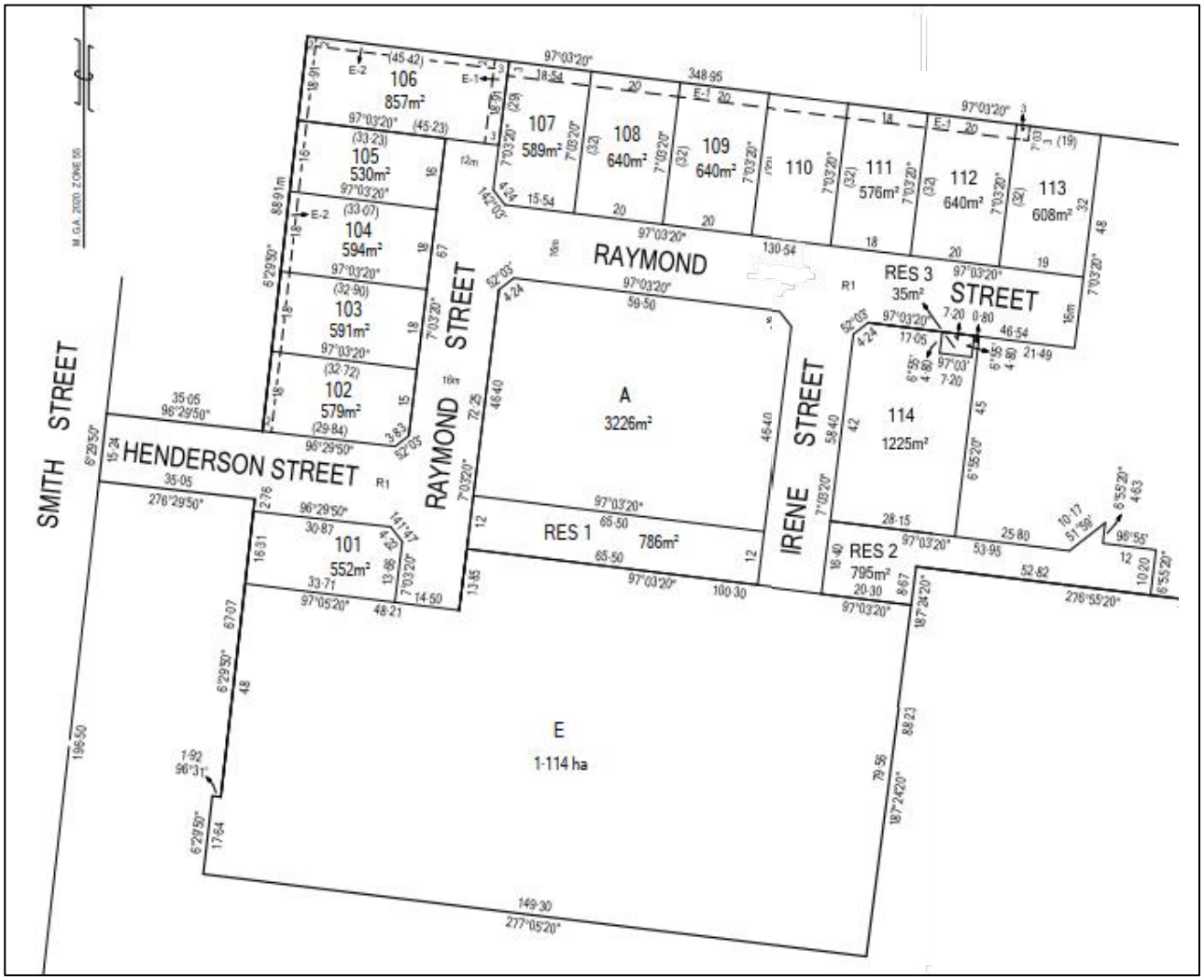


Figure 5 17 Smith Street – Stage 2

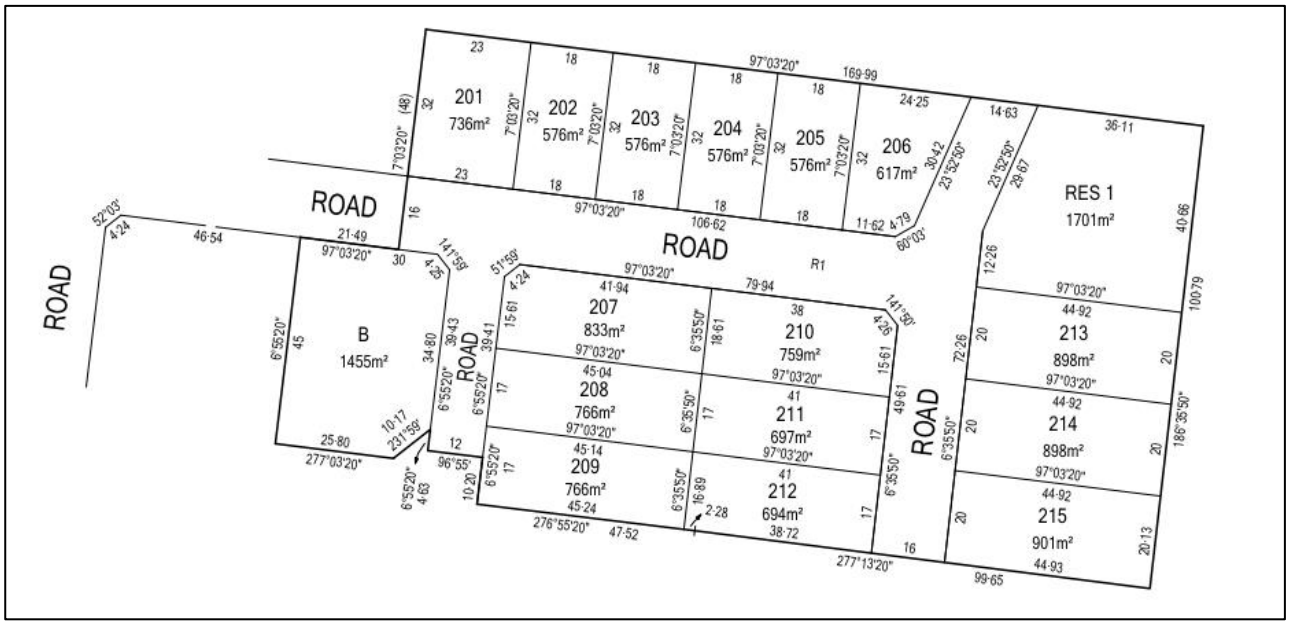
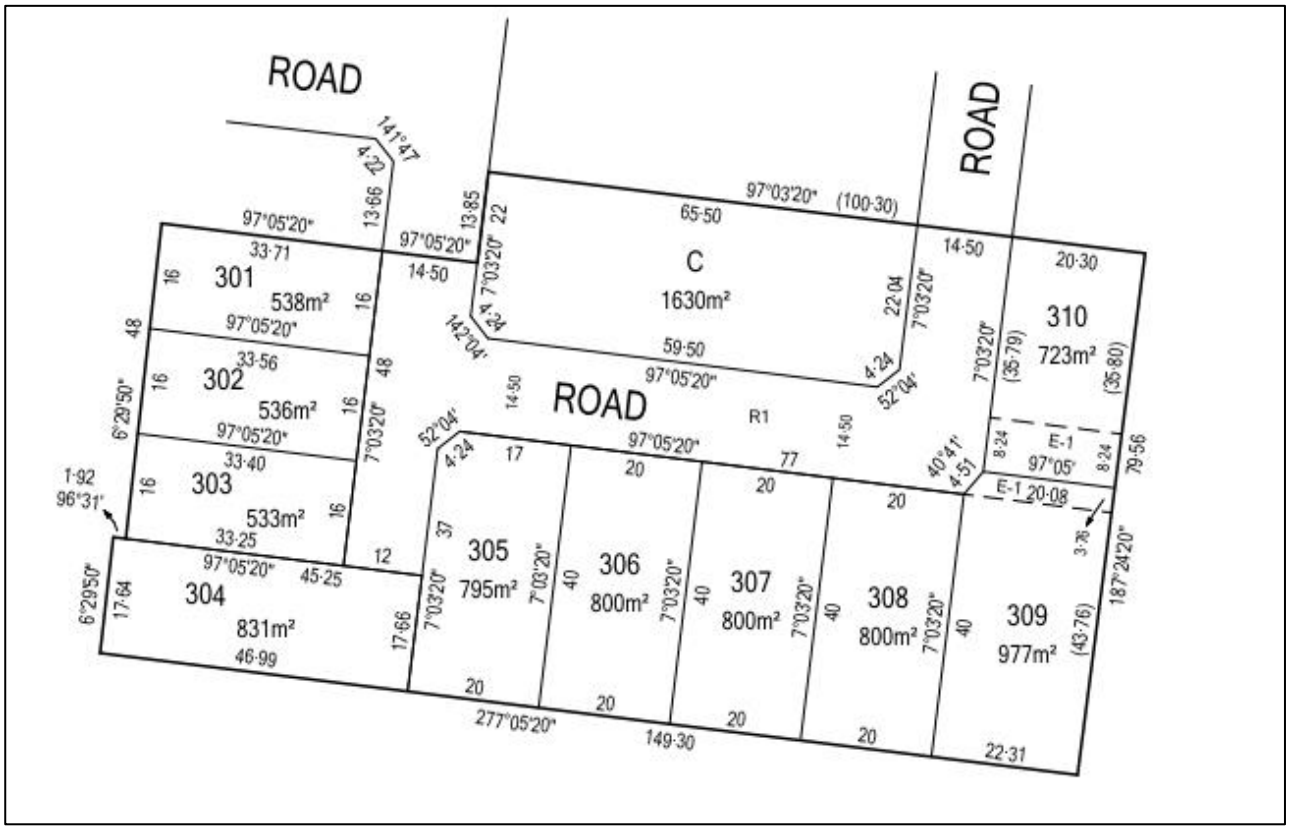


Figure 6 17 Smith Street – Stage 3



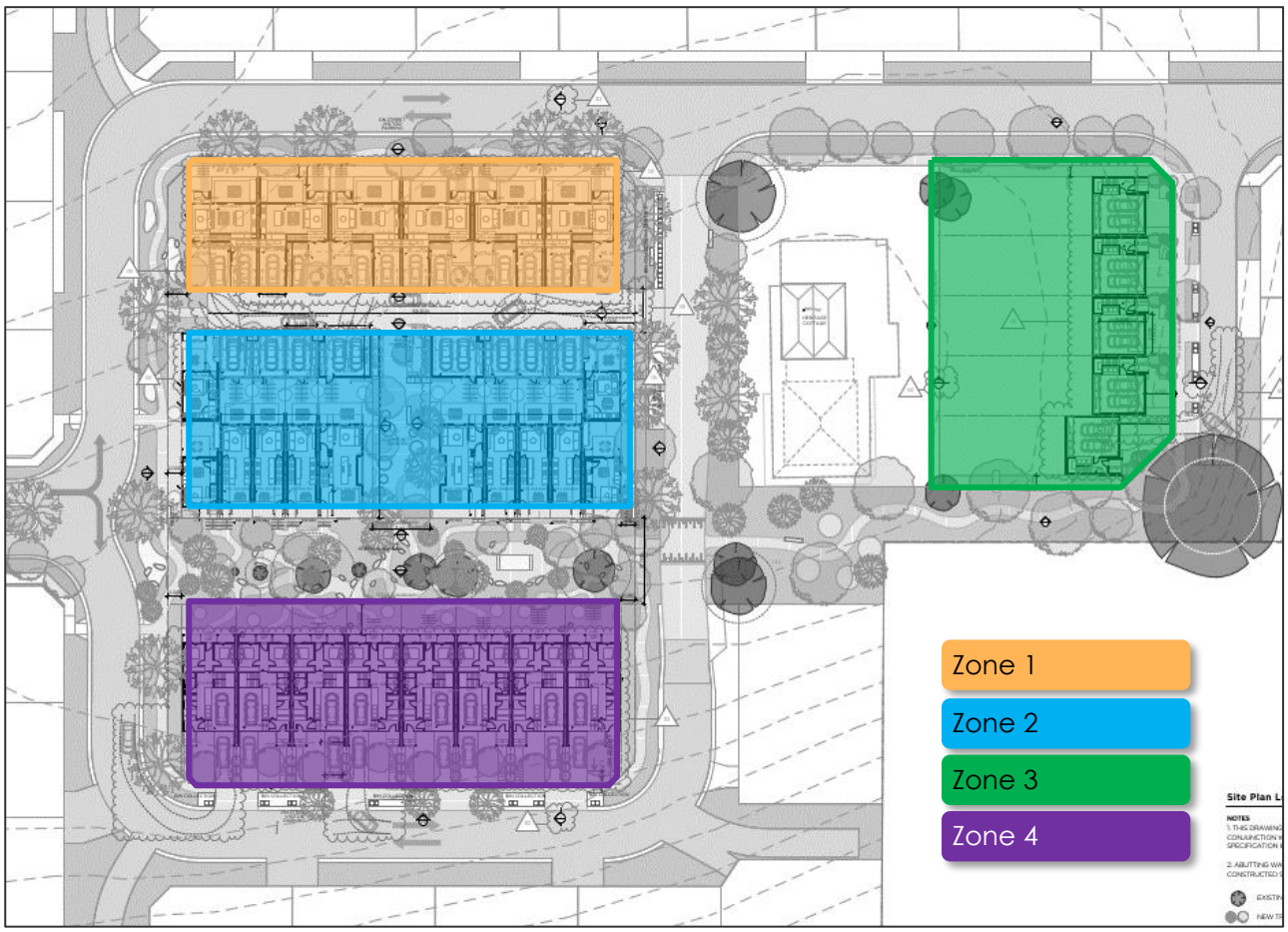
3 DEVELOPMENT PROPOSAL

It is proposed to develop three superlots within the broader subdivision (Superlots A, B and C) for the purposes of a residential development comprising 31 new lots.

A private laneway is proposed between the dwellings located in Zones 1 and 2 to provide rear access to the garages, whilst Zone 3 and Zone 4 are provided with direct and separate access to each lot from the subdivision road network.

The site layout is shown below in Figure 7.

Figure 7 Site Layout



Access is proposed to be provided via the approved road network which has not yet been constructed. Externally, access will be via Smith Street to the west, and a future connection to the east.

4 DESIGN ASSESSMENT

4.1 Hepburn Planning Scheme – Clause 52.06

onemile**grid** has undertaken an assessment of the car parking layout and access for the proposed development with due consideration of the Design Standards detailed within Clause 52.06-9 of the Planning Scheme. A review of those relevant Design Standards is provided in the following section.

4.1.1 Design Standard 1: Accessways

A summary of the assessment for Design Standard 1 is provided in Table 1.

Table 1 Clause 52.06-9 Design Assessment – Design Standard 1

Requirement	*Comments*
Be at least 3 metres wide.	Satisfied – 6 metres wide
Have an internal radius of at least 4 metres at changes of direction or intersection or be at least 4.2 metres wide.	Satisfied – 6 metres wide
Allow vehicles parked in the last space of a dead-end accessway in public car parks to exit in a forward direction with one manoeuvre.	N/A – Private laneway and driveways
Provide at least 2.1 metres headroom beneath overhead obstructions, calculated for a vehicle with a wheel base of 2.8 metres.	Satisfied – A minimum height clearance of 2.2 metres will be provided on entry to garages
If the accessway serves four or more car spaces or connects to a road in a Transport Zone 2 or Transport Zone 3, the accessway must be designed so that cars can exit the site in a forward direction.	Satisfied
Provide a passing area at the entrance at least 6.1 metres wide and 7 metres long if the accessway serves ten or more car parking spaces and is either more than 50 metres long or connects to a road in a Transport Zone 2 or Transport Zone 3.	Satisfied – The laneway is provided with a width of 6.1 metres for the first 7 metres, before reducing to 6 metres.
Have a corner splay or area at least 50 per cent clear of visual obstructions extending at least 2 metres along the frontage road from the edge of an exit lane and 2.5 metres along the exit lane from the frontage, to provide a clear view of pedestrians on the footpath of the frontage road. The area clear of visual obstructions may include an adjacent entry or exit lane where more than one lane is provided, or adjacent landscaped areas, provided the landscaping in those areas is less than 900mm in height.	Generally satisfied – Landscaping and fencing in these areas will be kept below 900 mm height
If an accessway to four or more car parking spaces is from land in a Transport Zone 2 or Transport Zone 3, the access to the car spaces must be at least 6 metres from the road carriageway.	N/A – Does not connect to a Transport Zone

Further to the above, swept paths have been prepared and are attached within Appendix A demonstrating two 99.8th percentile passenger vehicles (B99) simultaneously entering and exiting the site and passing along the laneway.

4.1.2 Design Standard 2: Car Parking Spaces

Standard car spaces have been designed with a length of 5.4 metres a minimum width of 2.4 metres and are accessed from aisles of no less than 5.8 metres in accordance with the Australian Standard for Off-Street Car Parking AS2890.1. It is noted that Design Standard 2 recommends the use of the Planning Scheme dimensions in preference to the Australian Standard however the Australian Standard dimensions still provides for safe and efficient access to car spaces and is considered acceptable.

It acknowledged that the clothes lines shown within Zone 1 represent a very minor obstruction to the door opening area of the car space clearance envelope, though is considered to be acceptable.

All double garages have been proposed with a minimum width of 5.5 metres and length of 6 metres, in accordance with the Planning Scheme.

The Planning Scheme specifies single garages are required to be provided with a length of 6 metres, and a width of 3.5 metres. The single garage dimensions for each Zone are provided with clear dimensions as listed below:

- Zone 1: 5.74 metres long x 3.5 metres wide;
- Zone 2: 6 metres long x 3.46 metres wide; and
- Zone 4: 6 metres long x 3.21 metres wide.

It is noted that all garages are provided with dedicated storage outside of the clear dimensions.

Whilst it is acknowledged that the single garages all provide either a reduced length or width compared to the Planning Scheme dimensions, Clause 52.06-10 of the Planning Scheme outlines a number of factors that the responsible authority must consider when deciding on the suitability of the parking design.

The proposed garages are provided with a minimum internal width of 3.2m, this allows clearance for a 2.6 metre wide parking space and 300mm either side of the space for opening doors, in accordance with Diagram 1 – Clearance to Car Parking Spaces of Clause 52.06 of the Planning Scheme. The proposed garage widths are therefore considered to be appropriate to accommodate vehicles.

The proposed garages provide for a minimum length of 5.74 metres. This provides for a 99.8th percentile passenger vehicle (B99) with clearance of over 250 mm at the front and rear of the vehicle. The proposed garage lengths are therefore considered to be appropriate to accommodate vehicles.

In relation to the minimum garage dimensions, whilst the parking space length is related primarily to the storage of vehicles and useability of the car space, the garage dimensions are considered to be related to both the useability of the space (in allowing for additional length at the front and rear of a car), and also the ability to be able to store additional items (such as bicycles or rubbish bins) within a garage. This is based on the minimum garage dimensions (3.5m wide and 6.0m long for a single garage) being well in excess of the minimum car park dimensions.

In relation to the above, the single garages are all proposed with additional space specifically allocated to storage.

Based on the above, the garages are considered to be appropriately sized to accommodate a vehicle, and with sufficient additional storage area for storage and services.

Further to the above, swept paths have been prepared and are attached within Appendix A demonstrating appropriate access to critical garages and car spaces, including those for lots 1 and 31. The swept paths show no more than one corrective manoeuvre on entry or exit, in accordance with the Australian Standard.

4.1.3 Design Standard 3: Gradients

The garage levels, driveway grades, and car park space grades will be further developed to ensure all levels and grade changes are appropriate. Specifically, changes in gradient will not exceed 1:8, grades through a car space will not exceed 1:16, and crossfall grades between garages in Zones 1 and 2 across the laneway will not exceed 1:16.

4.2 Waste Collection

It is proposed to utilise Hepburn Council's municipal waste collection services to manage the collection and disposal of garbage and recycling, with a private contractor or residents proposed to manage the collection and disposal of additional waste streams not collected by Council.

Refer to the Waste Management Plan for further information.

5 BICYCLE PARKING

The bicycle parking requirements for the subject site are identified in Clause 52.34 of the Hepburn Planning Scheme. The Planning Scheme does not specify bicycle parking provision requirements for dwellings or townhouse style developments; therefore, no bicycle parking is required.

6 CAR PARKING

6.1 Statutory Car Parking Requirements

The car parking requirements for the subject site are identified in Clause 52.06 of the Hepburn Planning Scheme, which specifies the following requirements for the proposed development.

Table 2 Clause 52.06 – Car Parking Requirements

Use	*No/Area*	*Rate*	*Car Parking Measure*	*Total*
Dwelling	10	1	to each one or two bedroom dwelling, plus	10
	21	2	to each three or more bedroom dwelling (with studies or studios that are separate rooms counted as bedrooms), plus	42
	31	1	for visitors to every 5 dwellings for developments of 5 or more dwellings	6
Total				**58**

All two and three bedroom dwellings are provided with car parking in accordance with the above requirements. The four single bedroom dwellings proposed on-site do not include any car parking.

No visitor car parking is proposed on-site.

Based on the above, the proposed development generates a shortfall of ten car parking spaces, including four resident car parking spaces associated with the four single bedroom dwellings, and six visitor parking spaces.

Clause 52.06-7 of the Hepburn Planning Scheme indicates that an application to reduce (including reduce to zero) the requirement for car spaces must be accompanied by a Car Parking Demand Assessment. The Assessment must assess the car parking demand likely to be generated by the proposed development, having consideration to:

- The likelihood of multi-purpose trips within the locality which are likely to be combined with a trip to the land in connection with the proposed use.
- The variation of car parking demand likely to be generated by the proposed use over time.
- The short-stay and long-stay car parking demand likely to be generated by the proposed use.
- The availability of public transport in the locality of the land.
- The convenience of pedestrian and cyclist access to the land.
- The provision of bicycle parking and end of trip facilities for cyclists in the locality of the land.
- The anticipated car ownership rates of likely or proposed visitors to or occupants (residents or employees) of the land.
- Any empirical assessment or case study.

An assessment of the likely parking demands and the appropriateness of reducing the car parking provision below them is set out below.

6.2 Car Parking Demand Assessment

For the purposes of analysis, the car parking requirements identified by the Planning Scheme are considered to represent the actual car parking demands expected to be generated.

Accordingly, a review of the proposed car parking provision is set out below.

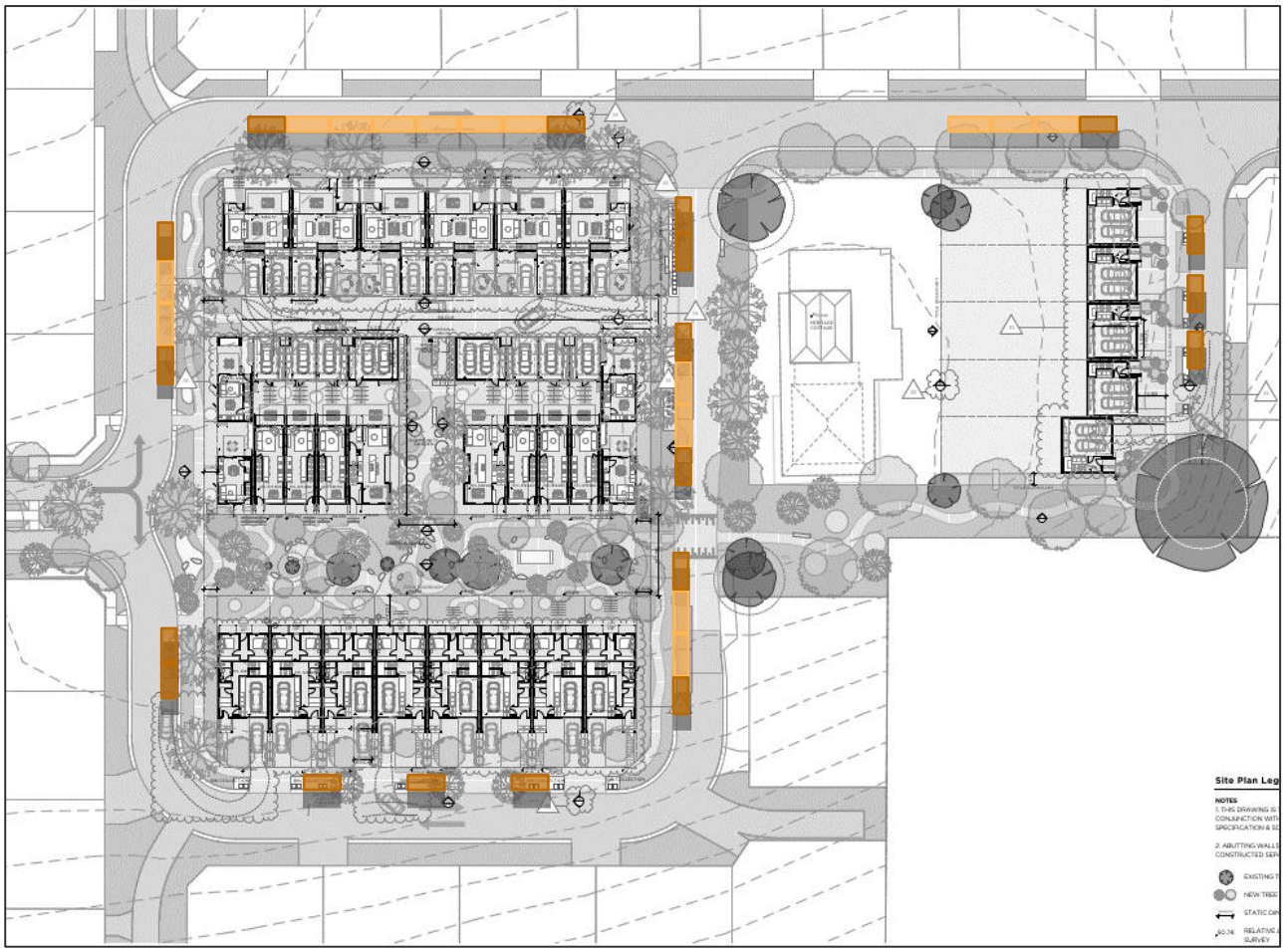
6.3 Review of Car Parking Provision

The site is proposed to operate as an eco-village, and is therefore expected to attract residents who are less likely to own a vehicle as they would opt to use more sustainable transport modes such as cycling or public transport.

Regardless of the above, it is acknowledged that the proposed development may have to accommodate some level of car parking shortfall on-street. As the site is proposed as a residential use in a residential area, it is considered appropriate for the shortfall of up to ten car spaces to be accommodated on-street within the site frontages.

As shown below in Figure 8, the site provides opportunity for up to 34 cars to park on-street along the immediate site frontages.

Figure 8 On-Street Car Parking Supply



It is noted that the above parking spaces include car spaces in front of the bin collection areas (which would typically be used once per week), and parking spaces along the street to the east of Zone 1, 2 and 4, which is has a narrow pavement, and only allows for parking on one side of the street.

Even when removing these spaces from the calculations, there is still opportunity for 21 cars to park on-street along the immediate site frontages, which is well in excess of the shortfall of ten spaces required by the site.

Dwellings in the vicinity of the site which would share the use of the on-street parking are proposed as low density dwellings, with lot sizes ranging between 531 square metres and 977 square metres. These lots are expected to generate little requirement for on-street parking, and are not expected

to be impacted by up to ten resident and visitor vehicles parking on-street in the vicinity as required.

It is understood that the proposed access streets around the subdivision will provided a carriageway of 7.3 metres along all segments where the development fronts dwellings not part of the site. A 7.3 metre carriageway allows for parking on both sides of the road. It is expected that vehicles parking on-street for dwellings in the vicinity would typically park on the same side of the street as the dwelling they are visiting, and therefore would not be impacted by vehicles parking in the spaces indicated in the above figure, as they are on opposite sides of the street

Based on the above, it is considered appropriate for the shortfall of up to ten spaces to be accommodated on-street within the site frontages.

7 TRAFFIC

An approved traffic assessment was prepared for the proposed site by Driscoll Engineering Services Pty Ltd dated 8 October 2021. The assessment considered the whole site addressed 17 Smith Street Daylesford, including 39 standard density lots, and the 3 superlots which make up the subject site. The traffic assessment assumed that the 3 superlots may accommodate a total of 22 medium density dwellings, and applied a rate of 5 trips per dwelling per day for dwellings within the superlots, including 10% during the AM and PM peak periods.

It is proposed to provide 31 lots within the superlots, reflecting an increase of 9 dwellings compared to the previous traffic assessment. This represents an increase of 45 trips per day, including 5 trips during each of the peak hours, equivalent to one additional vehicle trip every 12 minutes during the peak periods, which is very low in traffic engineering terms, and expected to be easily absorbed into the surrounding road network.

The proposed development is therefore expected to have a negligible impact on the surrounding road network when compared to the level of development assessed as part of the broader subdivision.

8 CONCLUSIONS

It is proposed to develop the subject site for the purposes of 31 residential lots.

Considering the analysis presented above, it is concluded that:

- The proposed car parking and access design is considered appropriate;
- The proposed supply of car parking equates to a shortfall of 10 parking spaces, including 4 spaces associated with residents, and 6 parking spaces associated with visitors;
- The shortfall of car parking is considered appropriate based on the following:
  - The site is proposed as an eco-village, and is more likely to attract residents who do not require a car parking space as they would choose to utilise more sustainable transport modes;
  - There are up to 34 on-street parking spaces available on-street along the site frontages which can be used to accommodate the shortfall in car parking;
  - Even discounting the spaces which would prevent a car from parkin on the opposite side of the street, or be unavailable typically once a week during bin collection, there are no fewer than 21 spaces available on-street along the immediate site frontages to accommodate the shortfall; and
  - The low-density dwellings in the vicinity are not expected to be impacted by the shortfall of up to ten spaces parking on-street.
- The proposed development is expected to have a negligible impact on the surrounding road network when compared to the level of development assessed as part of the broader subdivision.

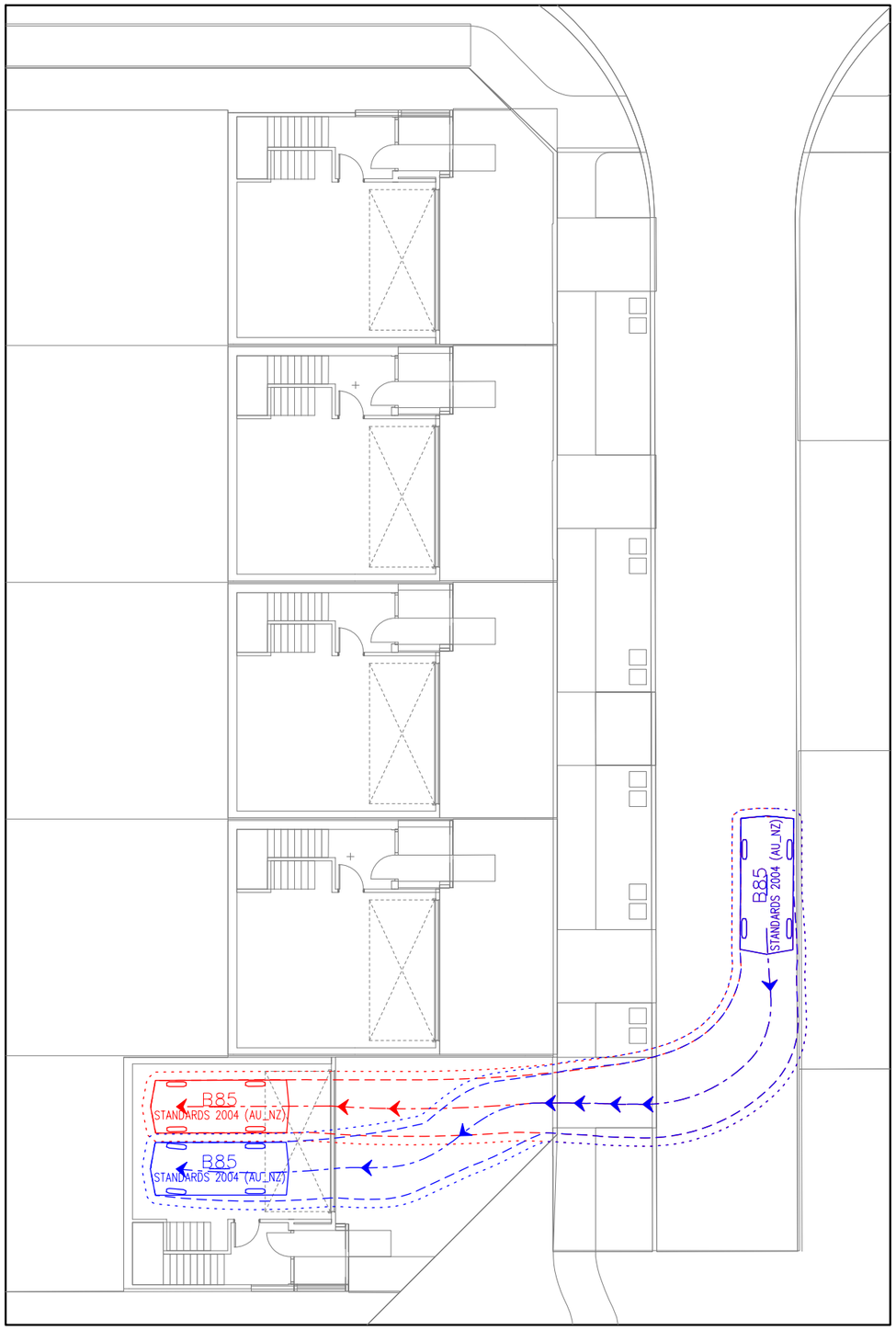
9 RESPONSE TO RFI

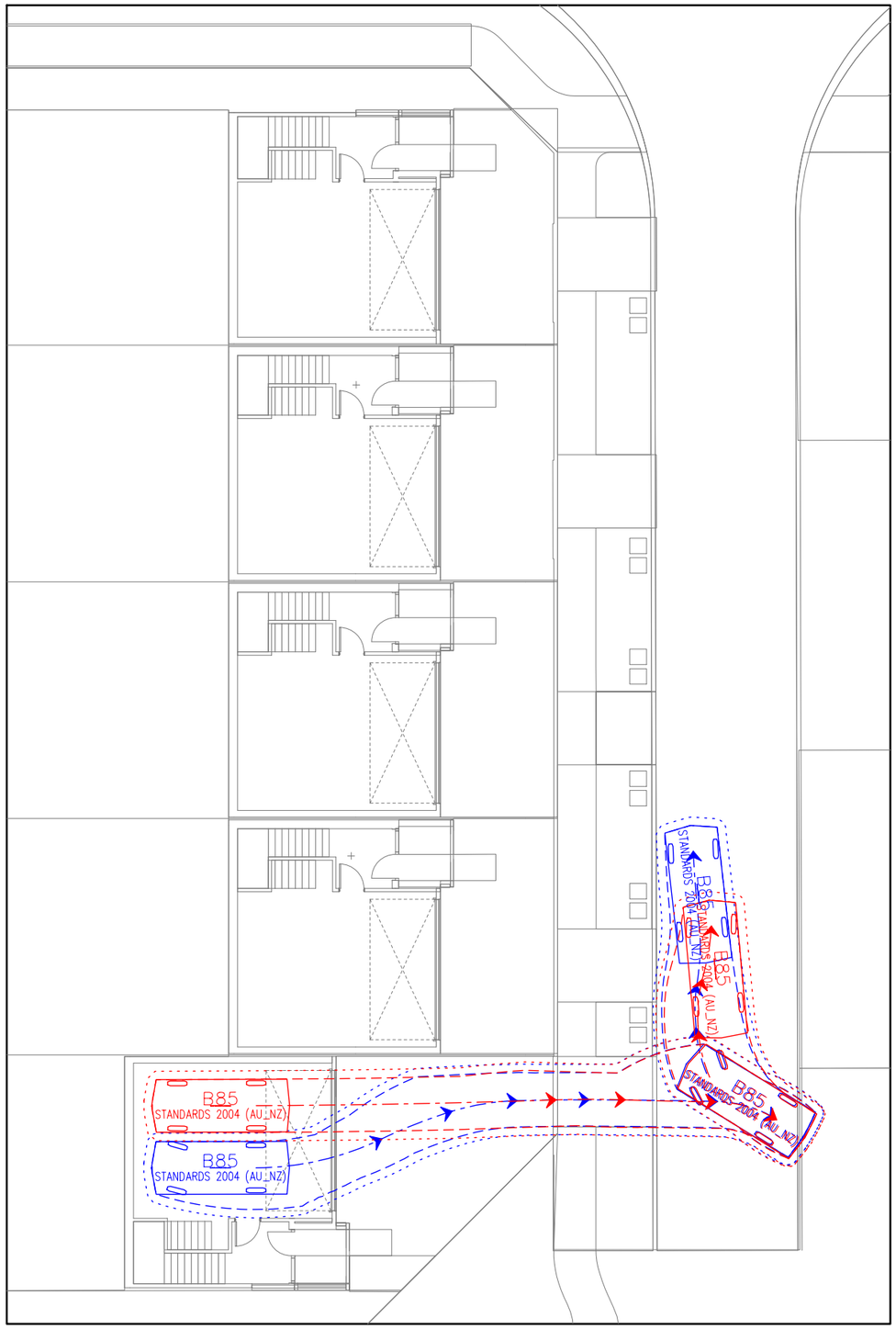
As part of the review of the application, Hepburn Shire Council provided an RFI which regarded the traffic and parking related items on the site. These comments are summarised in Table 3 and have been addressed as part of this amended Transport Impact Assessment.

Table 3 Hepburn Shire Council RFI Response

Item	*Response*
Turning circles particularly showing how cars can exit the private driveway from dwellings to the western end – particularly Lot 1 and the southern lot within Zone 3.	Swept paths have been prepared, and are provided within Appendix A demonstrating appropriate access and egress for critical parking spaces with an 85th percentile passenger vehicle (B85), including those for Lot 1 and Lot 31. The swept paths show no more than one corrective manoeuvre on entry or exit, in accordance with the Australian Standard.
Confirmation of the width of the private driveway which is dimensioned at 6m but the Traffic Impact Assessment in Table 1 on Page 10 notes it has a clear width in excess of 6.1m for the first 7m of the laneway.	The laneway is provided with a width of 6.1 metres for the first 7 metres, before reducing to 6 metres.
Initial Concern: Reduction of the statutory car parking and the availability of on street carparking.	There is considerable car parking available on the direct street frontages to the site to accommodate the shortfall of car parking, and visitor demands. It is not expected that the on-street parking demand for dwellings within the development, and those outside of the development will impact the other, as vehicles will typically park adjacent to their destination, which would be on opposite sides of the street. For further detail, see Section 6.3.

Appendix A Swept Path Diagrams





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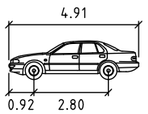

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Steering Angle	: 34.1

SWEPT PATH LEGEND

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--------- 300mm CLEARANCE ENVELOPE SHOWN DOTTED

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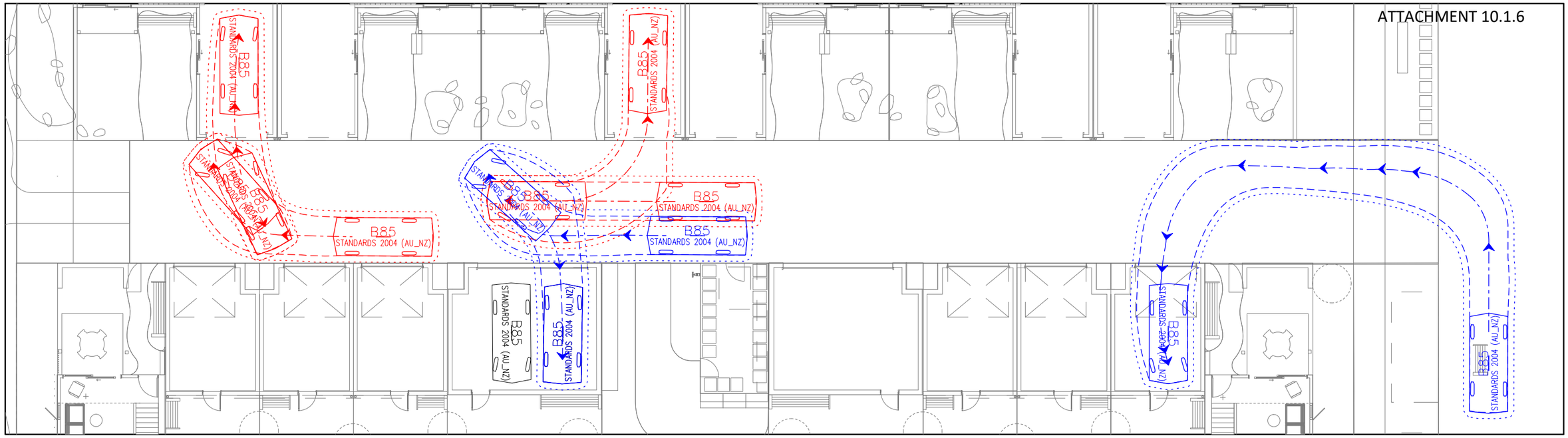
Scale
1:200 @ A3
0 1 2 4

Drawing Title
17 SMITH STREET, DAYLESFORD
SITE VEHICLE ACCESS - B85
SWEPT PATH ANALYSIS

Designed	Approved	Melway Ref
JPB	VG	X921 D12

Project Number	Drawing Number	Revision
220413	SPA102	B

ATTACHMENT 10.1.6



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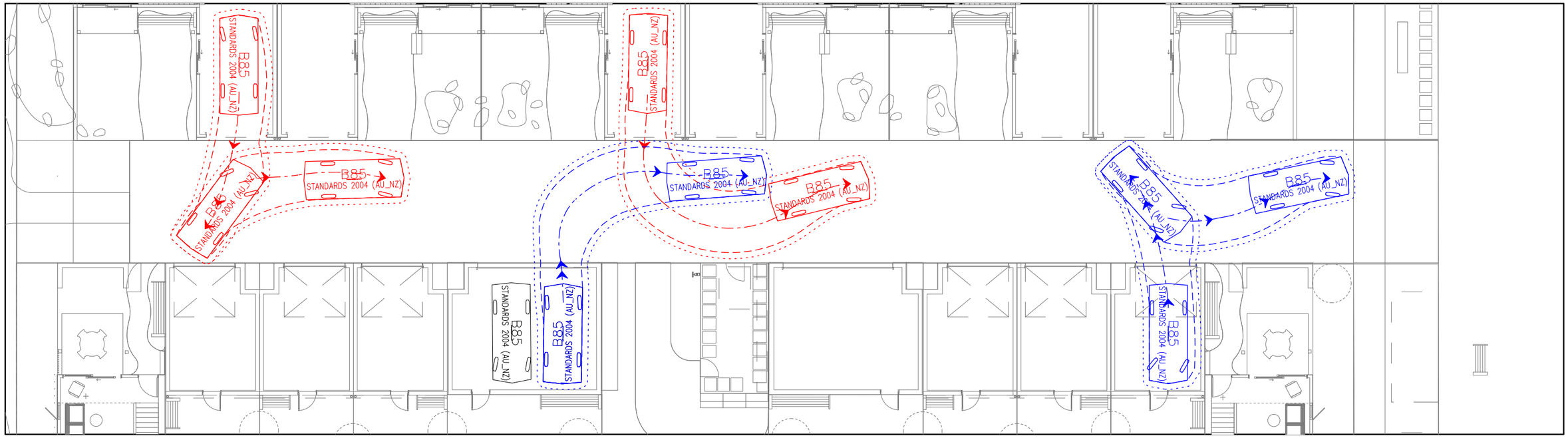

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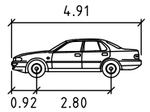

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Steering Angle	: 34.1

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Drawing Title
17 SMITH STREET, DAYLESFORD
SITE VEHICLE ACCESS - B85
SWEPT PATH ANALYSIS

Designed	Approved	Melway Ref
JPB	VG	X921 D12

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Project Number	Drawing Number	Revision
220413	SPA101	B

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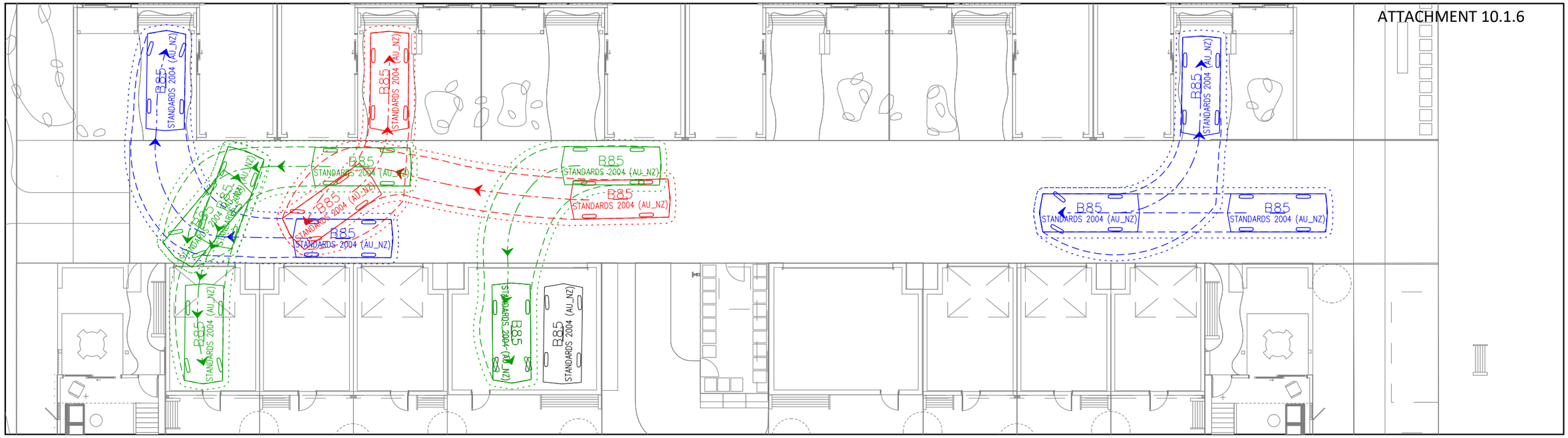

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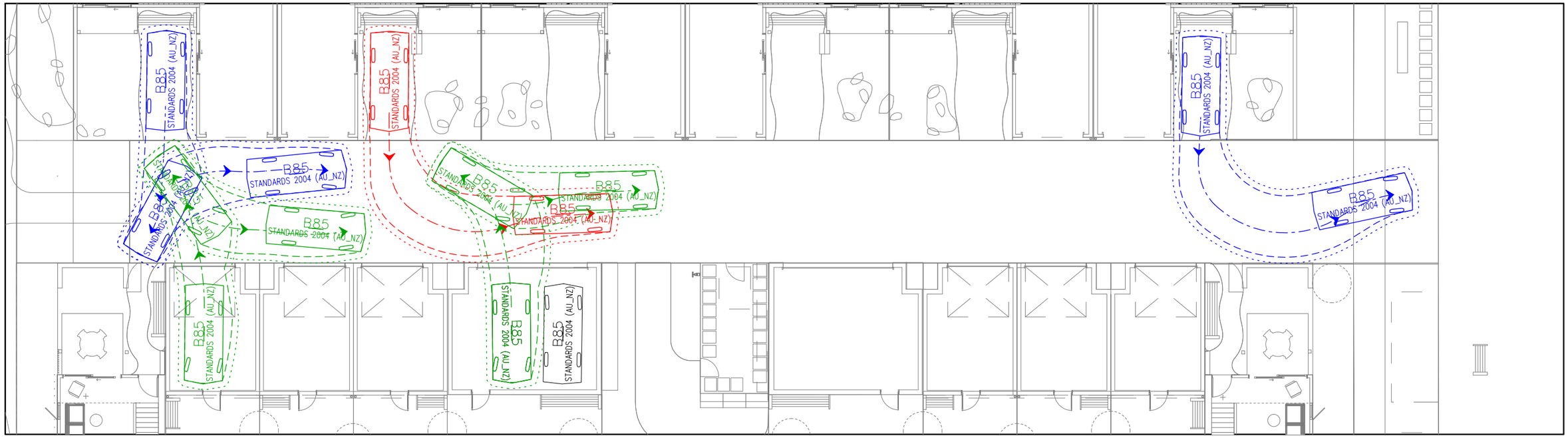

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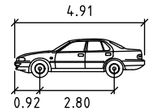

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Drawing Title
17 SMITH STREET, DAYLESFORD
SITE VEHICLE ACCESS - B85
SWEPT PATH ANALYSIS

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JPB	VG	X921 D12

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Project Number	Drawing Number	Revision
220413	SPA100	B

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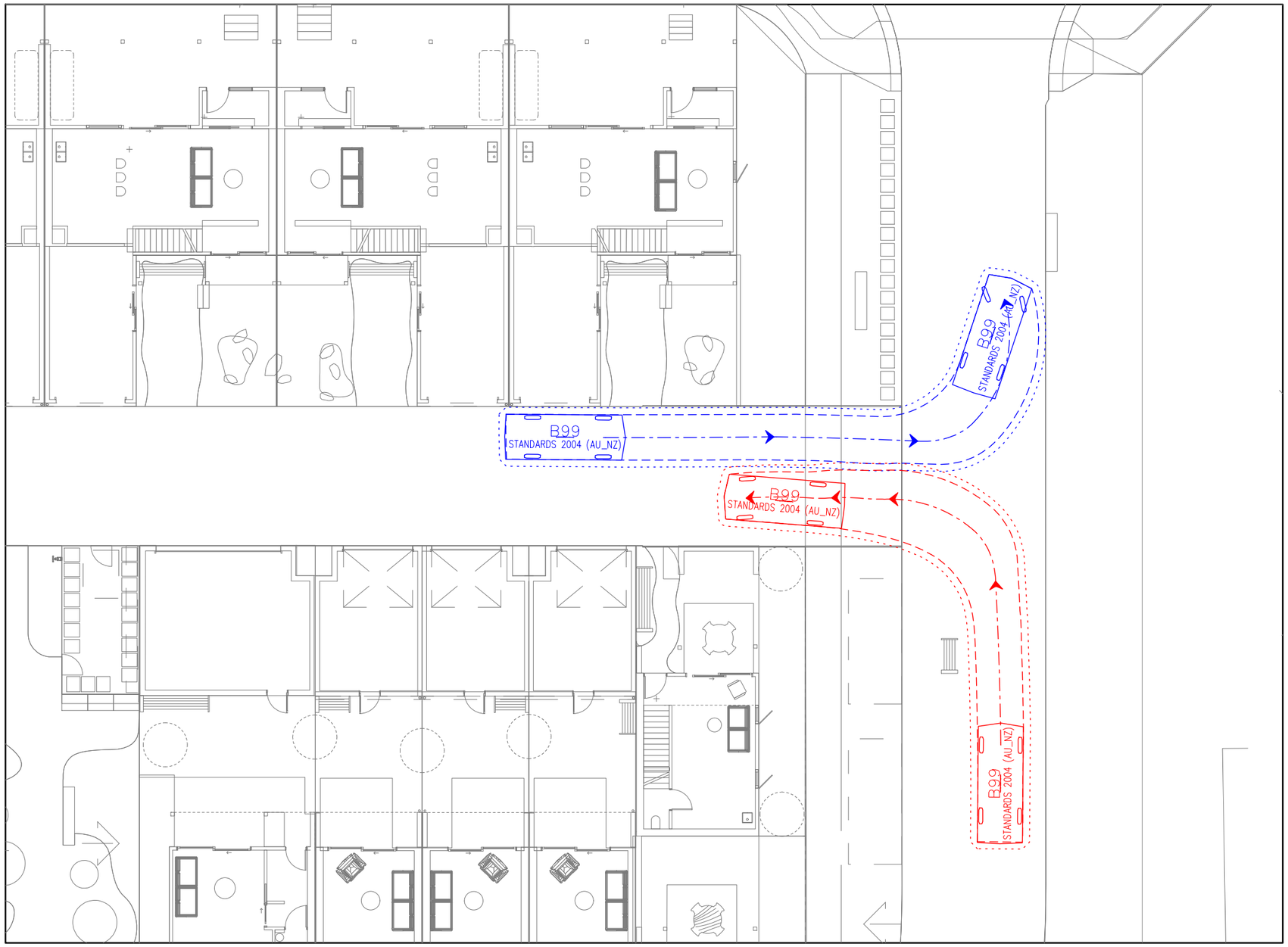

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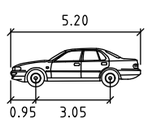

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SWEPT PATH LEGEND

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Scale
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Drawing Title
17 SMITH STREET, DAYLESFORD
SITE VEHICLE ACCESS - B99
SWEPT PATH ANALYSIS

Designed	Approved	Melway Ref
JPB	VG	X921 D12

Project Number	Drawing Number	Revision
220413	SPA103	B

NICHE PLANNING STUDIO

CLAUSE 55 ASSESSMENT

Permit application for staged subdivision and development of 31 townhouses

ASSESSMENT

OBJECTIVES	STANDARDS	RESPONSE
55.01 NEIGHBOURHOOD AND SITE DESCRIPTION AND DESIGN RESPONSE		
55.01-1 Neighbourhood and site description The neighbourhood and site description may use a site plan, photographs or other techniques and must accurately describe: - In relation to the neighbourhood: - The patter of development of the neighbourhood - The built form, scale and character of surrounding development including front fencing - Architectural and roof styles - Any other notable features or characteristics of the neighbourhood - In relation to the site: - Site shape, size, orientation and easements. - Levels of the site and the difference in levels between the site and surrounding properties. - The location of existing buildings on the site and on surrounding properties, including the location and height of walls built to the boundary of the site. - The use of surrounding buildings		Please refer Planning Report and Architect Plans (Appendix 1).

- The location of secluded private open space and habitable room windows of surrounding properties which have an outlook to the site within 9 metres
- Solar access to the site and to surrounding properties
- Location of significant trees existing on the site and any significant trees removed from the site 12 months prior to the application being made, where known
- Any contaminated soils and filled areas, where known
- Views to and from the site
- Street frontage features such as poles, street trees and kerb crossovers
- The location of local shops, public transport services and public open spaces within walking distance
- Any other notable features or characteristics of the site

If in the opinion of the responsible authority a requirement of the neighbourhood and site description is not relevant to the evaluation of an application, the responsible authority may waive or reduce the requirement

Satisfactory neighbourhood and site description

If the responsible authority decides that the neighbourhood and site description is not

satisfactory, it may require more information from the applicant under Section 54 of the Act. The responsible authority must not require notice of an application to be given or decide an application until it is satisfied that the neighbourhood and site description meets the requirements of Clause 55.01-1 and is satisfactory. This does not apply if the responsible authority refused an application under Section 52(1A) of the Act.		
55.01-2 Design Response The design response must explain how the proposed design: - Derives from and responds to the neighbourhood and site description - Meets the objectives of Clause 55 - Responds to any neighbourhood character features for the area identified in a local planning policy or a Neighbourhood Character Overlay If the application is for an apartment development, the design response must explain how the proposed design selects materials and finishes for the external walls. The design response must include correctly proportioned street elevations or		Please refer Planning Report and Architect Plans (Appendix 1)

photographs showing the development in the context of adjacent buildings. If in the opinion of the responsible authority this requirement is not relevant to the evaluation of an application, it may waive or reduce the requirement.		

55.02 NEIGHBOURHOOD CHARACTER AND INFRASTRUCTURE

55.02-1 Neighbourhood character objectives To ensure that the design respects the existing neighbourhood character or contributes to a preferred neighbourhood character. To ensure that development responds to the features of the site and the surrounding area.	*Standard B1* The design response must be appropriate to the neighbourhood and the site. The proposed design must respect the existing or preferred neighbourhood character and respond to the features of the site.	**Complies** Please refer to Planning Permit Report and Architect Plans (Appendix 1).
55.02-2 Residential policy objectives To ensure that residential development is provided in accordance with any policy for housing in the Municipal Planning Strategy and the Planning Policy Framework. To support medium densities in areas where development can take advantage of public transport and community infrastructure and services.	*Standard B2* An application must be accompanied by a written statement to the satisfaction of the responsible authority that describes how the development is consistent with any relevant policy for housing in the Municipal Planning Strategy and the Planning Policy Framework.	**Complies** Please refer to Planning Permit Report.
55.02-3 Dwelling diversity objective To encourage a range of dwelling sizes and types in developments of ten or more dwellings.	*Standard B3* Developments of ten or more dwellings should provide a range of dwelling sizes and types, including: - Dwellings with a different number of bedrooms - At least one dwelling that contains a kitchen, bath or shower, and a toilet and wash basin at ground floor level	**Variation** This development includes dwellings of typologies. Dwellings are provided with 1, 2, 3, bedrooms. Dwellings in Superlot 3 are proposed on a steep slope, with the garage on the lower floor and all other living areas on the upper floor. This results in access to kitchen and bathroom via stairs from the garage.

55.02-4 Infrastructure objectives To ensure development is provided with appropriate utility services and infrastructure. To ensure development does not unreasonably overload the capacity of utility services and infrastructure.	*Standard B4* Development should be connected to reticulated services, including reticulated sewerage, drainage, electricity and gas, if available. Development should not unreasonably exceed the capacity of utility services and infrastructure, including reticulated services and roads. In areas where utility services or infrastructure have little or no spare capacity, developments should provide for the upgrading of or mitigation of the impact on services or infrastructure.	**Complies** Refer Servicing (Appendix 8), Traffic (Appendix 4) and Stormwater Reports (Appendix 3).
55.02-5 Integration with the street objective To integrate the layout of development with the street	*Standard B5* Developments should provide adequate vehicle and pedestrian links that maintain or enhance local accessibility. Development should be oriented to front existing and proposed streets. High fencing in front of dwellings should be avoided if practicable. Development next to existing public open space should be laid out to complement the open space.	**Complies**

55.03 SITE LAYOUT AND BUILDING MASSING		
55.03-1 Street setback objective To ensure that the setbacks of buildings from a street respect the existing or preferred neighbourhood character and make efficient use of the site.	*Standard B6* Walls of buildings should be set back from streets: - At least the distance specified in a schedule to the zone, or - If no distance is specified in a schedule to the zone, the distance specified in Table B1 Porches, pergolas and verandahs that are less than 3.6 metres high and eaves may encroach not more than 2.5 metres into the setbacks of this standard	**Variation** All lots have a minimum front or side setback of 2m except for Lot 27 The side setback of Lot 27 is 1.5m and therefore does not comply with Standard B6. No preferred neighbourhood character has been established in the area for this site other than the Design Guidelines associated PA2504. Lot 27 has been positioned in order to provide for tree retention. The impact of this interface is offset by the extreme slope of the site and articulation provided through building gradation down the slope of the site and window fenestration. In addition, landscaping is utilised to soften and setback the appearance of this building. Therefore, it is considered that the design has made it highly efficient of the site and complies with the objective of Standard B6.
55.03-2 Building height objective To ensure that the height of buildings respects the existing or preferred neighbourhood character	*Standard B7* The maximum building height should not exceed the maximum height specified in the zone, schedule to the zone or an overlay that applies to the land. If no maximum height is specified in the zone, schedule to the zone or an overlay, the maximum building height should not exceed 9 metres, unless the slope of the natural ground level at any cross section wider than 8 metres of the site of the building is 2.5 degrees	**Complies**

	or more, in which case the maximum building height should not exceed 10 metres. Changes of building height between existing buildings and new buildings should be graduated.	
55.03-3 Site coverage objective To ensure that the site coverage respects the existing or preferred neighbourhood character and responds to the features of the site.	*Standard B8* The site area covered by buildings should not exceed: - The maximum site coverage specified in a schedule to the zone, or - If no maximum site coverage is specified in a schedule to the zone, 60%	**Complies** Refer to Architect Plans (Appendix 1).
55.03-4 Permeability and stormwater management objectives To reduce the impact of increased stormwater run-off on the drainage system To facilitate on-site stormwater infiltration To encourage stormwater management that maximises the retention and reuse of stormwater	*Standard B9* The site area covered by the pervious surfaces should be at least: - The minimum area specified in a schedule to the zone, or - If no minimum is specified in a schedule to the zone, 20 percent of the site The stormwater management system should be designed to: - Meet the current best practice performance objectives for stormwater quality as contained in the *Urban Stormwater – Best Practice Environmental Management Guidelines (Victorian Stormwater Committee, 1999)* - Contribute to cooling, improving local habitat and providing attractive and enjoyable spaces	**Complies** The permeable site area is; - Superlot 1: 47% - Superlot 2: 41% - Superlot 3: 40% Refer to Stormwater Report (Appendix 3) for BESS assessment which confirms the stormwater management system has been designed to meet best practice performance objectives. Please refer to the Landscape Concept Plans (Appendix 2), for demonstration of landscape design for cooling locations and recreation uses.

55.03-5 Energy efficiency objectives To achieve and protect energy efficient dwellings and residential buildings To ensure the orientation and layout of development reduce fossil fuel energy use and make appropriate use of daylight and solar energy.	*Standard B10* Buildings should be: - Oriented to make appropriate use of solar energy - Sited and designed to ensure that the performance of existing rooftop solar energy systems on dwellings on adjoining lots in a General Residential Zone, Neighbourhood Residential Zone or Township Zone are not unreasonably reduced. The existing rooftop solar energy system must exist at the date the application is lodged Living areas and private open space should be located on the north side of the development, if practicable. Developments should be designed so that solar access to north-facing windows is maximised.	**Complies** Refer to Architect Plans (Appendix 1) and ESD Report (Appendix 6)
55.03-6 Open space objective To integrate the layout of development with any public and communal open space provided in or adjacent to the development	*Standard B11* If any public or communal open space is provided on site, it should: - Be substantially fronted by dwellings, where appropriate - Provide outlook for as many dwellings as practicable - Be designed to protect any natural features on the site - Be accessible and useable	**Complies** The development has incorporated a layout that fronts dwellings to the public open space adjacent to the development. The communal garden is located between lots 12 and 13, while there is no frontage at this interface however the long side of the dwellings abut the communal garden have been articulated in order to provide passive surveillance of the space. In addition, the communal garden design and location allows for pedestrian linkage to the public

		open space and between the different Superlots of the ecovillage. Therefore, it is considered that the communal open space is provided in accordance with the objective of 55.03-6.
55.03-7 Safety Objective To ensure the layout of development provides for the safety and security of residents and property.	*Standard B12* Entrances to dwellings and residential buildings should not be obscured or isolated from the street and internal accessways. Planting which creates unsafe spaces along streets and accessways should be avoided. Developments should be designed to provide good lighting, visibility, and surveillance of car parks and internal accessways. Private spaces within developments should be protected from inappropriate uses as public thoroughfares.	**Complies** Entrances to dwellings are visible from the street or internal accessways through provision of low planting or unobscured viewlines. As dwellings incorporate double storeys, increased passive surveillance to the POS link facilitates good visibility to internal accessways. The communal garden, a private space, however is unlikely to be inappropriately used as a thoroughfare as the POS link provides public links through and around the development.
55.03-8 Landscaping Objectives To encourage development that respects the landscape character of the neighbourhood. To encourage developments that maintains and enhances habitat for plants and animals in locations of habitat importance. To encourage the retention of mature vegetation on the site.	*Standard B13* The landscape layout and design should: - Protect any predominant landscape features of the neighbourhood. - Take into account the soil type and drainage patterns of the site. - Allow for intended vegetation growth and structural protection of buildings. - In locations of habitat importance, maintain existing habitat and provide for new habitat for plants and animals.	Complies The proposal includes a specialised approach to landscaping, with a highly vegetated landscape with dwellings sitting amongst it. It provides a departure from the traditional rural landscape character of the area, however provides an enriched and attractive setting. See further information in the Planning Report and Landscape Concept (Appendix 2).

	- Provide a safe, attractive and functional environment for residents. Development should provide for the retention or planting of trees, where these are part of the character of the neighbourhood. Development should provide for the replacement of any significant trees that have been removed I the 12 months prior to the application being made, The landscape design should specify landscape themes, vegetation (location and species), paving and lighting. Development should meet any additional landscape requirements specified in a schedule to the zone.	
55.03-9 Access Objective To ensure the uber and design of vehicular crossovers respects the neighbourhood character.	*Standard B14* The width of accessways or car spaces should not exceed: - 33 precent of the street frontage, or - If the width of the street frontage is less than 20 meters, 40 percent of the street frontage. No more than one single-width crossover should be provided for each dwelling fronting a street. The location of access points to a road in Road Zone should be minimised. The number of access points to a road in a Road Zone should be minimised. Developments must provide for access for service, emergency, and delivery vehicles.	**Variation** The proposed vehicle crossovers to the dwellings in Superlot 2 do not comply with this standard. However, the proposed development outcome is considered to be appropriate for the following reasons: - The crossover arrangement sees the crossovers grouped together to preserve spaces for on-street parking spaces. - The arrangement is consistent with the emerging character of the immediate area that is defined by the approved subdivision of the broader area. - The location of the crossovers supports the integration of the dwellings in Superlot 2 with the secluded private open space to the north.

55.03-10 Parking Location Objectives To provide convenient parking for resident and visitor vehicles.	*Standard B15* Car parking facilities should: - Be reasonably close and convenient to dwellings and residential buildings. - Be secure. - Be well ventilated if enclosed. Shared access ways or car parks of other dwellings and residential buildings should be located at least 1.5 meters form the windows of habitable rooms. This setback may be reduced to 1 meter where there is a fence at least 1.5 meters high or where window sills are at least 1.4 meters above the accessway.	**Complies** Refer to Traffic Report (Appendix 4) for further detail.

55.04 AMENITY IMPACTS

55.04-1 Side and Rear Setbacks Objective To ensure that the height and setback of a building from a boundary respects the existing or preferred neighbourhood character ad limits the impacts on the amenity of existing dwellings.	*Standard B17* A new building not on or within 200mm of a boundary should be set back from side or rear boundaries: - At least the distance specified in a schedule to the zone, or - If no distance is specified in a schedule to the zone, 1 meter, plus 0.3 meters for every meter of height over 3.5 meters up to 6.9 meters, plus 1 meter for every meter of height over 6.9 meters. Sun blinds, verandas, porches, eaves, fascias, gutter, masonry chimneys, flues, pipes, domestic fuel or water tanks, and heating or cooling or other services may encroach not more than 0.5 meters into the setbacks of this standard. Landings having an area of not more than 2 meters and less than 1 meter high, stairways, ramps, pergolas, shade sails and carports may encroach into the setbacks of this standard.	**Variation** The end dwellings within Superlot 1 requires a minor variation to this standard. This is considered to be appropriate for the following reasons: - The variations are all located where there is no interface with adjoining dwellings. As such, there is no amenity impact. - The character of the area is emerging as the subject site is located within the broader subdivision of 17 Smith Street.
55.04-2 Walls on Boundaries Objective To ensure that the location, length and heigh of a wall on a boundary respects the existing or preferred neighbourhood character and limits the impact on the amenity of existing dwellings.	*Standard B18* A new wall constructed on or within 200mm of a side or rear boundary of a lot or carport constructed on or within 1 meter of a side or rear boundary of a lot should not abut the boundary: - For a length of more than the distance specified in a schedule to the zone; or	**Not Applicable** There are no proposed walls on the boundaries abutting the adjoining properties.

	- If not distance is specified in a schedule to the zone, for a length of more than:
	  - 10 meters plus 25 percent of the remaining length of the boundary of an adjoining lot, or
	  - Where there are existing or simultaneously constructed walls or carports abutting the boundary on an abutting lot, the length of the existing or simultaneously constructed wall or carports whichever is the greater.
	
	A new wall or carport may fully abut a side or rear boundary where slope and retaining walls or fences would result in the effective heigh of the wall or carport being less than 2 meters on the abutting property boundary.
	
	A building on a boundary includes a building set back up to 200mm from a boundary.
	
	The height of a new wall constructed on or within 200mm of a side or rear boundary or a carport constructed on or within 1 meter of a side or rear boundary should not exceed an average of 3.2 meters with no part higher than 3.6 meters unless abutting a higher existing or simultaneously constructed wall.	

55.04-3 Daylight to Existing Windows Objective To allow adequate daylight into existing habitable windows.	*Standard B19* Buildings opposite an existing habitable room window should provide for a light court to the existing window that has a minimum area of 3 square metres and minimum dimension of 1 metre clear to the sky. The calculation of the area may include land on the abutting lot.	**Complies** The subject site is predominantly bound by roads, with only one existing dwelling within proximity of the site. With regard to the existing dwelling (located to the west of Superlot 3, the separation between this

	Walls or carports more than 3 metres in height opposite an existing habitable room window should be set back from the window at least 50 per cent of the height of the new wall if the wall is within a 55-degree arc from the centre of the existing window. The arc may be swung to within 35 degrees of the plane of the wall containing the existing window. Where the existing window is above ground floor level, the wall height is measured from the floor level of the room containing the window.	dwelling and the proposed dwellings complies with this standard.
55.04.4 North Facing Windows Objective To allow adequate solar access to existing north-facing habitable room windows.	*Standard B20* If a north-facing habitable room window of an existing dwelling is within 3 metres of a boundary on an abutting lot, a building should be setback from the boundary 1 metre, plus 0.6 metres for every metre of height over 3.6 metres up to 6.9 metres, plus 1 metre for every metre of height over 6.9 metres, for a distance of 3 metres from the edge of each side of the window. A north-facing window is a window with an axis perpendicular to its surface oriented north 20 degrees west to north 30 degrees east.	**Complies**
55.04-5 Overshadowing Open Space Objective To ensure buildings do not significantly overshadow existing secluded private open space.	*Standard B21* Where sunlight to the secluded private open space of an existing dwelling is reduced, at least 75 per cent, or 40 square metres with minimum dimension of 3 metres, whichever is the lesser area, of the secluded private open space should receive a minimum of five hours of sunlight between 9 am and 3 pm on 22 September.	**Complies**

	If existing sunlight to the secluded private open space of an existing dwelling is less than the requirements of this standard, the amount of sunlight should not be further reduced.	
55.04-6 Overlooking Objective To limit views into existing secluded private open space and habitable room windows.	*Standard B22* A habitable room window, balcony, terrace, deck or patio should be located and designed to avoid direct views into the secluded private open space of an existing dwelling within a horizontal distance of 9 metres (measured at ground level) of the window, balcony, terrace, deck or patio. Views should be measured within a 45-degree angle from the plane of the window or perimeter of the balcony, terrace, deck or patio, and from a height of 1.7 metres above floor level. A habitable room window, balcony, terrace, deck or patio with a direct view into a habitable room window of existing dwelling within a horizontal distance of 9 metres (measured at ground level) of the window, balcony, terrace, deck or patio should be either: - Offset a minimum of 1.5 meters from the edge of one window to the edge of the other. - Have sill heights of at least 1.7 meters above floor level. - Have fixed, obscure glazing in any part of the window below 1.7 meter above floor level. - Have permanently fixed external screens to at least 1.7 meters above floor level and be no more than 25 per cent transparent.	**Complies**

	Obscure glazing in any part of the window below 1.7 metres above floor level may be openable provided that there are no direct views as specified in this standard. Screens used to obscure a view should be: - Perforated or trellis with a maximum of 25 per cent openings or solid translucent panels. - Permanent, fixed or durable. - Designed and coloured to blend in with the development. This standard does not apply to a new habitable room window, balcony, terrace, deck or patio which faces a property boundary where there is a visual barrier at least 1.8 metres high and the floor level of the habitable room, balcony, terrace, deck or patio is less than 0.8 metres above ground level at the boundary.	
55.04-7 Internal Views Objective To limit views into the secluded private open space and habitable room windows of dwelling and residential buildings within a development.	*Standard B23* To limit views into the secluded private open space and habitable room windows of dwellings and residential buildings within a development.	Variation As the landscaping concept (Appendix 02) with this proposal is designed to promote connection to neighbours and nature, use of traditional privacy screens is limited. Privacy is achieved through control of sightlines into SPOS and habitable rooms through careful placement and consideration of planting locations, height, water tanks and windows. Therefore, it is considered that the objective of 55.04-7 is achieved.

		Please refer Planning Report and Landscape Concept for visual and further explanation of how this works.
55.04-8 Noise Impacts Objective To contain noise sources in developments that may affect existing dwellings. To protect residents from external noise.	*Standard B24* Noise sources, such as mechanical plant, should not be located near bedrooms of immediately adjacent existing dwellings. Noise sensitive rooms and secluded private open spaces of new dwellings and residential buildings should take account of noise sources on immediately adjacent properties. Dwellings and residential buildings close to busy roads, railway lines or industry should be designed to limit noise levels in habitable rooms.	**Complies**

55.05 ON-SITE AMENITY AND FACILITIES		
55.05-1 Accessibility Objective To encourage the consideration of the needs of people with limited mobility in the design of developments.	*Standard B25* The dwelling entries of the ground floor of dwellings and residential buildings should be accessible or able to be easily made accessible to people with limited mobility.	**Variation** As the site slopes significantly, stairs have been required for access to some homes. Similarly, in order to minimise the footprint of buildings, all houses are double storey. The dwellings in lots 7, 8 and 17,18 have been provided with level access on the ground floor.
55.05-2 Dwelling Entry Objective To provide each dwelling or residential building with its own sense of identity.	*Standard B26* Entries to dwelling and residential buildings should: - Be visible and easily identifiable from streets and other public spaces. - Provide shelter a sense of personal address and a transitional space around the entry.	**Complies**
55.05-3 Daylight to New Windows Objective To allow adequate daylight into new habitable room windows.	*Standard B27* A window in a habitable room should be located to face: - An outdoor space clear to the sky or a light court with a minimum area of 3 square metres and minimum dimension of 1 metre clear to the sky, not including land on an abutting lot or, - A verandah provided it is open for at least one third of its perimeter, or - A carport provided it has two or more open sides and is open for at least one third of its perimeter.	**Complies**

55.05-4 Private Open Space Objective To provide adequate private open space for the reasonable recreation and service needs of residents.	*Standard B28* A dwelling or residential building should have private open space of an area and dimensions specified in a schedule to the zone. If no area or dimensions are specified in a schedule to the zone, a dwelling or residential building should have private open space consisting of: - An area of 40 square metres, with one part of the private open space to consist of secluded private open space at the side or rear of the dwelling or residential building with a minimum area of 25 square metres, a minimum dimension of 3 metres and convenient access from a living room or, - A balcony of 8 square metres with a minimum width of 1.6 metres and convenient access from a living room, or - A roof-top area of 10 square metres with a minimum width of 2 metres and convenient access from a living room. The balcony requirements in Clause 55.05-4 do not apply to an apartment development.	**Complies** Dwellings within Superlot 1 include SPOS at ground floor. Dwellings within Superlot 2 & 3 include SPOS on balconies, as these dwellings incorporate reverse living arrangements.
55.05-5 Solar Access to Open Space Objective To allow solar access into the secluded private open space of new dwellings and residential buildings.	*Standard B29* The private open space should be located on the north side of the dwelling or residential building, if appropriate. The southern boundary of secluded private open space should be set back from any wall on the north of the	**Variation** Dwellings in Superlot 1 comply with the standard. Dwellings in Superlot 3 do not comply with the standard, however additional open space in the backyard is provided, with open air and northern sunlight for the majority of the day.

	space at least (2 + 0.9h) meters, where 'h' is the height of the wall.	Habitable rooms leading from the balcony and internal courtyard will still enjoy northern sunlight. Therefore, these residents can enjoy outdoor areas with northern sunlight, while also maintaining good solar access to internal habitable rooms, achieving a good outcome overall. Dwellings in Superlot 2 include south facing balconies as SPOS areas (oriented to the extensive views from these homes), however include north facing areas leading off the Public Open Space link. These areas are not linked to a living room, however northern sunlight access and convenient recreation areas are still achieved for these dwellings.
55.05-6 Storage Objective To provide adequate storage facilities for each dwelling.	*Standard B30* Each dwelling should have convenient access to at least 6 cubic meters of externally accessible, secure storage space.	**Complies**

55.06 DETAILED DESIGN		
55.06-1 Design Detail Objective *To encourage design detail that respects the existing or preferred neighbourhood character.*	*Standard B31* The design of buildings, including: - Façade articulation and detailing, - Window and door proportions, - Roof form, and - Verandas, eaves and parapets, Should respect the existing or preferred neighbourhood character. Garages and carports should be visually compatible with the development and the existing or preferred neighbourhood character.	**Complies** The proposed development responds to the existing surrounding area, which does not have a preferred neighbourhood character profile. Dwellings have been designed with hipped roofs, brick and traditional sash windows and other natural materials to accord with sustainable design goals and high-quality finishes seen in the surrounding area.
55.06-2 Front Fences Objective To encourage front fence design that respects the existing or preferred neighbourhood character.	*Standard B31* The design of front fences should complement the design of the dwelling or residential building and any front fences on adjoining properties. A front fence within 3 metres of a street should not exceed: - The maximum height specified in a schedule to the zone, or - If no maximum height is specified in a schedule to the zone, the maximum height specified in Table B3.	**Not Applicable** No front fences are proposed.
55.06-3 Common Property Objectives	*Standard B33* Developments should delineate public, communal, and private areas.	**Complies** Although the development has been specifically designed to seamlessly integrate with adjacent

To ensure that communal open space, car parking, access areas, and site facilities are practical, attractive, and easily maintained. To avoid future management difficulties in areas of common ownership.	Common property, where provided, should be functional and capable of efficient management.	Public Open Space areas, proposed common property areas will be functional and capable of efficient management. The communal garden will be delineated from the Public Open Space area through design choices, with POS area as a 'landscape' and the garden with raised vegie beds. The communal garden is in a location and of a size that will facilitate efficient management.
55.06-4 Site Service Objectives To ensure that site services can be installed and easily maintained. To ensure that site facilities are accessible, adequate and attractive.	*Standard B34* The design and layout of dwellings and residential buildings should provide sufficient space (including easements where required) and facilities for services to be installed and maintained efficiently and economically. Bin and recycling enclosures, mailboxes and other site facilities should be adequate in size, durable, waterproof and blend in with the development. Bin and recycling enclosures should be located for convenient access by residents. Mailboxes should be provided and located for convenient access as Australia Post requires.	**Complies** Refer to Architect Plans (Appendix 1)

55.07 APARTMENT DEVELOPMENTS – **Not Applicable**

Appendix 10 – Clause 56 Assessment

NICHE PLANNING STUDIO

CLAUSE 56 ASSESSMENT

Permit application for staged subdivision and development of 31 townhouses

1. INTRODUCTION

Clause 32.09-3 of the Neighbourhood Residential Zone states that an application to subdivide land must meet the requirements of Clause 56 and:

- *Must meet all of the objectives included in the clauses specified in the following table.*
- *Should meet all of the standard included in the clauses specified in the following table.*

As the subdivision is to create 31 lots, the following additional objectives and standards are to be met:

All except Clauses 56.03-1 to 56.03-3, 56.03-5 and 56.06-1 and 56.06-3.

Please refer to the Planning Permit Report for Subdivision Site and Context Description and the Design Response.

2. PROPOSAL AND ASSESSMENT

2.1 THE PROPOSED DEVELOPMENT

OBJECTIVES	STANDARDS	RESPONSE
56.01 SUBDIVISION SITE AND CONTEXT DESCRIPTION AND DESIGN RESPONSE		

56.01-1 Subdivision Site and Context Description
 	
The site and context description ay use a site plan, photographs or other techniques and must accurately describe:
 	
- In relation to the site:
  - Site shape, size, dimensions and orientation.
  - Levels and contours of the site.
  - Natural features including trees and other significant vegetation, drainage lines, water courses, wetlands, ridgelines and hill tops.
  - The siting and use of existing buildings and structures.
  - Street frontage features such as poles, street trees and kerb crossovers.
  - Access points.
  - Location of drainage and other utilities.
  - Easements.
  - Any identified natural or cultural features of the site.
  - Significant views to and from the site.
		Complies
		
		Please refer to Planning Report, Architect Plans (Appendix 1) and Traffic Report (Appendix 4).

  - Noise and odour sources or other external influences.
  - Soil conditions, including any land affected by contamination, erosion, salinity, acid sulphate soils or fill.
  - Any other notable features or characteristics of the site.
  - Adjacent uses.
  - Any other factor affecting the capacity to develop the site including whether the site is affected by inundation.
- An application for subdivision of 3 or more lots must also describe in relation to the surrounding area:
  - The pattern of subdivision.
  - Existing land uses.
  - The location and use of existing buildings on adjacent land.
  - Abutting street and path widths, materials and detailing.
  - The location and type of significant vegetation.
- An application for subdivision of 60 or more lots must also describe in relation to the surrounding area:
  - Location, distance and type of any nearby public open space and recreational facilities.
  - Direction and distances to local shops and community facilities.
  - Directions and walking distances to public transport routes and stops.
  - Direction and walking distances to existing neighbourhood, major and principal activity centres and major employment areas.

- Existing transport routes, including freeways, arterial roads and streets connecting neighbourhoods. - Local street network including potential connections to adjacent subdivisions. - Traffic volumes and movements on adjacent roads and streets. - Pedestrian, bicycle and shared paths identifying whether their primary role is neighbourhood or regional access. - Any places of cultural significance. - Natural features including trees and other significant vegetation, drainage lines, water courses, wetlands, ridgelines and hill tops. - Proximity of any fire threats. - Pattern of ownership of adjoining lots. If in the opinion of the responsible authority a requirement of the site and context description is not relevant to the assessment of an application, the responsible authority may waive or reduce the requirement:	
56.01-2 Subdivision Design Response The design response must explain how the proposed design: - Derives from and responds to the site and context description. - Responds to any site and context features for the area identified in a local	**Complies** Please refer to Planning Permit Report.

planning policy or a Neighbourhood Character Overlay.
- Responds to any relevant objective, policy, strategy or plan set out for the area in this scheme.
- Meets the relevant objectives of Clause 56.

The design response must include a dimensioned plan to scale showing the layout of the subdivision in context with the surrounding area. If in the opinion of the responsible authority this requirement is not relevant to the assessment of an application, it may waive or reduce the requirement.

An application for subdivision of 60 or more lots must also include a plan that meets the requirements of Standard C2. The plan must also show the:

- Proposed uses of each part of the site.
- Natural features of the site and identify any features proposed to be altered.
- Proposed integrated water management system.
- Proposed staging of the subdivision.

56.02 POLICY IMPLEMENTATION		
55.02-1 Strategic Implementation Objective To ensure that the layout of a subdivision is consistent with and implements any objective, policy, strategy or plan for the area set out in this scheme.	*Standard C1* An application must be accompanied by a written statement that describes how the subdivision is consistent with and implements any relevant growth area, activity centre, housing, access and mobility, community facilities, open space and recreation, landscape (including any native vegetation precinct plan) and urban design objective, policy, strategy or plan for the area set out in this scheme.	**Complies** Please refer to Planning Permit Report.
56.03 LIVEABLE AND SUSTAINABLE COMMUNITIES		
56.03-4 Built Environment Objective To create urban places with identity and character.	*Standard C5* The built environment should: - Implement any relevant urban design strategy, plan or policy for the area set out in this scheme. - Provide living and working environments that are functional, safe and attractive. - Provide an integrated layout, built form and urban landscape. - Contribute to a sense of place and cultural identity. An application should describe the identity and character to be achieved and the elements that contribute to that identity and character.	**Complies**

56.04 LOT DESIGN

56.04-1 Lot Diversity and Distribution Objectives To achieve housing densities that support compact and walkable neighbourhoods and the efficient provision of public transport services. To provide higher housing densities within walking distance of activity centres. To achieve increased housing densities in designated growth areas. To provide a range of lot sizes to suit a variety of dwelling and household types.	*Standard C7* A subdivision should implement any relevant housing strategy, plan or policy for the area set out in this scheme. Lot sizes and mix should achieve the average net residential density specified in any zone or overlay that applies to the land or in any relevant policy for the area set out in this scheme. A range and mix of lot sizes should be provided including lots suitable for the development of: - Single dwellings. - Two dwellings or more. - Higher density housing. - Residential buildings and Retirement villages. Unless the site is constrained by topography or other site conditions, lot distribution should provide for 95 per cent of dwellings to be located no more than 400 metre street walking distance from the nearest existing or proposed bus stop, 600 metres street walking distance from the nearest existing or proposed tram stop and 800 metres street walking distance from the nearest existing or proposed railway station. Lots of 300 square metres or less in area, lots suitable for the development of two dwellings or more, lots suitable for higher density housing and lots suitable for Residential buildings and Retirement villages should be	**Complies**

	located in and within 400 metres street walking distance of an activity centre.	
56.04-2 Lot Diversity and Distribution Objectives To provide lots with areas and dimensions that enable the appropriate siting and construction of a dwelling, solar access, private open space, vehicle access and parking, water management, easements and the retention of significant vegetation and site features.	*Standard C8* An application to subdivide land that creates lots of less than 300 square metres should be accompanied by information that shows: - That the lots are consistent or contain building envelope that is consistent with a development approved under this scheme, or - That a dwelling may be constructed on each lot in accordance with the requirements of this scheme. Lots of between 300 square metres and 500 square metres should: Contain a building envelope that is consistent with a development of the lot approved under this scheme, or - If no development of the lot has been approved under this scheme, contain a building envelope and be able to contain a rectangle measuring 10 metres by 15 metres, or 9 metres by 15 metres if a boundary wall is nominated as part of the building envelope. If lots of between 300 square metres and 500 square metres are proposed to contain dwellings that are built to the boundary, the long axis of the lots should be within 30 degrees east and 20 degrees west of north unless there are significant physical constraints that make this difficult to achieve.	**Complies** All lots are under 300sqm and will be developed in accordance with the requirements of the Scheme. Refer Clause 55 Assessment (Appendix 9)

Lots greater than 500 square metres should be able to contain a rectangle measuring 10 metres by 15 metres, and may contain a building envelope.

A building envelope may specify or incorporate any relevant siting and design requirement. Any requirement should meet the relevant standards of Clause 54, unless:

- The objectives of the relevant standards are met, and
- The building envelope is shown as a restriction on a plan of subdivision registered under the Subdivision Act 1988, or is specified as a covenant in an agreement under Section 173 of the Act.

Where a lot with a building envelope adjoins a lot that is not on the same plan of subdivision or is not subject to the same agreement relating to the relevant building envelope:

- The building envelope must meet Standards A10 and A11 of Clause 54 in relation to the adjoining lot, and
- The building envelope must not regulate siting matters covered by Standards A12 to A15 (inclusive) of Clause 54 in relation to the adjoining lot.
- This should be specified in the relevant plan of subdivision or agreement.

Lot dimensions and building envelopes should protect:

	- ``````````````````````Solar access for future dwellings and support the siting and design of dwellings that achieve the energy rating requirements of the Building Regulations. - Existing or proposed easements on lots. - Significant vegetation and site features.	
56.04-3 Solar Orientation of Lots Objective To provide good solar orientation of lots and solar access for future dwellings.	*Standard C9* Unless the site is constrained by topography or other site conditions, at least 70 percent of lots should have appropriate solar orientation. Lots have appropriate solar orientation when: - The long axis of lots are within the range north 20 degrees west to north 30 degrees east, or east 20 degrees north to east 30 degrees south. - Lots between 300 square metres and 500 square metres are proposed to contain dwellings that are built to the boundary, the long axis of the lots should be within 30 degrees east and 20 degrees west of north. - Dimensions of lots are adequate to protect solar access to the lot, taking into account likely dwelling size and the relationship of each lot to the street.	**Complies** All lots comply
56.04-4 Street Orientation Objective To provide a lot layout that contributes to community social interaction, personal safety and property security.	*Standard C10* Subdivision should increase visibility and surveillance by:	**Complies**

	- Ensuring lots front all roads and streets and avoid the side or rear of lots being oriented to connector streets and arterial roads. - Providing lots of 300 square metres or less in area and lots for 2 or more dwellings around activity centres and public open space. - Ensuring streets and houses look onto public open space and avoiding sides and rears of lots along public open space boundaries. - Providing roads and streets along public open space boundaries.	
56.04-5 Common Area Objective To identify common areas and the purpose for which the area is commonly held. To ensure the provision of common area is appropriate and that necessary management arrangements are in place. To maintain direct public access throughout the neighbourhood street network.	*Standard C11* An application to subdivide land that creates common land must be accompanied by a plan and a report identifying: - The common area to be owned by the body corporate, including any streets and open space. - The reasons why the area should be commonly held. - Lots participating in the body corporate. - The proposed management arrangements including maintenance standards for streets and open spaces to be commonly held.	**Complies** Refer Planning Report and Architect Plans (Appendix 1). The overall proposed development will have an overarching owners corporation, however, in addition there will be an owners corporation for each of the superlots. The overall owners corporation will manage items that apply to the overall development (i.e. the embedded energy and communications networks). The individual superlots owners corporation will manage the maintenance and waste obligations for the area in that lot.

56.05 URBAN LANDSCAPE

56.05-1 Integrated Urban Landscape Objectives To provide attractive and continuous landscaping in streets and public open spaces that contribute to the character and identity of new neighbourhoods and urban places or to existing or preferred neighbourhood character in existing urban areas. To incorporate natural and cultural features in the design of streets and public open space where appropriate. To protect and enhance native habitat and discourage the planting and spread of noxious weeds. To provide for integrated water management systems and contribute to drinking water conservation.	*Standard C12* An application for subdivision that creates streets or public open space should be accompanied by a landscape design. The landscape design should: - Implement any relevant streetscape, landscape, urban design or native vegetation precinct plan, strategy or policy for the area set out in this scheme. - Create attractive landscapes that visually emphasise streets and public open spaces. - Respond to the site and context description for the site and surrounding area. - Maintain significant vegetation where possible within an urban context. - Take account of the physical features of the land including landform, soil and climate. - Protect and enhance any significant natural and cultural features. - Protect and link areas of significant local habitat where appropriate. - Support integrated water management systems with appropriate landscape design techniques for managing urban run-off including wetlands and other water sensitive urban design features in streets and public open space. - Promote the use of drought tolerant and low maintenance plants and avoid species that are	**Complies** Please refer Landscape Concept Plan (Appendix 02) and Stormwater Report (Appendix 03).

	likely to spread into the surrounding environment. - Ensure landscaping supports surveillance and provides shade in streets, parks and public open space. - Develop appropriate landscapes for the intended use of public open space including areas for passive and active recreation, the exercising of pets, playgrounds and shaded areas. - Provide for walking and cycling networks that link with community facilities. - Provide appropriate pathways, signage, fencing, public lighting and street furniture. - Create low maintenance, durable landscapes that are capable of a long life. - The landscape design must include a maintenance plan that sets out maintenance responsibilities, requirements and costs.	
56.05-2 Public Open Space Provision Objectives To provide a network of quality, well distributed, multi-functional and cost effective public open space that includes local parks, active open space, linear parks and trails, and links to regional open space. To provide a network of public open space that caters for a broad range of users. To encourage healthy and active communities.	*Standard C13* The provision of public open space should: - Implement any relevant objective, policy, strategy or plan (including any growth area precinct structure plan) for open space set out in this scheme. - Provide a network of well-distributed neighbourhood public open space that includes: - Local parks within 400 metres safe walking distance of at least 95 percent of all dwellings. - Where not designed to include active open space, local parks should be generally 1 hectare	**Not applicable** Public Open Space was provided as part of Permit number PA 2504.

To provide adequate unencumbered land for public open space and integrate any encumbered land with the open space network. To ensure land provided for public open space can be managed in an environmentally sustainable way and contributes to the development of sustainable neighbourhoods.	in area and suitably dimensioned and designed to provide for their intended use and to allow easy adaptation in response to changing community preferences. - Additional small local parks or public squares in activity centres and higher density residential areas. - Active open space of a least 8 hectares in area within 1 kilometre of 95 percent of all dwellings that is: - Suitably dimensioned and designed to provide for the intended use, buffer areas around sporting fields and passive open space. - Sufficient to incorporate two football/cricket ovals. - Appropriate for the intended use in terms of quality and orientation. - Located on flat land (which can be cost effectively graded) Located with access to, or making provision for, a recycled or sustainable water supply. - Adjoin schools and other community facilities where practical. - Designed to achieve sharing of space between sports. - Linear parks and trails along waterways, vegetation corridors and road reserves within 1 kilometre of 95 percent of all dwellings. Public open space should:

	- Be provided along foreshores, streams and permanent water bodies. - Be linked to existing or proposed future public open spaces where appropriate. - Be integrated with floodways and encumbered land that is accessible for public recreation. - Be suitable for the intended use. - Be of an area and dimensions to allow easy adaptation to different uses in response to changing community active and passive recreational preferences. - Maximise passive surveillance. - Be integrated with urban water management systems, waterways and other water bodies. - Incorporate natural and cultural features where appropriate.

56.06 ACCESS AND MOBILITY MANAGEMENT

56.06-2 Walking and Cycling Network Objectives To contribute to community health and well being by encouraging walking and cycling as part of the daily lives of residents, employees and visitors. To provide safe and direct movement through and between neighbourhoods by pedestrians and cyclists. To reduce car use, greenhouse gas emissions and air pollution.	*Standard C15* The walking and cycling network should be designed to: - Implement any relevant regional and local walking and cycling strategy, plan or policy for the area set out in this scheme. - Link to any existing pedestrian and cycling networks. - Provide safe walkable distances to activity centres, community facilities, public transport stops and public open spaces. - Provide an interconnected and continuous network of safe, efficient and convenient footpaths, shared paths, cycle paths and cycle lanes based primarily on the network of arterial roads, neighbourhood streets and regional public open spaces. - Provide direct cycling routes for regional journeys to major activity centres, community facilities, public transport and other regional activities and for regional recreational cycling. - Ensure safe street and road crossings including the provision of traffic controls where required. - Provide an appropriate level of priority for pedestrians and cyclists. - Have natural surveillance along streets and from abutting dwellings and be designed for personal safety and security particularly at night.	**Complies** Refer to Traffic report (Appendix 4).

	- Be accessible to people with disabilities.	
56.06-4 Neighbourhood Street Network Objective To provide for direct, safe and easy movement through and between neighbourhoods for pedestrians, cyclists, public transport and other motor vehicles using the neighbourhood street network.	*Standard C17* The neighbourhood street network must: - Take account of the existing mobility network of arterial roads, neighbourhood streets, cycle paths, shared paths, footpaths and public transport routes. - Provide clear physical distinctions between arterial roads and neighbourhood street types. - Comply with the Head, Transport for 'Victoria's arterial road access management policies. - Provide an appropriate speed environment and movement priority for the safe and easy movement of pedestrians and cyclists and for accessing public transport. - Provide safe and efficient access to activity centres for commercial and freight vehicles. - Provide safe and efficient access to all lots for service and emergency vehicles. - Provide safe movement for all vehicles. - Incorporate any necessary traffic control measures and traffic management infrastructure. The neighbourhood street network should be designed to: - Implement any relevant transport strategy, plan or policy for the area set out in this scheme. - Include arterial roads at intervals of approximately 1.6 kilometres that have adequate	**Complies** Refer to Traffic Report (Appendix 4).

reservation widths to accommodate long term movement demand.

- Include connector streets approximately halfway between arterial roads and provide adequate reservation widths to accommodate long term movement demand.
- Ensure connector streets align between neighbourhoods for direct and efficient movement of pedestrians, cyclists, public transport and other motor vehicles.
- Provide an interconnected and continuous network of streets within and between neighbourhoods for use by pedestrians, cyclists, public transport and other vehicles.
- Provide an appropriate level of local traffic dispersal.
- Indicate the appropriate street type.
- Provide a speed environment that is appropriate to the street type.
- Provide a street environment that appropriately manages movement demand (volume, type and mix of pedestrians, cyclists, public transport and other motor vehicles).
- Encourage appropriate and safe pedestrian, cyclist and driver behaviour.
- Provide safe sharing of access lanes and access places by pedestrians, cyclists and vehicles.
- Minimise the provision of cul-de-sacs.
- Provide for service and emergency vehicles to safely turn at the end of a dead-end street.
- Facilitate solar orientation of lots.

	- Facilitate the provision of the walking and cycling network, integrated water management systems, utilities and planting of trees. - Contribute to the 'area's character and identity. - Take account of any identified significant features.	

56.06-5 Walking and Cycling Network Objectives
 	
To design and construct footpaths, shared path and cycle path networks that are safe, comfortable, well-constructed and accessible for people with disabilities.
 	
To design footpaths to accommodate wheelchairs, prams, scooters and other footpath bound vehicles.
	Standard C18
	
	Footpaths, shared paths, cycle paths and cycle lanes should be designed to:
	
	- Be continuous and connect.
	- Provide for public transport stops, street crossings for pedestrians and cyclists and kerb crossovers for access to lots.
	- Accommodate projected user volumes and mix.
	- Meet the requirements of Table C1.
	- Provide pavement edge, kerb, channel and crossover details that support safe travel for pedestrians, footpath bound vehicles and cyclists, perform required drainage functions and are structurally sound.
	- Provide appropriate signage.
	- Be constructed to allow access to lots without damage to the footpath or shared path surfaces.
	- Be constructed with a durable, non-skid surface.
	- Be of a quality and durability to ensure:
	  - Safe passage for pedestrians, cyclists, footpath bound vehicles and vehicles.
	  - Discharge of urban run-off.
	  - Preservation of all-weather access.
	  - Maintenance of a reasonable, comfortable riding quality.
		Complies

	- A minimum 20-year life span. - Be accessible to people with disabilities and include tactile ground surface indicators, audible signals and kerb ramps required for the movement of people with disabilities.	
56.06-6 Public Transport Network Detail Objectives To provide for the safe, efficient operation of public transport and the comfort and convenience of public transport users. To provide public transport stops that are accessible to people with disabilities.	*Standard C19* Bus priority measures must be provided along arterial roads forming part of the existing or proposed Principal Public Transport Network in Metropolitan Melbourne and the regional public transport network outside Metropolitan Melbourne to the requirements of the relevant roads authority. Road alignment and geometry along bus routes should provide for the efficient, unimpeded movement of buses and the safety and comfort of passengers. The design of public transport stops should not impede the movement of pedestrians. Bus and tram stops should have: - Surveillance from streets and adjacent lots. - Safe street crossing conditions for pedestrians and cyclists. Safe pedestrian crossings on arterial roads and at schools including the provision of traffic controls as required by the roads authority. - Continuous hard pavement from the footpath to the kerb. - Sufficient lighting and paved, sheltered waiting areas for forecast user volume at neighbourhood	**Not applicable**

	centres, schools and other locations with expected high patronage. - Appropriate signage. Public transport stops and associated waiting areas should be accessible to people with disabilities and include tactile ground surface indicators, audible signals and kerb ramps required for the movement of people with physical disabilities.	
56.06-7 Neighbourhood Street Network Objectives To design and construct street carriageways and verges so that the street geometry and traffic speeds provide an accessible and safe neighbourhood street system for all users.	*Standard C20* The design of streets and roads should: - Meet the requirements of TableC1. Where the widths of access lanes, access places, and access streets do not comply with the requirements of Table C1, the requirements of the relevant fire authority and roads authority must be met. - Provide street blocks that are generally between 120 metres and 240 metres in length and generally between 60 metres to 120 metres in width to facilitate pedestrian movement and control traffic speed. - Have verges of sufficient width to accommodate footpaths, shared paths, cycle paths, integrated water management, street tree planting, lighting and utility needs. - Have street geometry appropriate to the street type and function, the physical land characteristics and achieve a safe environment for all users.	**Complies**

- Provide a low speed environment while allowing all road users to proceed without unreasonable inconvenience or delay.
- Provide a safe environment for all street users applying speed control measures where appropriate.
- Ensure intersection layouts clearly indicate the travel path and priority of movement for pedestrians, cyclists and vehicles.
- Provide a minimum 5 metre by 5 metre corners play at junctions with arterial roads and a minimum 3 metre by 3 metre corners play at other junctions unless site conditions justify a variation to achieve safe sight lines across corners.
- Ensure streets are of sufficient strength to:
  - Enable the carriage of vehicles.
  - Avoid damage by the construction vehicles and equipment.
- Ensure street pavements are of sufficient quality and durability for the:
  - Safe passage of pedestrians, cyclists and vehicles.
  - Discharge of urban run-off.
  - Preservation of all-weather access and maintenance of a reasonable, comfortable riding quality.
- Ensure carriageways of planned arterial roads are designed to the requirements of the relevant road authority.
- Ensure carriageways of neighbourhood streets are designed for a minimum 20 year life span.

- Provide pavement edges, kerbs, channel and crossover details designed to:
  - Perform the required integrated water management functions.
  - Delineate the edge of the carriageway for all street users.
  - Provide efficient and comfortable access to abutting lots at appropriate locations.
  - Contribute to streetscape design.
- Provide for the safe and efficient collection of waste and recycling materials from lots.
- Be accessible to people with disabilities.
- Meet the requirements of Table C1. Where the width s of access lanes, access places, and access streets do not comply with the requirements of Table C1, the requirements of the relevant fire authority and roads authority must be met. Where the widths of connector streets do not comply with the requirements of Table C1, the requirements of the relevant public transport authority must be met.

A street detail plan should be prepared that shows, as appropriate:

- The street hierarchy and typical cross-sections for all street types.
- Location of carriageway pavement, parking, bus stops, kerbs, crossovers, footpaths, tactile surface indicators, cycle paths and speed control and traffic management devices.
- Water sensitive urban design features.
- Location and species of proposed street trees and other vegetation.

	- Location of existing vegetation to be retained and proposed treatment to ensure its health. - Any relevant details for the design and location of street furniture, lighting, seats, bus stops, telephone boxes and mailboxes.	
56.06-8 Lot Access Objective To provide for safe vehicle access between roads and lots.	*Standard C21* Vehicle access to lots abutting arterial roads should be provided from service roads, side or rear access lanes, access places or access streets where appropriate and in accordance with the access management requirements of the relevant roads authority. Vehicle access to lots of 300 square metres or less in area and lots with a frontage of 7.5 metres or less should be provided via rear or side access lanes, places or streets. The design and construction of a crossover should meet the requirements of the relevant road authority.	Complies

56.07 Integrated Water Management

56.07-1 Lot Access Objective To reduce the use of drinking water. To provide an adequate, cost-effective supply of drinking water.	*Standard C22* The supply of drinking water must be: - Designed and constructed in accordance with the requirements and to the satisfaction of the relevant water authority. - Provided to the boundary of all lots in the subdivision to the satisfaction of the relevant water authority.	**Complies** Refer Servicing Report (Appendix 8)
56.07-2 Reused and Recycled Water Objective To provide for the substitution of drinking water for non-drinking purposes with reused and recycled water.	*Standard C23* Reused and recycled water supply systems must be: - Designed, constructed and managed in accordance with the requirements and to the satisfaction of the relevant water authority, Environment Protection Authority and Department of Health and Human Services. - Provided to the boundary of all lots in the subdivision where required by the relevant water authority.	**Complies** Third pipe infrastructure is not yet available in Daylesford, however rainwater tanks will be utilised to provide water for gardening and toilet flushing.
56.07-3 Waste Water Management Objective To provide a waste water system that is adequate for the maintenance of public health and the management of effluent in an environmentally friendly manner.	*Standard C24* Waste water systems must be: - Designed, constructed and managed in accordance with the requirements and to the satisfaction of the relevant water authority and the Environment Protection Authority.	**Complies** Refer Servicing Report (Appendix 8).

	- Consistent with a domestic waste water management plan adopted by the relevant Council. Reticulated wastewater systems must be provided to the boundary of all lots in the subdivision where required by the relevant water authority.	
56.07-4 Stormwater Management Objectives To minimise damage to properties and inconvenience to residents from stormwater. To ensure that the street operates adequately during major storm events and provides for public safety. To minimise increases in stormwater and protect the environmental values and physical characteristics of receiving waters from degradation by stormwater. To encourage stormwater management that maximises the retention and reuse of stormwater. To encourage stormwater management that contributes to cooling, local habitat improvements and provision of attractive and enjoyable spaces.	*Standard C25* The stormwater management system must be: - Designed and managed in accordance with the requirements and to the satisfaction of the relevant drainage authority. - Designed and managed in accordance with the requirements and to the satisfaction of the water authority where reuse of stormwater is proposed. - Designed to meet the current best practice performance objectives for stormwater quality as contained in the Urban Stormwater-Best Practice Environmental Management Guidelines (Victorian Stormwater Committee, 1999). - Designed to ensure that flows downstream of the subdivision site are restricted to pre-development levels unless increased flows are approved by the relevant drainage authority and there are no detrimental downstream impacts. - Designed to contribute to cooling, improving local habitat and providing attractive and enjoyable spaces. The stormwater management system should be integrated with the overall development plan	Complies Refer Stormwater Report (Appendix 3), which confirms the proposed stormwater management system complies with best practice performance objectives.

including the street and public open space networks and landscape design.

For all storm events up to and including the 20% Average Exceedence Probability (AEP) standard:

- Stormwater flows should be contained within the drainage system to the requirements of the relevant authority.
- Ponding on roads should not occur for longer than 1 hour after the cessation of rainfall.

For storm events greater than 20% AEP and up to and including 1% AEP standard:

- Provision must be made for the safe and effective passage of stormwater flows.
- All new lots should be free from inundation or to a lesser standard of flood protection where agreed by the relevant floodplain management authority.
- Ensure that streets, footpaths and cycle paths that are subject to flooding meet the safety criteria da Vave < 0.35 m2/s (where, da = average depth in metres and Vave = average velocity in metres per second).

The design of the local drainage network should:

- Ensure stormwater is retarded to a standard required by the responsible drainage authority.
- Ensure every lot is provided with drainage to a standard acceptable to the relevant drainage authority. Wherever possible, stormwater should be directed to the front of the lot and discharged

into the street drainage system or legal point of discharge.

- Ensure that inlet and outlet structures take into account the effects of obstructions and debris build up. Any surcharge drainage pit should discharge into an overland flow in a safe and predetermined manner.
- Include water sensitive urban design features to manage stormwater in streets and public open space. Where such features are provided, an application must describe maintenance responsibilities, requirements and costs.

Any flood mitigation works must be designed and constructed in accordance with the requirements of the relevant floodplain management authority.

56.08 SITE MANAGEMENT

56.08-1 Site Management Objectives To protect drainage infrastructure and receiving waters from sedimentation and contamination. To protect the site and surrounding area from environmental degradation or nuisance prior to and during construction of subdivision works. To encourage the re-use of materials from the site and recycled materials in the construction of subdivisions where practicable.	*Standard C26* A subdivision application must describe how the site will be managed prior to and during the construction period and may set out requirements for managing: - Erosion and sediment. - Dust. - Run-off. - Litter, concrete and other construction wastes. - Chemical contamination. - Vegetation and natural features planned for retention. Recycled material should be used for the construction of streets, shared paths and other infrastructure where practicable.	**Complies** It is requested that a Construction Management Plan may be required as a condition of permit.

56.09 UTILITIES

56.09-1 Site Management Objectives To maximize the opportunities for shared trenching. To minimize constraints on landscaping within street reserves.	*Standard C27* Reticulated services for water, gas, electricity and telecommunications should be provided in shared trenching to minimize construction costs and land allocation for underground services.	**Complies** The proposed subdivision is consistent with the proposed development of the subject site for a multi-dwelling development. Shared trenching will be implemented where possible.
56.09-2 Electricity, Telecommunications and Gas Objectives To provide public utilities to each lot in a timely, efficient and cost effective manner. To reduce greenhouse gas emissions by supporting generation and use of electricity from renewable sources.	*Standard C28* The electricity supply system must be designed in accordance with the requirements of the relevant electricity supply agency and be provided to the boundary of all lots in the subdivision to the satisfaction of the relevant electricity authority. Arrangements that support the generation or use of renewable energy at a lot or neighbourhood level are encouraged. The telecommunication system must be designed in accordance with the requirements of the relevant telecommunications servicing agency and should be consistent with any approved strategy, policy or plan for the provision of advanced telecommunications infrastructure, including fibre optic technology. The telecommunications system must be provided to the boundary of all lots in the subdivision to the satisfaction of the relevant telecommunications servicing authority.	**Complies** Refer to Servicing Report (Appendix 8). It is not proposed to deliver gas to lots and the application therefore does not require referral to the gas authority.

	Where available, the reticulated gas supply system must be designed in accordance with the requirements of the relevant gas supply agency and be provided to the boundary of all lots in the subdivision to the satisfaction of the relevant gas supply agency.	
56.09-3 Fire Hydrants Objective To provide fire hydrants and fire plugs in positions that enable fire fighters to access water safely, effectively and efficiently.	*Standard C29* Fire hydrants should be provided: - A maximum distance of 120 metres from the rear of each lot. - No more than 200 metres apart. Hydrants and fire plugs must be compatible with the relevant fire service equipment. Where the provision of fire hydrants and fire plugs does not comply with the requirements of standard C29, fire hydrants must be provided to the satisfaction of the relevant fire authority.	**Complies**
56.09-3 Public Lighting Objective To provide public lighting to ensure the safety of pedestrians, cyclists and vehicles. To provide pedestrians with a sense of personal safety at night. To contribute to reducing greenhouse gas emissions and to saving energy.	*Standard C30* Public lighting should be provided to streets, footpaths, public telephones, public transport stops and to major pedestrian and cycle paths including public open spaces that are likely to be well used at night to assist in providing safe passage for pedestrians, cyclists and vehicles. Public lighting should be designed in accordance with the relevant Australian Standards.	**Complies**

	Public lighting should be consistent with any strategy, policy or plan for the use of renewable energy and energy efficient fittings.	

Appendix 7 – Arborist Report

Elms Horticulture

Arboricultural/Horticultural Consultancy
ABN 9168 0663 603

Preliminary Arboricultural Report

17 Smith Street
Daylesford, Victoria

Elms Horticulture, David Elms GradCert Arb, Dip Hort, 11 Boolarong dve, Belmont, Victoria, 3216, Ph. 0407 843 078, elmshort@gmail.com

Background

1.1 This inspection was done at the request of Mr Joseph van Dyk, Director – Hygge Property.
1.2 The trees are located throughout the property at 17 Smith Street, Daylesford, Victoria. The property is within the Hepburn Shire.
1.3 The property is approximately 4.5 hectares in size.
1.4 This inspection was to identify and assess the trees, provide their location, species, dimensions, age, useful life expectancy, health and structural condition, and their suitability for retention on this site as part of a potential development.
1.5 There is an Environmental Significance Overlay for this site, which also includes ESO schedules 1 & 2. ESO schedule 1 covers the removal of trees on the site.
1.6 The trees were assessed and this report was prepared by Mr David Elms, a qualified Arborist (AQF8) who has been working in the horticulture industry for over 30 years.
1.7 The inspection was a visual ground based inspection only. Only trees over 3m in height were assessed.
1.8 Inspections were conducted on the 27th May and 1st June 2019.

2.0 The Trees

2.1 There were 64 trees inspected as for this report. 47 of the trees were located on the actual site of 17 Smith Street, the remaining 17 trees were located in neighbouring properties.
2.2 The trees were a mix of native and exotic trees. Of the 47 trees on the property only 4 trees appear to be possible remnant vegetation, the remainder appear to all be planted vegetation.

3.0 Observations/Conclusions

3.1 Data from the inspection of the 64 trees can be found in Table 1 – Field Assessment and Table 2 – Tree Retention/Protection.
3.2 Tree 1 although of good health and structure is located in the middle of the proposed entrance and will most likely require removal to accommodate the driveway.
3.3 The eucalypts and elms along the current driveway are nearly all in poor to hazardous structurally and would be best being removed.
3.4 The trees immediately around the house (22 – 31) are generally in good structural condition and health.
3.5 Tree 32 has been heavily and poorly pruned which will result in a decline in health of the tree over the next few years.
3.6 The oaks along the northern property boundary (trees 33 & 38) are both good specimens for this species of tree.
3.7 The 2 large Manna gums in the centre of the paddock to the east of the dwelling both have shed significant limbs and have a number of suspected or observed defects such as cavities.
3.8 The 2 large manna gums located on the southern boundary of the same paddock as trees mentioned in 3.7 are more worthy of retention due to their habitat value and the ability to create an exclusion zone around the base of the trees. Both these trees have rubbish that has been dumped around the base and this rubbish would require careful removal so as not to damage the trees.
3.9 The remainder of the trees not already mentioned so far are in various conditions structurally and in health.
3.10 In my professional opinion the removal of any trees on this property would not compromise the quality of any water supply, aquafer, increase erosion or run off or increase pollution, turbidity or nutrient levels in water courses, bodies or storages as mentioned in ESO schedule 1.

4.0 Recommendations

4.1 Trees 33, 38 (Oaks) should both be considered for retention as they are of suitable condition both structurally and health wise and are of excellent aesthetic value to the site. Crown lifting would allow better access under these trees.

4.2 Trees 43 and 44 (Manna Gums) appear to both be remnant indigenous vegetation and are both of high aesthetic and habitat value. Carefully removing the dumped rubbish from around the base of these trees and mulching the entire TPZ within the property so as to create an exclusion zone under the trees is highly recommended.

4.3 Other trees to consider if possible for retention would be tree 1 (oak), tree 26 (chestnut) and tree 27 (Cedar)

4.4 All Ulmus (elm) should have the stumps poisoned and temporarily left before grinding to help prevent suckering from the root system. This includes trees 11, 17, 19 & 21.

4.5 All neighbouring trees must be protected from damage during development of the site as set out in AS 4970/2009 Protection of Trees on Development Sites. The Tree protection zones for these trees as shown in table 2 should be noted and no excavation be carried out within the TPZ of these trees.

4.6 All trees to be retained should be protected from damage as set out in the Australian Standard – AS 4970-2009 Protection of Trees on development sites. These zones are to protect the tree both above and below ground.

4.7 Further tree protection measures as set out in AS 4970-2009 which are listed below must also be put in place during development of the site.

4.8 Where possible all underground services that are required within the site should be bought in by directional drilling at a depth of 600mm deep as far as possible rather than using trenching methods. All sub-contractors such as Electrician and Plumbers should be aware of this

4.9 All trees shall have temporary site fencing that is recommended at a minimum of 1.8m high and with shade cloth or similar material attached to it to protect the trees from damage. These fences should have signs attached identifying the area as a tree protection zone and a contact name and number for the site manager or project arborist should the fence require moving. Approval must be given before any fence can be moved. The area within this fence should be mulched with mulched with a woodchip material to a depth between 50&100mm deep to further help reduce stress on the tree.

4.10 These barriers should remain in place until handover is occurring and all other trades have vacated the site.

4.11 The following activates are not permitted within the TPZ for any of the trees on this nature strip –

- Machine excavation including trenching (excluding work as described in 4.2)
- Excavation for silt trenching
- Cultivation
- Storage
- Preparation of Chemicals, including cement products
- Parking of vehicles and plant
- Refuelling
- Dumping of waste
- Wash down and cleaning of equipment
- Placement of fill
- Lighting of fires
- Soil level changes
- Temporary or Permanent installation of utilities and signs
- Physical damage to the tree

4.12 Any pruning of existing trees that are chosen to be retained should be done to Australian Standard AS 4373-2007, Pruning of Amenity Trees by a qualified arborist.

5.0 References

- Australian Standard 4970-2009 Protection of Trees on Development Sites
- Australian Standard 4373-2007 Pruning of Amenity Trees

6.0 Definitions

Age: Expected life span of tree

Category	Description
Young	Juvenile or recently planted tree, 1-7 Yrs in age. Less than 20% of expected life span
Semi Mature	Tree is in active growth phase of its life, still has not reached expected physical size for its species/location
Mature	The tree has reached its expected physical size
Over Mature / Senescent	Tree is approaching the end of its life and is beginning to show signs of decline

Health: A trees vigour as exhibited by crown density & cover, leaf colour, presence of epicormic shoots, ability to withstand pests & diseases and degree of dieback

Category	Description
Excellent	Canopy full with even foliage density throughout, leaves are entire and are of excellent size and colour for the species. Excellent growth indicators. No pest or disease present
Good	Canopy full with minor variations in foliage density throughout, leaves are entire and are of good size for the species with minimal or no visible pest or disease damage. Good growth indicators. No or minimal deadwood
Fair	Canopy with moderate variations in foliage density throughout, leaves not entire with reduced size and/or atypical in colour, moderate pest or disease damage. Reduced growth indicators, visible amounts of deadwood, canopy may contain epicormic growth
Poor	Canopy density significantly reduced throughout, leaves are not entire, are significantly reduced in size and/or are discoloured, significant pest or disease damage present. Significant amounts of deadwood and/or epicormic growth, noticeable dieback of branch tips, possible extensive
Dead	No live plant material evident throughout canopy. Bark may be delaminating from the trunk or branches

Structure: The structure of the tree from root to crown

Category	Description
Good	Sound Branch attachments with no visible structural defects. No visible wounds to the trunk and/or root plate. No visible fungal pathogens (decay/rot) present.
Fair	Minor structural defects in limbs. Minor damage to trunk and/or roots e.g. mower strike. Small wounds present but no apparent fungal pathogens present
Poor	Significant structural defects present such as bifurcations with included bark with possible union failure within 5 years. Minor lateral splits within limbs. Wounding evident with cavities and decay present. Damage to structural roots, particularly within SRZ or girdling roots. Decay/Rot present
Hazardous	Severe structural defects with failure imminent. Defects include large lateral splits, horizontal cracking and partial root plate failure. Tree requires immediate work

Definitions …… ATTACHMENT 10.1.9

DBH – Diameter at breast height, refers to the trunk measurement taken at 1.4m from the ground for a single trunked tree.

SULE – Safe useful life expectancy of the tree

TPZ – Tree protection zone, as defined in AS4970-2009 'Protection of Trees on Development Sites. TPZ is calculated by multiplying the DBH x 12An area around the tree where use is limited both above and below ground to protect the wellbeing of the tree.

SRZ – Structural root zone, as defined in AS4970-2009 'Protection of Trees on Development Sites. Is calculated by measuring the diameter at the base (D) of the tree then applying the following formula. SRZ radius = $(Dx50)^{0.42}$ x 0.64. SRZ is the area required for tree stability. This area around the tree is where no work can be carried out.

Branch Attachment – the structural linkage of branch to another branch or the trees trunk

Bifurcation – the division of branches or roots into 2 parts of similar dimensions and from the same point. Also known as co-dominant

Coppice: A mass of epicormic shoots arising from heavy pruning, usually from the stump

Leader: A structural branch asserting apical dominance

Crown Lifting: Pruning to remove branches from the lower crown, usually for clearance or access

Defect – any structural weakness or deformity

Epicormic – shoots which form as a result of a latent or adventitious bud

Girdling Root – a root which circles and constricts the stem or roots causing death of the phloem and/or cambial tissue

Included Bark – pattern of development at a branch junction where bark is turned inwards rather than pushed out, causing a potential failure point.

Phototropic lean: a natural lean by the tree, usually towards a light source

Sounding: Tapping of roots, trunk or branches with a mallet to sample acoustic resonance to compare soundwood with wood that is decayed or hollow

Topping: Removal of the upper parts of the tree, reducing its height by lopping. Usually not done in modern arboriculture as it increases the chances of premature decline of the tree.

Torsional Crack: A crack or split in a limb or trunk caused by a twisting action of the limb, usually while under load

Target area – people or property that would potentially be affected if a tree or part of the tree were to fail

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7.0 Disclaimer

- Unless otherwise stated, this report is based from a ground based visual tree assessment. Some defects may be hidden from view of the inspector from the ground or may be below ground. The inspector cannot detect every condition that could cause the tree/s to fail.
- This report is written using information gathered from observations by the inspector as well as information provided at the time of inspection by the trees owner.
- Trees are living organisms and their health and structure can be affected by many different factors. Tree reports are not indefinite, trees should be re-inspected on a regular basis.
- It is the client's choice whether they choose to accept or disregard any recommendations found in this report.
- It is the client's responsibility to arrange for any work listed in the recommendations to be carried out including any re-inspections.
- This report must be read in its entirety.
- At no time shall any part of this report be referred to unless it is taken into the full context of the whole report.
- If this report is to be used in a court of law or a legal situation, Elmshorticulture must first be advised in writing prior to the report being presented in any form to another party.
- While the inspector has some specific knowledge regarding some local laws it is the clients responsibility to obtain the relevant approvals from local government before any work commences.
- At no time will David Elms be held responsible for the compliance to any relevant local or state government law arising from recommendations contained in this report or for the standard of work carried out on the tree completed by other persons.

Report by David Elms,
6/6/2019

Table 1 – Field Assessment

No.	Genus	Species	Common Name	DBH	Height	Age	Structure	Health	SULE	Comments
1	Quercus	robur	English Oak	113	12-24m	Mature	Good	Good	40 + Years	Would require uplifting and some deadwood removal
2	Eucalyptus	leucoxylon	Yellow Gum	31	3-6m	Semi Mature	Poor	Good	5-10 years	Coppiced tree. top has snapped out leaving no proper leader
3	Eucalyptus	leucoxylon	Yellow Gum	17	3-6m	Semi Mature	Poor	Good	5-10 years	coppiced tree
4	Eucalyptus	leucoxylon	Yellow Gum	33	6-12m	Semi Mature	Fair	Good	10-20 Years	Southern primary scaffold limb has large wound from previous failure.
5	Eucalyptus	leucoxylon	Yellow Gum	25	3-6m	Semi Mature	Poor	Good	5-10 years	Has lost leader. All epicormic regrowth. decay in trunk
6	Acacia	melanoxylon	Blackwood	44	6-12m	Mature	Fair	Good	5-10 years	numerous acute branch angles with potential for major limb failure
7	Eucalyptus	leucoxylon	Yellow Gum	25	6-12m	Semi Mature	Fair	Fair	5-10 years	Numerous pruning events. some die back of limbs
8	Cedrus	deodara	Deodar Cedar	10	0-3m	Young	Good	Good	40 + Years	Young tree
9	Eucalyptus	leucoxylon	Yellow Gum	26	6-12m	Semi Mature	Fair	Fair	5-10 years	some die back in limbs
10	Acacia	melanoxylon	Blackwood	36	6-12m	Mature	Hazardous	Fair	0-5 Years	large torsional crack in trunk and split in nearby primary scaffold limb
11	Ulmus	procera	English Elm	116	12-24m	Over Mature	Hazardous	Fair	5-10 years	Large recent failure in lower trunk. Decay present.
12	Eucalyptus	leucoxylon	Yellow Gum	12	3-6m	Semi Mature	Fair	Poor	5-10 years	Considerable die back in limbs. cankerous wounds evident

No.	Genus	Species	Common Name	DBH	Height	Age	Structure	Health	SULE	Comments
13	Eucalyptus	leucoxylon	Yellow Gum	16	3-6m	Semi Mature	Fair	Poor	5-10 years	some die back in limbs
14	Ulmus	procera	English Elm	72	6-12m	Over Mature	Hazardous	Poor	5-10 years	Tree appears to have failed in the centre and reshot new limbs. Pocket of decay down centre of tree evident. sounding does not indicate decay is too thick
15	Eucalyptus	leucoxylon	Yellow Gum	12	0-3m	Semi Mature	Poor	Fair	5-10 years	Coppiced tree.
16	Eucalyptus	leucoxylon	Yellow Gum	35	3-6m	Semi Mature	Fair	Good	10-20 Years	tree heavily pruned over driveway
17	Ulmus	procera	English Elm	62	6-12m	Semi Mature	Poor	Fair	5-10 years	Appears to have been topped or had major trunk failure. Numerous pockets of decay and wound sites present.
18	Eucalyptus	leucoxylon	Yellow Gum	12	3-6m	Young	Poor	Fair	5-10 years	Has re-shot from base. Heavily pruned over driveway. poor specimen
19	Ulmus	procera	English Elm	85	12-24m	Mature	Hazardous	Poor	0-5 Years	Large pocket of decay in trunk evident. Sounding and probing indicate insufficient holding wood in trunk. high risk of tree failing at trunk
20	Acacia	longifolia	Sallow Wattle	18	3-6m	Mature	Poor	Fair	5-10 years	numerous wounds in trunk indicating decay
21	Ulmus	procera	English Elm	87	12-24m	Mature	Poor	Fair	5-10 years	Wound in trunk indicates pocket of decay. sounding shows sufficient holding wood
22	Aesculus	hippocastanum	Horse Chestnut	36	3-6m	Semi Mature	Good	Good	10-20 Years	
23	Betula	pendula	Silver Birch	11	3-6m	Semi Mature	Good	Good	10-20 Years	
24	Aesculus	hippocastanum	Horse Chestnut	35	6-12m	Semi Mature	Good	Good	10-20 Years	multi trunked from base
25	Aesculus	hippocastanum	Horse Chestnut	50	6-12m	Semi Mature	Good	Good	10-20 Years	

No.	Genus	Species	Common Name	DBH	Height	Age	Structure	Health	SULE	Comments
26	Aesculus	hippocastanum	Horse Chestnut	42	6-12m	Semi Mature	Good	Good	10-20 Years	
27	Cedrus	deodara	Deodar Cedar	154	25m+	Mature	Fair	Good	10-20 Years	
28	Cupressus	sempervirens	Italian Cypress	105	25m+	Mature	Fair	Good	10-20 Years	
29	Aesculus	hippocastanum	Horse Chestnut	30	3-6m	Semi Mature	Poor	Fair	5-10 years	Decay in trunk evident. borer evident in trunk
30	Malus	domestica	Apple	multi	0-3m	Semi Mature	Poor	Good	5-10 years	Decay in trunk.
31	Citrus	x limon	Lemon	12	0-3m	Semi Mature	Fair	Fair	10-20 Years	
32	Jaglans	spp.	Walnut	72	6-12m	Mature	Poor	Fair	10-20 Years	Heavily pruned on school side of tree
33	Quercus	robur	English oak	105	12-24m	Mature	Fair	Good	20-40 Years	requires some dead wooding
34	Acer	opalus	Italian Maple	6	0-3m	Young	Poor	Fair	5-10 years	very poor specimen
35	Jaglans	spp.	Walnut	15	3-6m	Semi Mature	Fair	Fair	10-20 Years	has maple suckers growing up around base of trunk
36	Acer	opalus	Italian Maple	82	6-12m	Mature	Fair	Fair	10-20 Years	
37	Acer	opalus	Italian Maple	110	12-24m	Semi Mature	Fair	Poor	10-20 Years	heavy suckering from base
38	Quercus	robur	English oak	108	12-24m	Mature	Fair	Good	20-40 Years	would require some dead wooding and uplifting
39	Acer	opalus	Italian Maple	126	12-24m	Over Mature	Hazardous	Fair	0-5 Years	Trunk extensively hollow. high risk of collapse
40	Eucalyptus	viminalis	Manna Gum	177	25m+	Mature	Poor	Fair	20-40 Years	Possible pocket of decay mid trunk. numerous limb failures resulting in some large wounds

No.	Genus	Species	Common Name	DBH	Height	Age	Structure	Health	SULE	Comments
41	Eucalyptus	viminalis	Manna Gum	211	25m+	Mature	Hazardous	Fair	5-10 years	Large cavity visible through main vertical trunk. Numerous very large limb failures leaving large wounds back into trunk.
42	Corymbia	spp	Flowering Gum	40	3-6m	Mature	Fair	Good	10-20 Years	
43	Eucalyptus	viminalis	Manna Gum	155	12-24m	Over Mature	Poor	Fair	10-20 Years	Numerous cavities and wound sites. Important habitat tree. Canopy is thinning. isolate around TPZ and retain
44	Eucalyptus	viminalis	Manna Gum	112	12-24m	Over Mature	Poor	Good	10-20 Years	Phototropic lean in trunk. Numerous wound sites. Retain for habitat value.
45	Acacia	melanoxylon	Blackwood	50	6-12m	Mature	Fair	Good	10-20 Years	
46	Cedrus	deodara	Deodar Cedar	22	3-6m	Young	Good	Good	20-40 Years	
47	Acer	opalus	Italian Maple	12	3-6m	Young	Fair	Fair	10-20 Years	
48	Betula	spp.	Birch	25	3-6m	Semi Mature	Fair	Fair	10-20 Years	X 4 trees. all with wounding to trunk, possible decay/cavity's
49	Eucalyptus	viminalis	Manna Gum	65	12-24m	Mature	Fair	Good	20-40 Years	wound site in trunk from limb failure
50	Betula	spp.	Birch	35	3-6m	Semi Mature	Fair	Fair		X 15 trees. all with wounding in trunks
51	Pittosporum	tennuifolium	Pittosporum	multi	3-6m	Mature	Poor	Fair	5-10 years	decay at base
52	Fraxinus	spp.	Ash	multi	3-6m	Mature	Poor	Fair	5-10 years	decay at base
53	Pittosporum	tennuifolium	Pittosporum	60	6-12m	Over Mature	Poor	Fair	5-10 years	Dieback in upper canopy. Heavily lopped.
54	Acacia	melanoxylon	Blackwood	30	3-6m	Mature	Fair	Fair	5-10 years	located in School yard

No.	Genus	Species	Common Name	DBH	Height	Age	Structure	Health	SULE	Comments
55	Eucalyptus	viminalis	Manna Gum	55	12-24m	Semi Mature	Fair	Fair	10-20 Years	Located in School yard
56	Acer	opalus	Italian Maple	45	12-24m	Semi Mature	Good	Good	20-40 Years	2 trees growing with 1m of each other
57	Abies	pinsapo	Spanish Fir	100	12-24m	Mature	Fair	Fair	10-20 Years	
58	Abies	pinsapo	Spanish Fir	100	12-24m	Mature	Fair	Fair	10-20 Years	
59	Abies	pinsapo	Spanish Fir	100	12-24m	Mature	Fair	Good	10-20 Years	
60	Abies	pinsapo	Spanish Fir	100	12-24m	Mature	Fair	Good	10-20 Years	
61	Abies	pinsapo	Spanish Fir	100	12-24m	Mature	Fair	Fair	10-20 Years	
62	Eucalyptus	tricarpa	Ironbark	90	6-12m	Mature	Fair	Good	20-40 Years	
63	Populus	spp.	Poplar	55	12-24m	Semi Mature	Fair	Good	10-20 Years	
64	Populus	spp.	Poplar	55	12-24m	Semi Mature	Fair	Good	10-20 Years	

Table 2 – Tree Retention/Protection

Tree No.	Genus	Species	Common Name	Diameter @ Breast Height (cm)	Tree Protection Zone (m)	Structural Root Zone (m)	Height (m)	Source	Worth Retaining
1	Quercus	robur	English Oak	113	13.6	3.5	12-24m	Exotic	Consider
2	Eucalyptus	leucoxylon	Yellow Gum	31	3.7	2.0	3-6m	Locally Indigenous	No
3	Eucalyptus	leucoxylon	Yellow Gum	17	2.0	1.6	3-6m	Locally Indigenous	No
4	Eucalyptus	leucoxylon	Yellow Gum	33	4.0	2.1	6-12m	Locally Indigenous	No
5	Eucalyptus	leucoxylon	Yellow Gum	25	3.0	1.8	3-6m	Locally Indigenous	No
6	Acacia	melanoxylon	Blackwood	44	5.3	2.3	6-12m	Locally Indigenous	No
7	Eucalyptus	leucoxylon	Yellow Gum	25	3.0	1.8	6-12m	Locally Indigenous	No
8	Cedrus	deodara	Deodar Cedar	10	1.2	1.3	0-3m	Exotic	No
9	Eucalyptus	leucoxylon	Yellow Gum	26	3.1	1.9	6-12m	Locally Indigenous	No
10	Acacia	melanoxylon	Blackwood	36	4.3	2.2	6-12m	Locally Indigenous	No
11	Ulmus	procera	English Elm	116	13.9	3.5	12-24m	Exotic	No
12	Eucalyptus	leucoxylon	Yellow Gum	12	1.4	1.4	3-6m	Locally Indigenous	No
13	Eucalyptus	leucoxylon	Yellow Gum	16	1.9	1.5	3-6m	Locally Indigenous	No
14	Ulmus	procera	English Elm	72	8.6	2.9	6-12m	Exotic	No
15	Eucalyptus	leucoxylon	Yellow Gum	12	1.4	1.4	0-3m	Locally Indigenous	No
16	Eucalyptus	leucoxylon	Yellow Gum	35	4.2	2.1	3-6m	Locally Indigenous	No
17	Ulmus	procera	English Elm	62	7.4	2.7	6-12m	Exotic	No
18	Eucalyptus	leucoxylon	Yellow Gum	12	1.4	1.4	3-6m	Locally Indigenous	No

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Tree No.	Genus	Species	Common Name	Diameter @ Breast Height (cm)	Tree Protection Zone (m)	Structural Root Zone (m)	Height (m)	Source	Worth Retaining
19	Ulmus	procera	English Elm	85	10.2	3.1	12-24m	Exotic	No
20	Acacia	longifolia	Sallow Wattle	18	2.2	1.6	3-6m	Locally Indigenous	No
21	Ulmus	procera	English Elm	87	10.4	3.1	12-24m	Exotic	No
22	Aesculus	hippocastanum	Horse Chestnut	36	4.3	2.2	3-6m	Exotic	No
23	Betula	pendula	Silver Birch	11	1.3	1.3	3-6m	Exotic	No
24	Aesculus	hippocastanum	Horse Chestnut	35	4.2	2.1	6-12m	Exotic	No
25	Aesculus	hippocastanum	Horse Chestnut	50	6.0	2.5	6-12m	Exotic	No
26	Aesculus	hippocastanum	Horse Chestnut	42	5.0	2.3	6-12m	Exotic	Consider
27	Cedrus	deodara	Deodar Cedar	154	18.5	4.0	25m+	Exotic	Consider
28	Cupressus	sempervirens	Italian Cypress	105	12.6	3.4	25m+	Exotic	No
29	Aesculus	hippocastanum	Horse Chestnut	30	3.6	2.0	3-6m	Exotic	No
30	Malus	domestica	Apple	multi	2.0	1.5	0-3m	Exotic	No
31	Citrus	x limon	Lemon	12	1.4	1.4	0-3m	Exotic	No
32	Jaglans	spp.	Walnut	72	8.6	2.9	6-12m	Exotic	No
33	Quercus	robur	English oak	105	12.6	3.4	12-24m	Exotic	Yes
34	Acer	opalus	Italian Maple	6	0.7	1.0	0-3m	Exotic	No
35	Jaglans	spp.	Walnut	15	1.8	1.5	3-6m	Exotic	No
36	Acer	opalus	Italian Maple	82	9.8	3.0	6-12m	Exotic	No
37	Acer	opalus	Italian Maple	110	13.2	3.4	12-24m	Exotic	No

Tree No.	Genus	Species	Common Name	Diameter @ Breast Height (cm)	Tree Protection Zone (m)	Structural Root Zone (m)	Height (m)	Source	Worth Retaining
38	Quercus	robur	English oak	108	13.0	3.4	12-24m	Exotic	Yes
39	Acer	opalus	Italian Maple	126	15.1	3.6	12-24m	Exotic	No
40	Eucalyptus	viminalis	Manna Gum	177	21.2	4.2	25m+	Locally Indigenous	No
41	Eucalyptus	viminalis	Manna Gum	211	25.3	4.5	25m+	Locally Indigenous	No
42	Corymbia	spp	Flowering Gum	40	4.8	2.3	3-6m	Australian Native	No
43	Eucalyptus	viminalis	Manna Gum	155	18.6	4.0	12-24m	Locally Indigenous	Yes
44	Eucalyptus	viminalis	Manna Gum	112	13.4	3.5	12-24m	Locally Indigenous	Yes
45	Acacia	melanoxylon	Blackwood	50	6.0	2.5	6-12m	Locally Indigenous	No
46	Cedrus	deodara	Deodar Cedar	22	2.6	1.8	3-6m	Exotic	No
47	Acer	opalus	Italian Maple	12	1.4	1.4	3-6m	Exotic	No
48	Betula	spp.	Birch	25	3.0	1.8	3-6m	Exotic	Yes
49	Eucalyptus	viminalis	Manna Gum	65	7.8	2.8	12-24m	Locally Indigenous	Yes
50	Betula	spp.	Birch	35	4.2	2.1	3-6m	Exotic	Yes
51	Pittosporum	tennuifolium	Pittosporum	multi	3.0	1.5	3-6m	Exotic	Yes
52	Fraxinus	spp.	Ash	multi	6.0	2.5	3-6m	Exotic	Yes
53	Pittosporum	tennuifolium	Pittosporum	60	7.2	2.7	6-12m	Exotic	Yes
54	Acacia	melanoxylon	Blackwood	30	3.6	2.0	3-6m	Locally Indigenous	Yes

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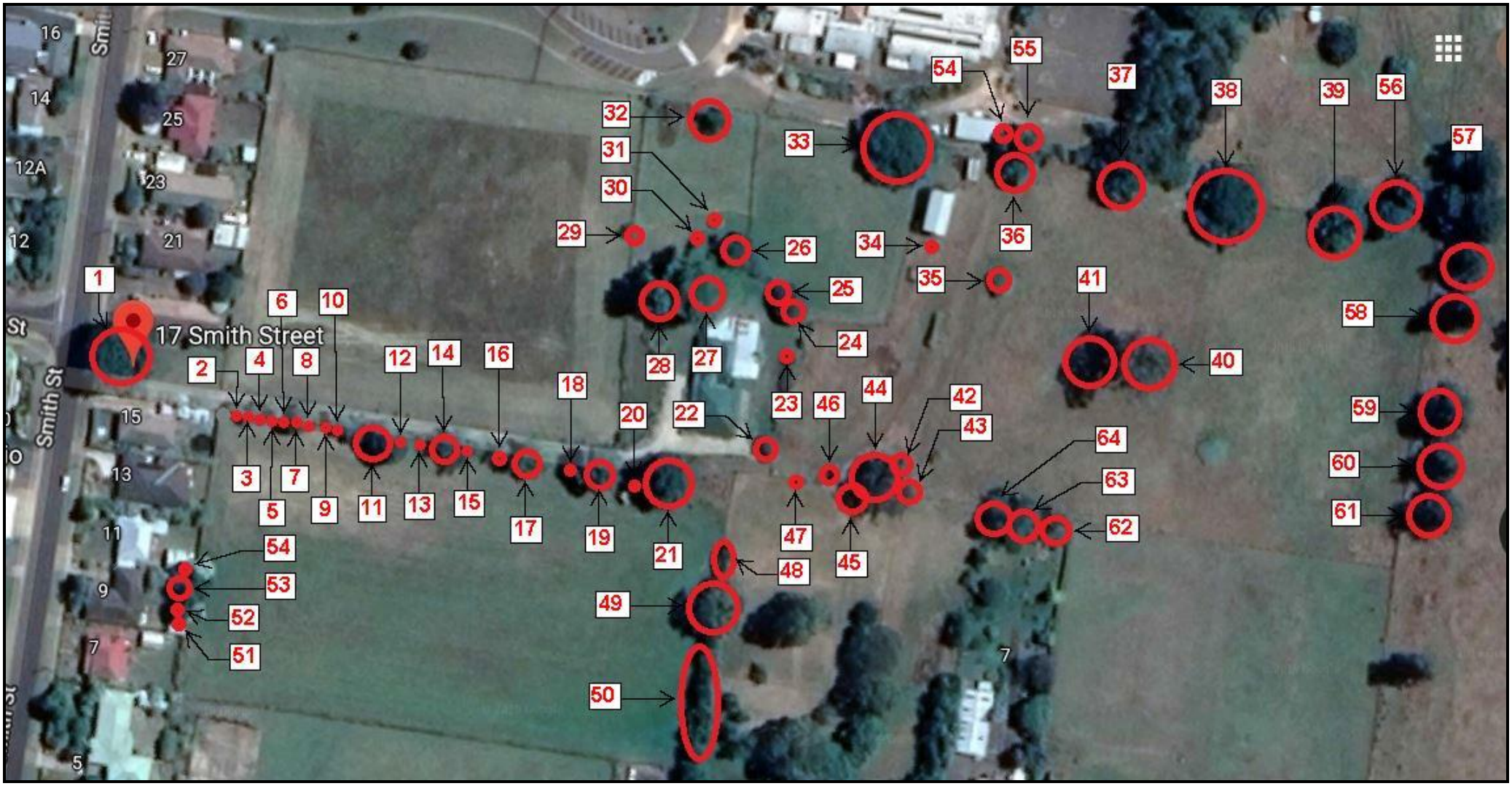
Tree No.	Genus	Species	Common Name	Diameter @ Breast Height (cm)	Tree Protection Zone (m)	Structural Root Zone (m)	Height (m)	Source	Worth Retaining
55	Eucalyptus	viminalis	Manna Gum	55	6.6	2.6	12-24m	Locally Indigenous	Yes
56	Acer	opalus	Italian Maple	45	5.4	2.4	12-24m	Exotic	Yes
57	Abies	pinsapo	Spanish Fir	100	12.0	3.3	12-24m	Exotic	Yes
58	Abies	pinsapo	Spanish Fir	100	12.0	3.3	12-24m	Exotic	Yes
59	Abies	pinsapo	Spanish Fir	100	12.0	3.3	12-24m	Exotic	Yes
60	Abies	pinsapo	Spanish Fir	100	12.0	3.3	12-24m	Exotic	Yes
61	Abies	pinsapo	Spanish Fir	100	12.0	3.3	12-24m	Exotic	Yes
62	Eucalyptus	tricarpa	Ironbark	90	10.8	3.2	6-12m	Locally Indigenous	Yes
63	Populus	spp.	Poplar	55	6.6	2.6	12-24m	Exotic	Yes
64	Populus	spp.	Poplar	55	6.6	2.6	12-24m	Exotic	Yes

Appendix 1 – Site Plan

ATTACHMENT 10.1.9



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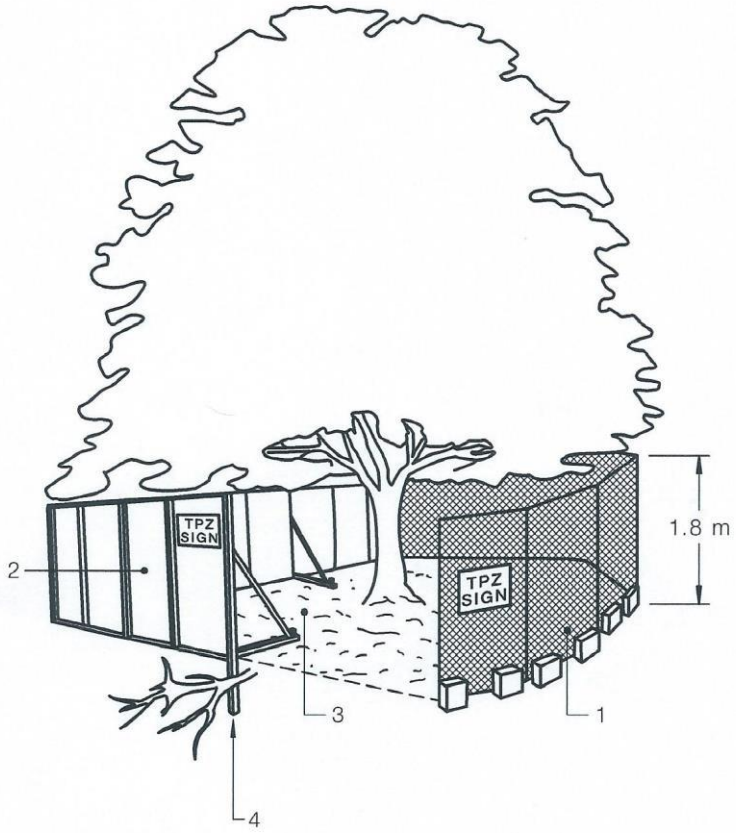

LEGEND:

1 Chain wire mesh panels with shade cloth (if required) attached, held in place with concrete feet.
2 Alternative plywood or wooden paling fence panels. This fencing material also prevents building materials or soil entering the TPZ.
3 Mulch installation across surface of TPZ (at the discretion of the project arborist). No excavation, construction activity, grade changes, surface treatment or storage of materials of any kind is permitted within the TPZ.
4 Bracing is permissible within the TPZ. Installation of supports should avoid damaging roots.

FIGURE 3 PROTECTIVE FENCING

FIGURE C1 TREE PROTECTION ZONE SIGN

Appendix 5 – Waste Management Plan

onemilegrid

17 Smith Street, Daylesford

Waste Management Plan

220413WMP001C-F.docx

5 August 2022

onemile**grid**

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DOCUMENT INFORMATION

Prepared for	hygge property		
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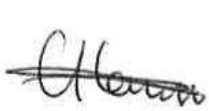
Signature		**Signature**	

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1 INTRODUCTION

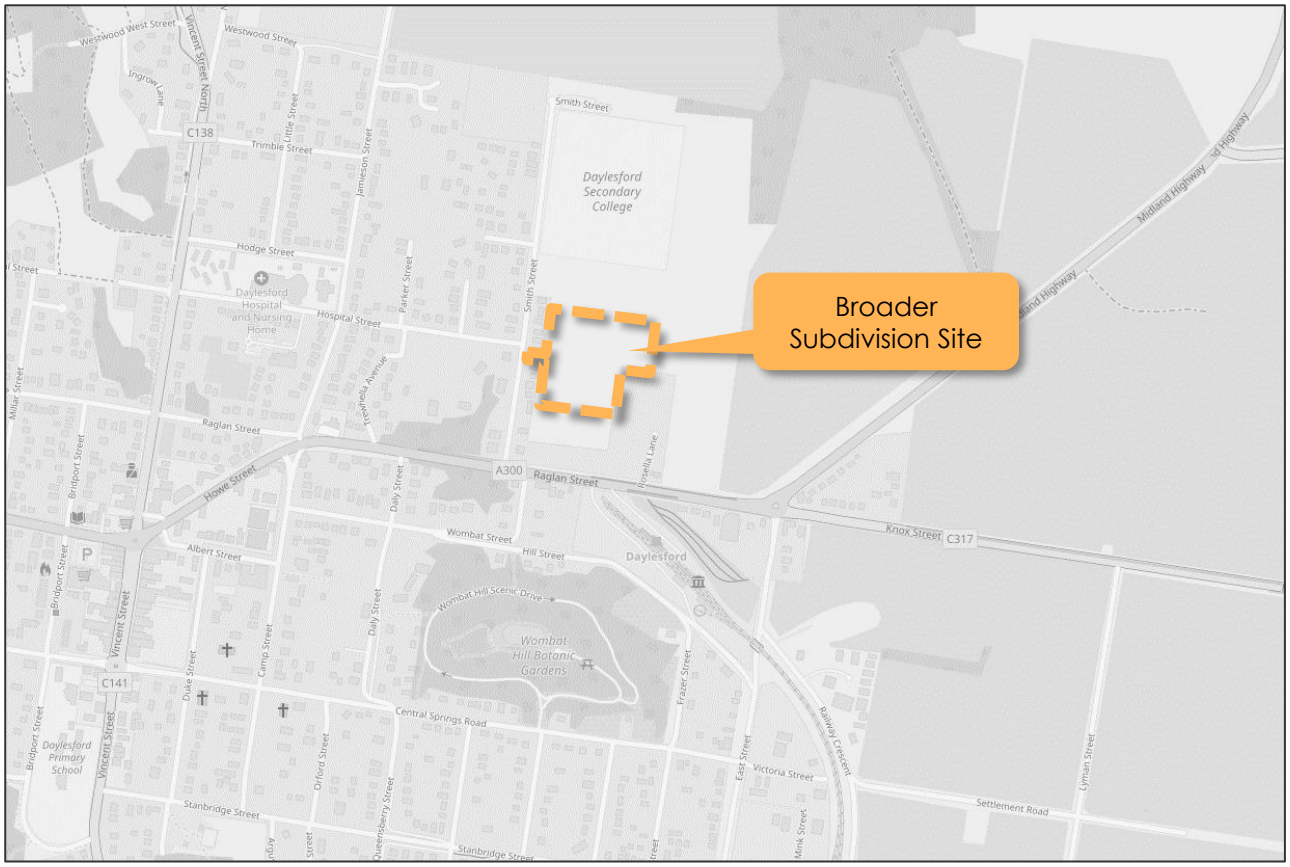
onemile**grid** has been requested by hygge property to prepare a Waste Management Plan for the proposed residential development at 17 Smith Street, Daylesford.

The preparation of this management plan has been undertaken with due consideration of the Sustainability Victoria Better Practice Guide for Waste Management and Recycling in Multi-unit Developments and relevant Council documentation.

2 EXISTING SITE CONDITIONS

The subject site is located within part of a larger residential subdivision, at 17 Smith Street, Daylesford, as shown in Figure 1.

Figure 1 Site Location



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The overall site is largely unoccupied, with a single dwelling located within the site accessed via Smith Street to the west.

Land use in the immediate vicinity of the site is residential in nature or farming land.

3 DEVELOPMENT PROPOSAL

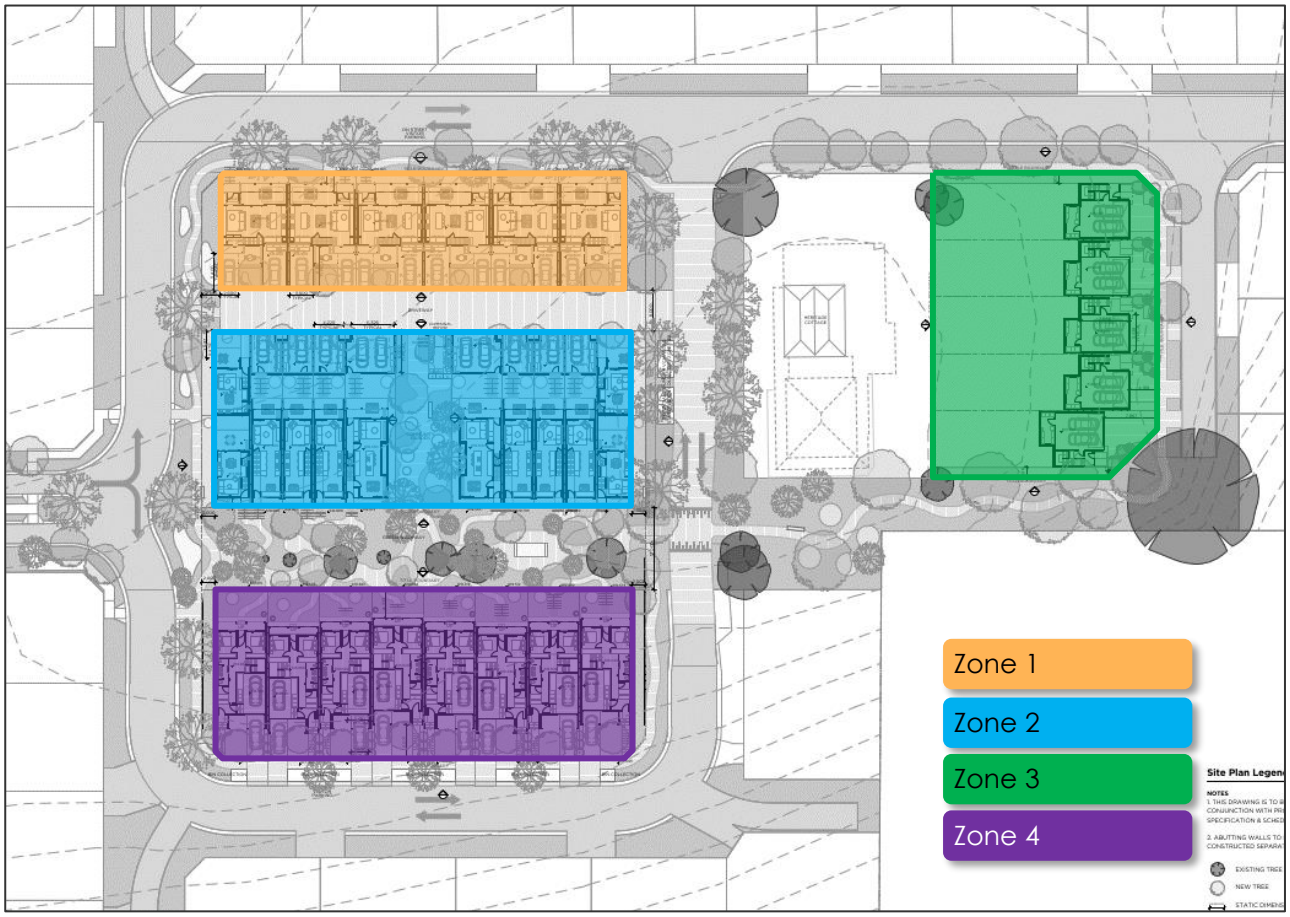
3.1 General

It is proposed to develop three superlots within the broader subdivision (Superlots A, B and C) for the purposes of a residential development comprising 31 new lots.

For the purposes of waste collection, the site has been split into four zones as identified below.

The site layout is shown below in Figure 2.

Figure 2 Site Layout



3.2 Waste Management

It is proposed to utilise Hepburn Council's municipal waste collection services to manage the collection and disposal of garbage and recycling, with a private contractor or residents proposed to manage the collection and disposal of additional waste streams not collected by Council.

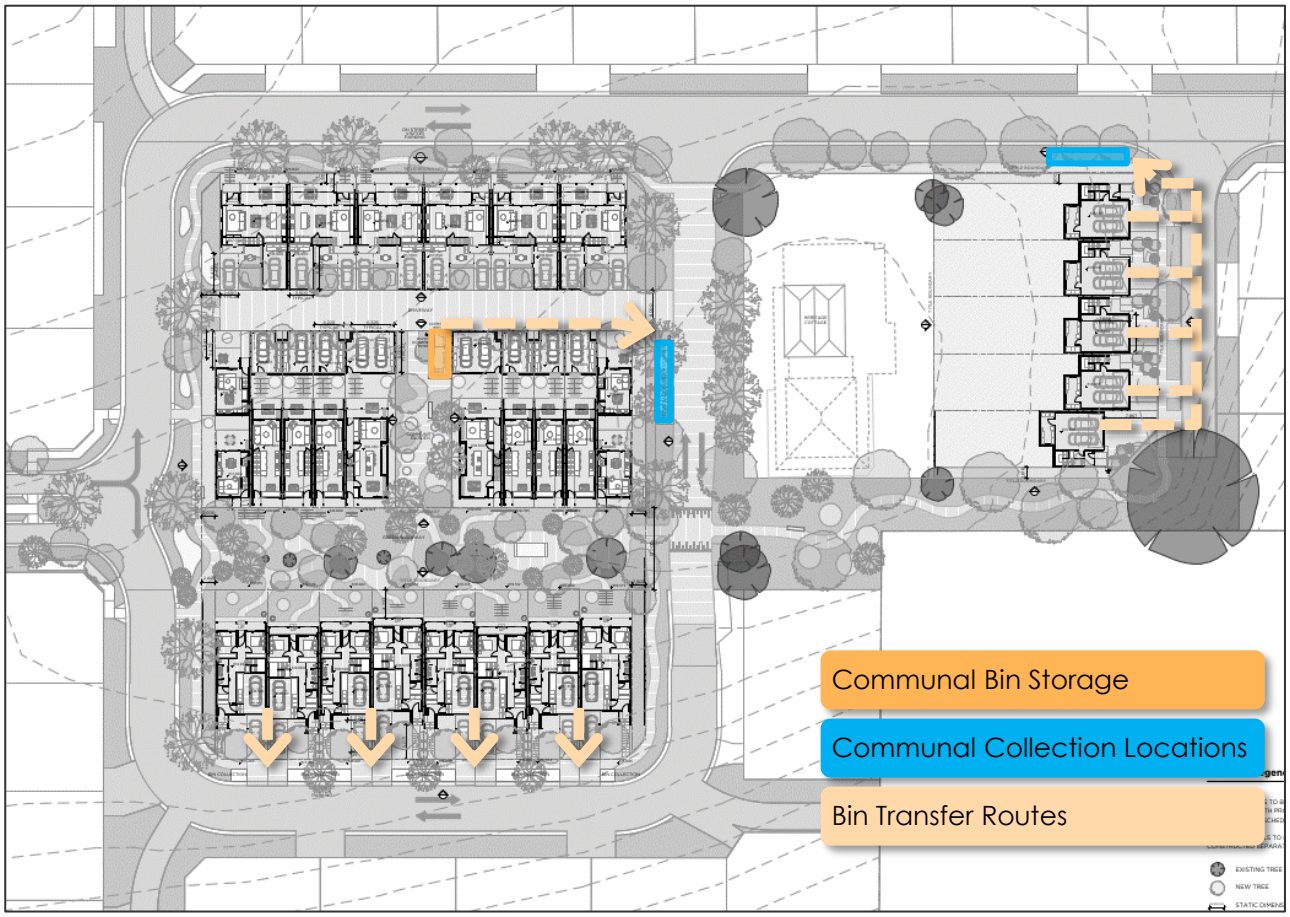
Dwellings located within Zones 1 and 2 are proposed to be provided with shared garbage and recycling bins in a communal bin storage area in the reserve adjacent to Lot 13. Bins will be transferred to the street frontage for Council collection by a site manager or residents on a roster system.

Dwellings located within Zones 3 and 4 are proposed to be provided with individual garbage and recycling bins which will be stored within individual dwellings. Bins for Zone 3 dwellings will be transferred by residents to the street frontage adjacent to lot 27 for Council collection. Bins for Zone 4 dwellings will be transferred by residents to the relevant street frontage for Council collection.

Additional waste stream bins stored within the communal waste storage area shared by all dwellings will be transferred to the street frontage for collection by a site manager or residents on a roster system.

The collection locations and expected transfer routes are shown in Figure 3.

Figure 3 Bin Storage Room and Collection Details



4 WASTE GENERATION

4.1 Residential Waste Survey – Garbage and Recycling

The Victorian Local Government Annual Survey assesses the kerbside waste management and recycling services by local governments, and provides household yields for both recyclables and garbage.

In order to estimate the expected waste generation of the proposed dwellings, information from the 2019-2020 Annual Survey was sourced for the Shire of Hepburn. Based on standard waste densities provided by Sustainability Victoria, the survey indicates that approximately 85 litres of garbage and 65 litres of commingled recyclables are generated per household per week.

Furthermore, the above rates are for uncompacted waste and recyclables. It should be noted that slight compaction can significantly reduce the volume of waste and particularly recyclables, reducing the bin requirements accordingly.

4.2 Organics

Sustainability Victoria identifies that approximately 35% of the garbage generation for residential properties comprises organic waste, and therefore, the provision of organics waste collection can result in a reduction in garbage generation by 35%.

Dwellings within Zones 1 and 2 will share compost bins located adjacent to the bin storage room, and organics waste bins located in the communal bin storage.

Dwellings within Zones 3 and 4 will be provided with individual compost bins which can be stored within individual back yards.

4.3 Soft Plastics

Soft plastic waste is estimated to contribute approximately 20% of landfill waste volumes, and includes such things as bread bags, plastic bags, bubble wrap and snap lock bags. Therefore, the provision of soft plastics waste collection can result in a reduction in garbage generation by 20%.

Soft plastics bins to be shared by all dwellings are proposed within the communal bin storage. Considering the light weight of soft plastics waste, it is considered reasonable for soft plastics to be transferred from all dwellings to the communal bin storage by residents.

4.4 Glass Recycling

Glass recycling is estimated to contribute approximately 10% of commingled recycling volumes, and therefore, the provision of glass recycling collection can result in a reduction in commingled recycling generation by 10%.

Glass recycling bins to be shared by all dwellings are proposed within the communal bin storage. Considering the low generation, it is considered reasonable for glass recycling to be transferred from all dwellings to the communal bin storage by residents.

4.5 Expected Waste Generation

It is proposed to provide garbage and commingled recycling bins to the dwellings in Zone 3 and 4 in accordance with Council standards, though shared bins will be provided for garbage and recycling for the dwellings in Zone 1 and 2, and for the streams not collected by Council for all dwellings.

Based on the above, the following weekly waste generation is expected for the shared bin storage.

Table 1 Expected Waste Generation

Stream	*Waste/Dwelling/Week*	*No. Dwellings Serviced by Communal Bin Storage*	*Shared Bin Storage Waste / Week*
Garbage	38 litres	18	689 litres
Organics	30 litres	18	536 litres
Soft Plastics	17 litres	31	527 litres
Commingled Recycling	59 litres	18	1,053 litres
Glass Recycling	7 litres	31	202 litres

4.6 Electronic Waste (E-Waste)

E-waste includes all manner of electronic waste, such as televisions, computers, cameras, phones, household electronic equipment, batteries and light bulbs. On 1st July 2019, the disposal of E-waste to landfill was banned by the Victorian Government.

E-waste contains valuable materials that can be recovered and reused such as tin, nickel, zinc, aluminium, copper, silver and gold.

A large number of e-waste collection points are available in Victoria and private contractors are equipped with the resources to undertake E-waste collections.

E-waste is proposed to be stored within the shared bin storage area for use by all residents.

E-waste will be taken by residents or a site manager to Daylesford Transfer Station as required.

Additional recycling locations are provided at https://recyclingnearyou.com.au/

4.7 Hard Waste

Hard waste services will also be provided by the private contractor, under the management of the Owners Corporation. Hard waste will be stored within individual dwellings between collections, with coordinated collections to occur twice per year from the same location bins are collected for each dwelling.

4.8 Charity Items

Residents will be encouraged to offer items which are still in good usable condition to be offered to local charity organisations or for free pickup on social media, before being sent for disposal.

Charity collections will be provided by a private contractor or arranged by a local charity, under the management of the Owners Corporation.

5 BIN REQUIREMENTS

5.1 Bin Provision and Specifications

It is proposed to utilise Council's municipal waste collection for garbage and recycling collection for the proposed development. Council offers a 120 litre bin for garbage and a 240 litre bin for recycling for each dwelling. It is proposed for dwellings with individual garbage and recycling bins to be provided with the standard bins identified above.

Considering garbage bins are proposed to be shared by dwellings 1-18, it is proposed for the shared bin storage to be provided with 240 litre garbage and recycling bins.

It is proposed to utilise a private waste contractor for collection of all other waste streams associated with the development.

In relation to organic waste, though some shared compost bins are proposed to be provided for dwellings 1-18, the full provision of organic waste bins has been accommodated in the communal bin store in the event al compost bins are full in a given week.

The following bins shared bins will be required for the proposed development.

Table 2 Shared Bin Provision

Component – Lots Serviced	*Total Waste/Week*	*Bin Size*	*Collection Frequency*	*Collection Service*	*Bins Required*
Garbage (Lots 1-18)	689 litres	240 litres	Weekly	Council	3 bins
Recycling (Lots 1-18)	1,053 litres	240 litres	Fortnightly	Council	9 bins
Organics (Lots 1-18)	536 litres	240 litres	Weekly	Private	3 bins
Soft Plastics (All Lots)	527 litres	240 litres	Weekly	Private	3 bins
Glass Recycling (All Lots)	202 litres	240 litres	Weekly	Private	1 bin
E-Waste (All Lots)	-	-	As Required	Private	-
Total					**19 bins**

Table 3 Bin Specifications

Capacity	*Width*	*Depth*	*Height*	*Area*
80 litres	0.45m	0.50m	0.85m	0.23m²
120 litres	0.50m	0.55m	0.95m	0.28m²
240 litres	0.60m	0.75m	1.10m	0.45m²

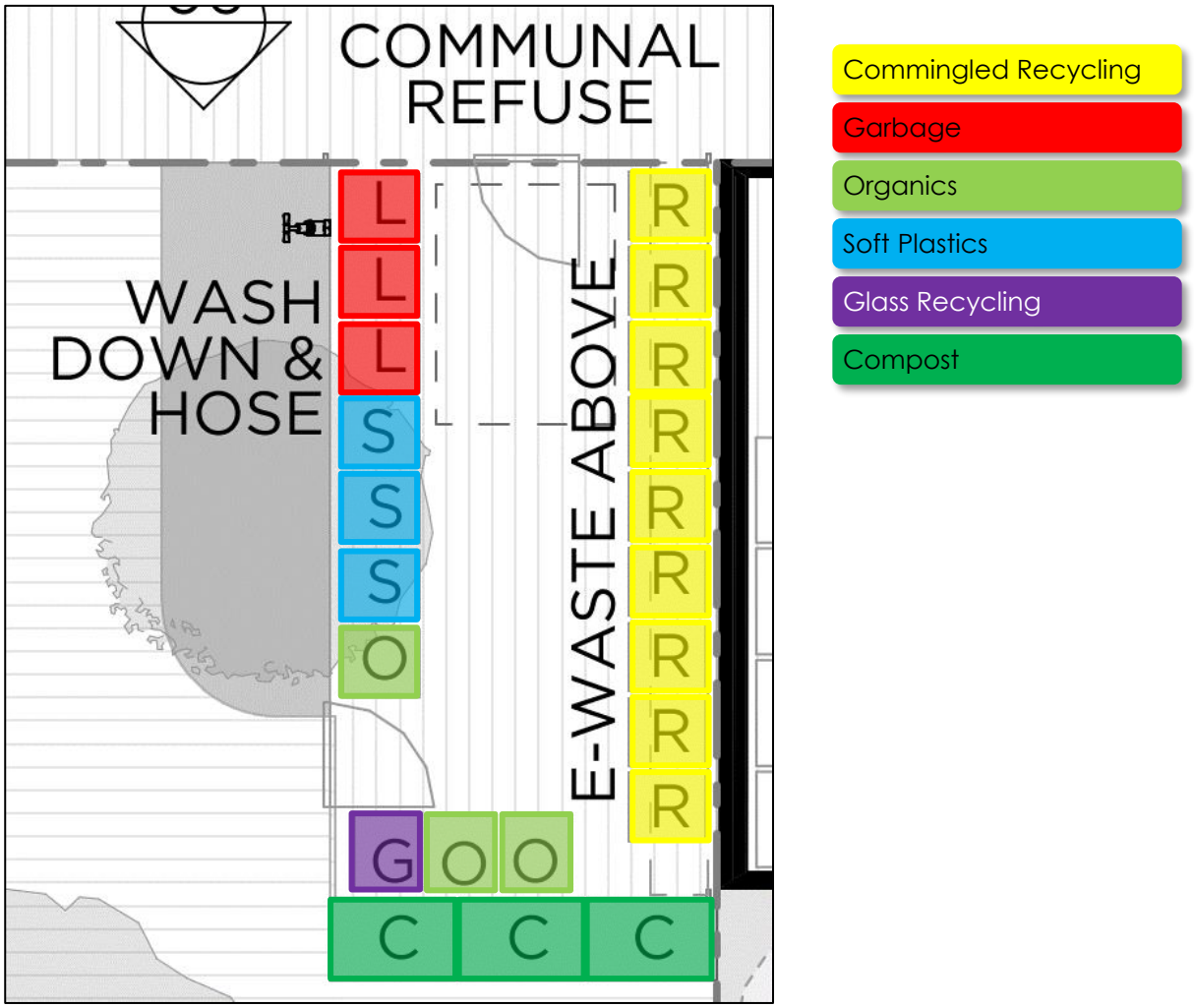
Garbage and recycling bins will be colour coded to Council Standard. Bin lids of other waste streams will be colour coded to the Australian Standard (AS4123) or to the standard colour specifications of the private contractor.

5.2 Bin Storage

As indicated in Figure 3, it is proposed to provide a communal bin storage adjacent to Lot 13 with a total area of approximately 21 square metres.

The layout of the bin storage area is shown in Figure 4, which demonstrates that the area is capable of accommodating the required bins, as calculated in Table 2.

Figure 4 Bin Storage Room Layout



5.3 Bin Collection

Shared bins will be transferred to the designated street frontage for collection by a site manager or residents on a roster system.

Individual bins for dwellings in Zones 3 and 4 will be transferred to the appropriate street frontages by residents for collection.

Allowing for approximately 0.5 metres between bins, a maximum kerbside length of 12.7 metres will be required for bin collection for the communal bins, coinciding with the fortnightly recycling collection. Similarly, a maximum kerbside length of 10.5 metres will be required for bin collection for the Zone 3 bins, coinciding with the fortnightly recycling collection.

5.4 Bin Cleaning

The Owners Corporation shall ensure that the shared residential bins are kept in a clean state, to minimise odours and to discourage vermin. This may include regular cleaning by a third party, cleaning by the waste contractor, bin swapping by the waste contractor, or maintenance by residents.

Where cleaning is to be undertaken on-site, it should only occur in a designated bin cleaning area, provided with a drain connected to sewer.

6 WASTE MANAGEMENT

6.1 Best Practice Waste Management

Best Practice Waste Management is an initiative designed to reduce the amount of waste generated through encouraging a change of behaviour and action on waste management and moreover recycling.

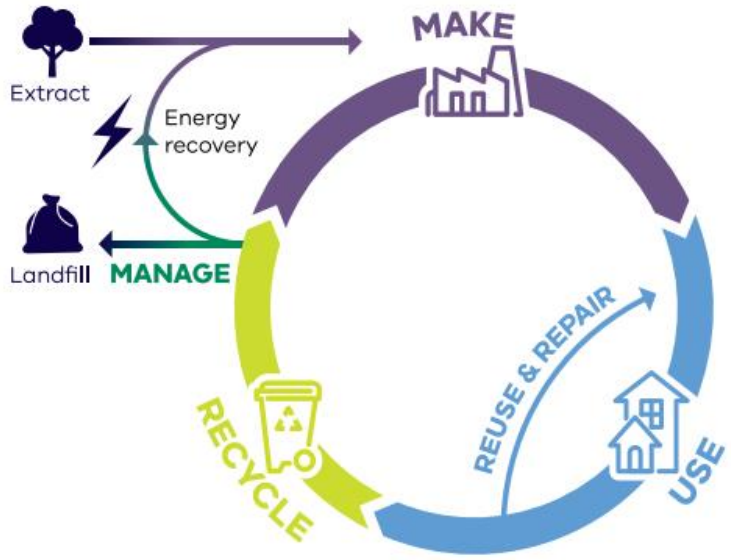
The benefits of reducing waste generation are far reaching and have been identified as significantly important by Council and the Victorian Government.

Recycling Victoria: A New Economy is a policy and 10-year action plan, prepared by the Victoria Government, to "deliver a cleaner, greener Victoria, with less waste and pollution, better recycling, more jobs and a stronger economy".

Four overarching goals have been identified in order to achieve a circular economy in relation to waste, as below:

1. MAKE – Design to last, repair and recycle;
2. USE – Use products to create more value;
3. RECYCLE – Recycle more resources;
4. MANAGE – Reduce harm from waste and pollution.

Figure 5 Resource Flows in a Circular Economy



In relation to the proposed development, recycling is of key importance, and in this regard, the Owners Corporation shall encourage residents to participate in minimising and reducing solid waste production by:

- Promoting the waste hierarchy, which in order of preference seeks to:
  - Avoid waste generation in the first place;
  - Increase the reuse and recycling of waste when it is generated; and
  - Recover, treat or contain waste preferentially to;
  - Its disposal in Land Fill (which is least desirable).
- Providing information detailing recyclable materials to ensure that non-recyclable materials do not contaminate recycling collections;

- Providing information regarding safe chemical waste disposal methods and solutions, including correct battery and electronics disposal methods;
- Encouraging composting for residents; and
- Providing tips for recycling and reusing waste, including encouraging the disposal of reusable items in good condition via donations to Opportunity Shops and Charities.

6.2 Bin Usage

Residents will bag and dispose of garbage in the provided individual or shared bins.

Residents will transport and dispose of recyclables, organics and soft plastics (non-bagged) in the provided individual or shared bins. Cardboard boxes should be flattened, and containers rinsed and cleaned prior to disposal in the provided bins.

6.3 Signage

To avoid contamination between garbage streams, bin lids will be colour coded in accordance with Council, Australian Standard or contractor standards, to ensure the bin type is easily distinguishable. Furthermore, bins should include typical signage (preferably on the bin lid) to reinforce the appropriate materials to be deposited in each bin. Example signage available from Sustainability Victoria is shown below.

Figure 6 Example Waste Signage

6.4 Noise Control

To minimise the disturbance to residents during waste collection, the collection should follow the criteria specified by the EPA, as below:

- Collections occurring once a week should be restricted to the hours 6:00am to 6:00pm, Monday to Saturday;
- Collections occurring more than once a week should be restricted to the hours 7:00am to 6:00pm, Monday to Saturday;
- Compaction should only be carried out while on the move;
- Bottles should not be broken up at the point of collection;
- Routes that service entirely residential areas should be altered regularly to reduce early morning disturbance; and
- Noisy verbal communication between operators should be avoided where possible.

6.5 Resident Information

To ensure all residents are aware of their responsibilities with regard to waste and bin management, an information package will be provided by the Owners Corporation to all residents, including the following information:

- A copy of this Waste Management Plan;
- Methods and techniques for waste reduction and minimisation;
- Information regarding bin collection days and requirements;
- Resident responsibilities with regard to bin usage, storage, and collection; and
- Resident responsibilities with regard to litter and waste removal from the common property.

7 Occupational Health & Safety Responsibilities

The Owners Corporation shall ensure compliance to all relevant OH&S regulations and legislation, including the following:

- Worksafe Victoria Guidelines for Non-Hazardous Waste and Recyclable Materials

8 Contact Information

8.1 Council

Hepburn Shire Council

Phone: (03) 5348 2306

Web: https://www.hepburn.vic.gov.au

Email: shire@hepburn.vic.gov.au

8.2 Contractors

Cleanaway

Services: Private contractor

Phone: 131 339

Web: www.cleanaway.com.au/

JJ Richards & Sons

Services: Private contractor including bin tugs

Phone: (03) 9703 5222

Web: www.jjrichards.com.au

Email: operations.melbourne@jjrichards.com.au

WasteWise

Services: Private contractor

Phone: 1300 550 408

Web: www.wastewise.com.au

BioPak (Organic Waste Compost Service)

Services: Private contractor

Phone: 1300 246 725

Web: www.biopak.com.au/compost-service

8.3 Equipment

Eco-Safe Technologies (odour control equipment)

Phone: 0411 335 753

Web: https://eco-safe.com.au/

Email: info@eco-safe.com.au

8.4 Others

Sustainability Victoria

Services: Sustainable Waste Management initiatives and information

Phone: 1300 363 744 (Energy, Waste and Recycling)

Web: www.sustainability.vic.gov.au

Email: info@sustainability.vic.gov.au

Appendix 3 – Stormwater Management Strategy

AXIOM CONSULTING ENGINEERS

STORMWATER MANAGEMENT STRATEGY

RESIDENTIAL SUBDIVISION

17 & 29 Smith Street and 9 Raglan Street, Daylesford

Prepared for

Smith Development Partnership Pty Ltd

Document Reference

863SS-02

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A	Michael Parker	28/01/21	Michael Parker	28/01/21	Chris Coughlan	28/01/21
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D	Michael Parker	03/12/21	Michael Parker	03/12/21	Chris Coughlan	03/12/21
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This investigation and report have been authorised by Mr Chris Coughlan, the Director of Axiom Consulting Engineers Pty Ltd.

Chris Coughlan BEng (Civil), MIEAust

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Definitions

AEP	Annual Exceedance Probability
WSUD	Water Sensitive Urban Design
RORB	Runoff and stream flow routing program
MUSIC	Stormwater treatment program

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1. INTRODUCTION

This Stormwater Strategy (SS) has been prepared for a proposed staged residential subdivision on three parcels of land known as 17 & 29 Smith Street and 9 Raglan Street, Daylesford.

The broad objectives of the SS are to ensure that there are no adverse impacts on the receiving waterways along with achieving best practice pollutant reductions through Water Sensitive Urban Design (WSUD) and storage of stormwater for onsite detention requirements.

2. SITE & SURROUNDS

The topography of the catchment is undulating with varying slopes up to 1:5.

The total catchment area for the development sites is 7.54ha. Individually, 17 Smith Street is 4.88ha, 29 Smith Street is 0.66ha and 9 Raglan Street is 2ha. There is an upstream catchment area of 13.48ha, which means the total catchment area 21.01ha.

The site is located within Hepburn Shire Council and is zoned as General Residential Zone 1 (GRZ1). A locality plan is sown in Figure 1 below.

Figure 1 – Locality Plan

Overlays ESO 1 and ESO 2 exist over the site and this strategy will address with references to stormwater, mentioned within the schedules for these overlays. The schedules also mention

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requirements for sewer and the site will provide sewer reticulation that is connected to the existing sewer system.

3. PROPOSED DEVELOPMENT

A Planning Permit exists for the staged subdivision of 17 Smith Street in 53 residential lots (Council ref no. PA 2504). A plan of the proposed development is shown below in Figure 2.

Figure 2 – Proposed Development Plan

4. EXISTING STORMWATER DRAINAGE

An overland flow path exists on the eastern side of the development site, which flows in a northerly direction. The majority of the site falls to the overland flow path, with the exception of the northwest part of the site, which falls towards Smith Street.

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No formal drainage infrastructure currently exists in the overland flow path. The northwest catchment will connect to Council's existing underground drainage network in Smith Street.

5. STORMWATER DISCHARGE

The software program RORB was used to create the hydrological model. RORB is a nonlinear rainfall runoff and streamflow routing model for calculation of flow hydrographs in drainage and stream networks, which are used in the hydraulic model. The overall catchment was broken into sub-catchments and a plan showing these can be found in Appendix A. The configuration of the RORB model can be seen below in Figure 3.

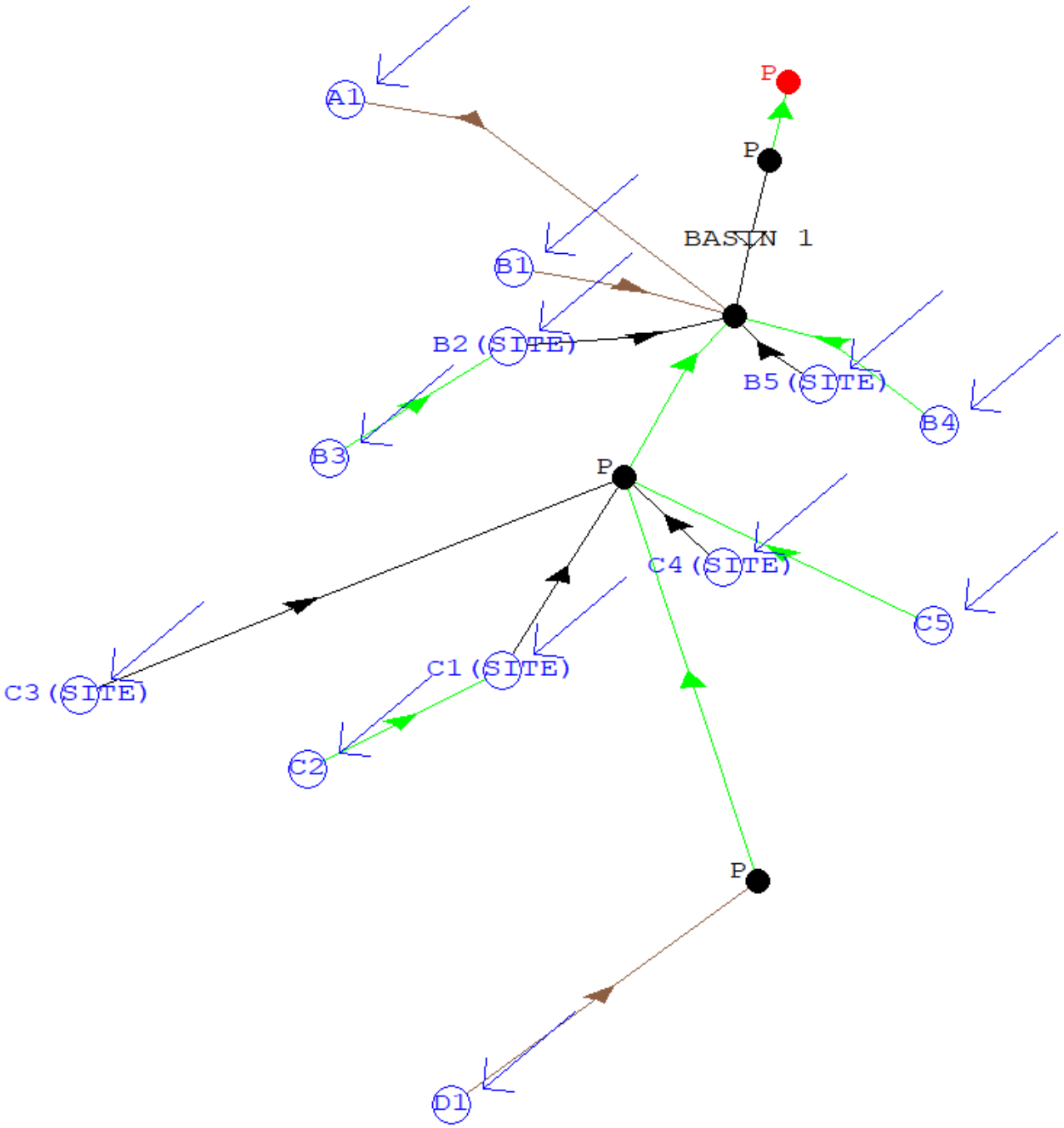

Figure 3 – RORB Model Configuration

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RORB Parameters

- Runoff coefficient model
- Rainfall Intensity Frequency Duration: ARR 2016 IFD
- Filtered patterns
- Uniform Areal Pattern
- Areal Reduction Factor: ARR Data Hub File
- Kc = 0.43
- M = 0.8
- Initial Loss = 26mm
- Continuing Loss = 4.3
- Ensemble mode used to determine critical event and temporal pattern

Note: Kc was calibrated using the ARR Regional Flood Frequency Analysis and correlation was found with the Auswide Dyer Kc value. Refer to Appendix D for details.

A pre-development catchment file was created in RORB, which represents the current pre-developed scenario (natural reaches and very low fraction impervious) including the upstream catchment of the overland flow path to the east of the site. Outputs generated at the northeastern corner of the site (the outlet) for the 20% AEP event. For comparison, a post-development model was created to assess the likely increase in peak flows and storm duration. Finally, storage nodes were added to the post-development scenario in an attempt to alleviate the increase in flows between the pre and post scenarios. A summary of the RORB model outputs is shown below in Table 1.

Scenario	Peak Storm Duration	Discharge at Outlet (m^3/s)
Pre-development 20% AEP	3 hour	0.52
Post-development 20% AEP no storage	2 hour	0.71
Post-development 20% AEP with storage	2 hour*	0.51

* Selected from Ensemble Simulation:

Table 1 – RORB Flow Summary

In order to determine the most critical storm duration and accompanying temporal pattern, RORB was run in Ensemble mode. The ensemble analysis incorporates 10 different temporal patterns for each storm duration and produces an output file.

The output file determines which duration produces the peak discharge at the outlet. Then the temporal pattern that most closely represents the average of the peak flows for that duration is selected and utilized for the single storm event analysis (results are shown in Appendix C).

A RORB model was produced which included a storage node (Basin 1), which modelled the 'Post-development 20% AEP with storage scenario' to detain the required volume that achieves a discharge flow of less than the Pre-development scenario.

The storage node includes details relating to height, storage and outflow, also known as a HSQ table. A 450mm diameter pipe in a 1m deep pit acts as an orifice for the basin. Refer to Table 2 below for details.

Basin 1		
H (AHD, m)	S (m^3)	Q (m^3/s)
590.00	0	0
590.20	105	0.02
590.40	236	0.42
590.60	392	0.46
590.80	576	0.48
590.90	900	1.000

Table 2 – RORB Storage Details

The cells highlighted in yellow above are arbitrary numbers to ensure the model does not crash if the storage level goes above 590.80m AHD. The remainder of the table is based on computed values and 3D surface modelling. The pit level for the orifice pipe is 590.30m AHD and the top water level for the storage volume is 590.69m AHD (refer Table 3). A weir will be designed at 590.70m AHD to discharges flows from the basin in events greater that the 20% AEP.

Table 3 below shows the performance of Basin 1, including inflow, outflow and storage volume for the post-development peak discharge storm duration (2 hour as shown above). It should be noted the spillway for Basins 1 is not engaged at all during the post-development 20% AEP storm event.

Storage	Inflow (m^3/s)	Outflow (m^3/s)	Storage (m^3)	Peak Elevation (AHD, m)
BASIN 1	0.84	0.52 (pipe only)	479	590.69

Table 3 – RORB Storage Summary

Full results of the post-development storage scenario from RORB can be found in Appendix C.

The storage requirements in Table 2 above have been achieved by creating additional 'air space' above the treatment zones of the proposed bioretention systems in Basin 1.

It should be noted the post-development with storage option produces a discharge flow rate at the outlet of $0.51m^3/s$, which is slightly below the pre-development flow of $0.52m^3/s$, meaning the development does not worsen the peak flow at the outlet in a 20% AEP event.

As per discussions with Council, any drainage outlet connection to the existing overland flow path will incorporate methods to avoid concentrated flows entering the overland flow path, such as a wide weir or energy dissipating structure.

Figure 4 on page 6 shows a schematic of Basin 1, including proposed contours for the basin and subdivision.

In regard to the northwestern catchment that cannot physically drain to the proposed basins, a separate detention system is proposed using oversized underground pipes, generally in accordance with Figure 5 on page 7. This system will connect to existing Council infrastructure in Smith Street, via an outfall pipe through the 29 Smith Street. A drainage easement will be created for the outfall pipe.

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As there is no overland flow available for the northwest catchment, the detention system will provide storage volume calculated for the 1% AEP storm event. Refer to Appendix E for the west catchment detention computations.

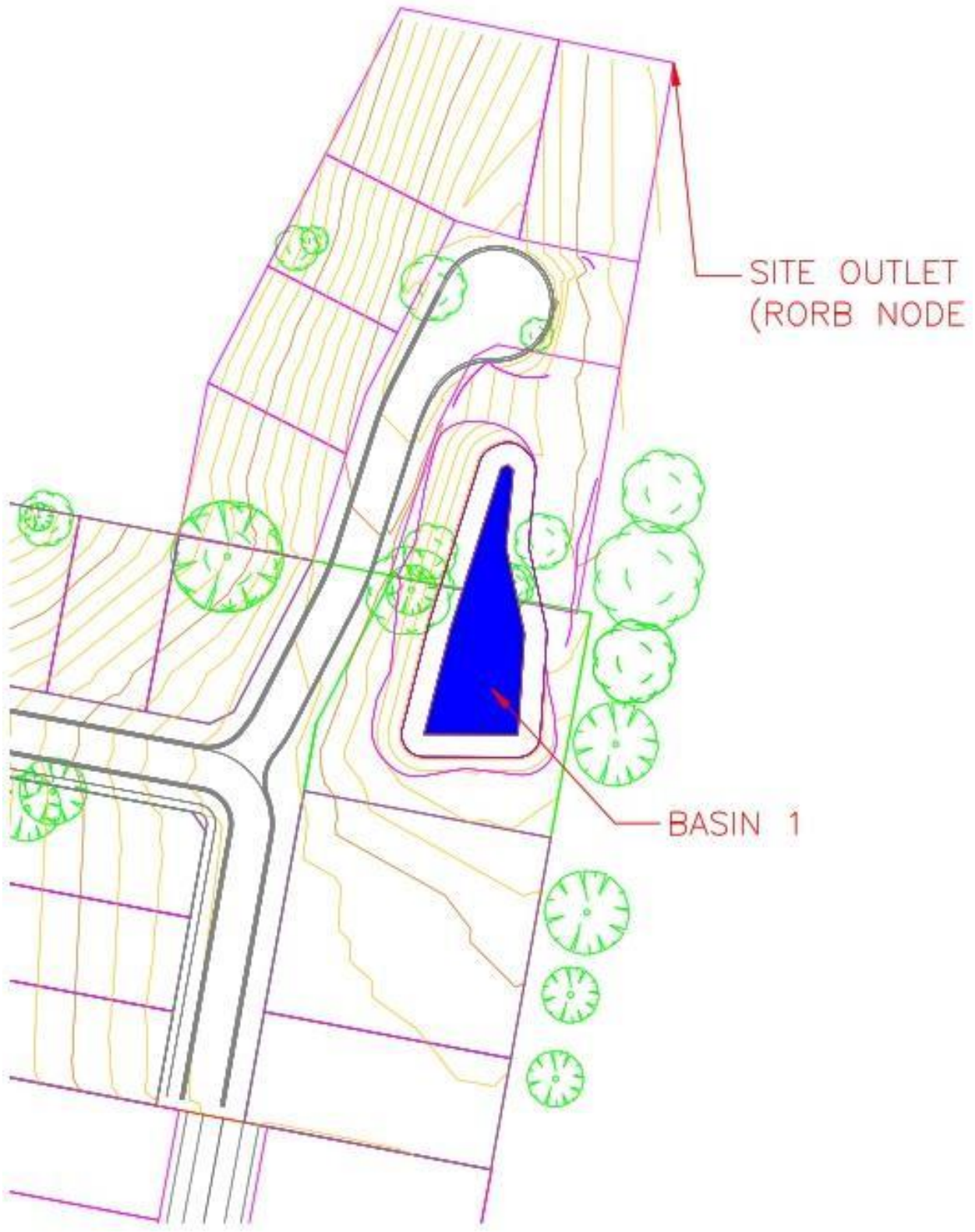

Figure 4 – Basin Plan

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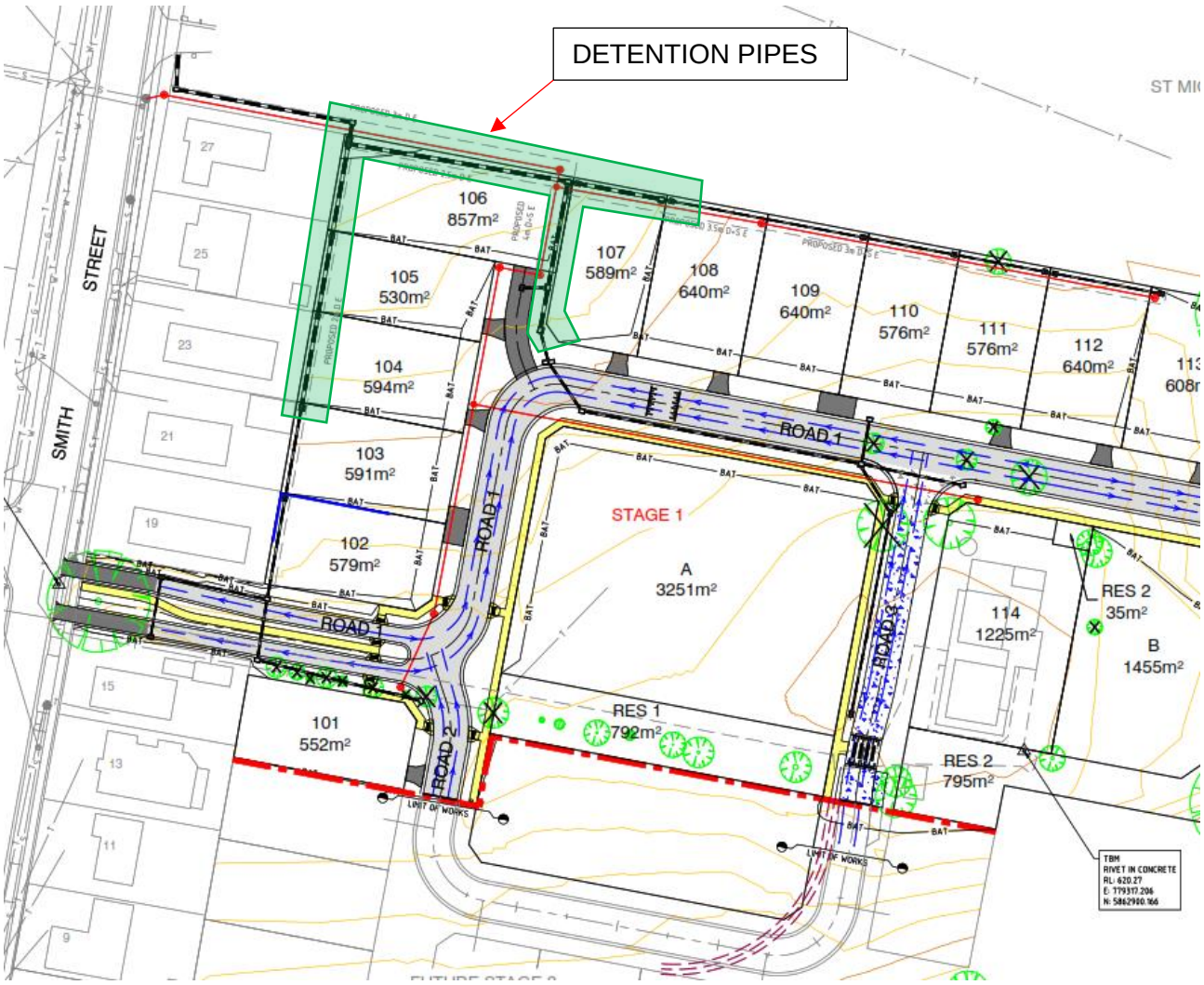

Figure 5 – Stage 1 FLP

6. OVERLAND FLOWS

There are two existing overland flow paths from the upstream catchment. One comes from the south and represents the majority of the upstream catchment. The other overland flow path comes from the west and has a much smaller catchment.

Refer to Figure 6 below for a plan showing the existing overland flow paths and how they can be managed within the development site, particularly the eastern overland flow path, which will need to be realigned as part of the 17 Smith Street development. There is also on overland flow path required in the southwest catchment to allow stormwater to flow to the basins across private land. If an agreement cannot be reached with the adjoining landowner, then the southwest catchment will need to provide a separate treatment and detention system.

It is noted that all overland flow paths will in accordance with DELWP “Guidelines for Development in Flood Affected Areas” design criteria.

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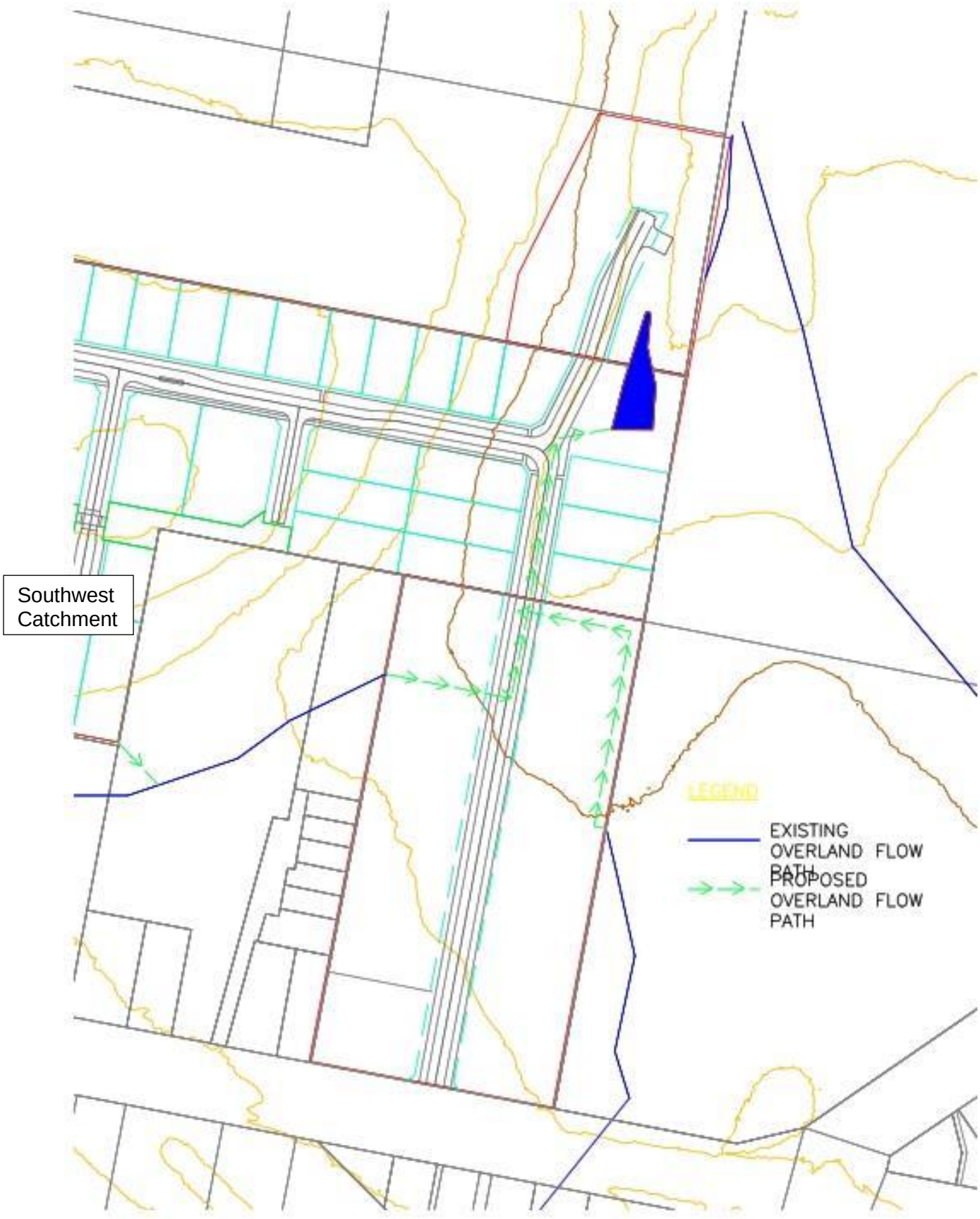

Figure 6 – Overland Flow Path Plan

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7. STORMWATER QUALITY

To address the WSUD requirements for stormwater quality treatment in the post development phase, a MUSC model has been produced. Refer to Appendix B for model layout and results for pollutant reductions.

MUSIC has the ability to simulate rainfall events for catchments and produce outputs from treatment nodes to measure the effectiveness of pollutant reductions at a given discharge point. The discharge point in the model shown in Appendix B is the existing overland flow path at the northeast corner of the development site.

As stated in *Water Sensitive Urban Design Engineering Procedures – Stormwater* published by CSIRO 2005, the requirements to meet best practice guidelines are as follows:

- 70% reduction in gross pollutants
- 80% reduction in total suspended solids
- 45% reduction in total nitrogen
- 45% reduction in total phosphorous

In order to achieve the above outcomes a series of treatment nodes are proposed, including a bioretention system, products from SPEL and rainwater tanks.

As part of Central Highlands Water's requirements in relation to Integrated Water Management, rainwater tanks are proposed for each lot, which are to be plumbed to the dwelling for reuse in toilet flushing. An allowance for 150L/day has been made for each lot, which represents the typical daily household toilet and laundry demand.

As the site is split into two catchments, a MUSIC model has been produced for each catchment. The two catchments are as follows:

- the northwest catchment (Stage 1)
- the balance of the site (Stages 2 & 3).

Northwest Catchment

All lots will have the roof drainage connected to a 3500L rainwater tank, which will be plumbed to the dwelling for reuse in toilet flushing, irrigation and optional laundry. This requirement will be mandated by way of a Section 173 Agreement.

The runoff from the roads will be captured by side entry pits fitted with SPEL Stormsacks.

All runoff from the catchment will then be directed to a SPEL Ecoceptor for further pollutant and nutrient removal.

A schematic and summary of results for the northwest catchment MUSIC model can be found in Appendix B.

Balance of Site

A summary of the key elements of the tanks and bioretention system is shown below in Table 4.

	Rainwater Tanks	Basin 1 (Bioretention Basin)
Storage Volume (kL/lot)	3.5	N/A
Daily Reuse (kL/lot)	0.15	N/A
Surface Area (m²)	N/A	400
Permanent Volume (m^3)	N/A	N/A
Extended Detention (m)	N/A	0.3

Table 4 – Treatment Node Summary

All lots will have the roof drainage connected to a 3500L rainwater tank, which will be plumbed to the dwelling for reuse in toilet flushing, irrigation and optional laundry. This requirement will be mandated by way of a Section 173 Agreement.

The bioretention system remove pollutants using an infiltration process incorporating various layers of sandy loam, sand and course gravel. Treated stormwater is collected in perforated pips below the filter media and transported to a discharge pit.

8. STAGING OF SUBDIVISION

The timing and sequencing of stages needs to be considered and temporary measures are likely to be required. A plan of the Stages can be found in Appendix F.

The intent is to construct Stage 1, then Stage 3 and finally Stage 2. Stage 1 mostly drains to the northwest outlet, but a small section of road falls to the east. As a result, a temporary sedimentation and storage basin is proposed, which can also be utilised by Stage 3.

A plan of the temporary basin is shown below in Appendix G.

As the temporary basin is located within the footprint of the ultimate basin, there will be a brief period during the Stage 2 construction, where the temporary basin will not be operational, to allow for the excavation of the ultimate basin. This duration is expected to be no longer than one week pending weather.

9. CONCLUSION

It has been determined that the increase of stormwater runoff due to development in the described catchment area can be decreased back to pre-existing conditions via a storage basin.

All stormwater from the catchment shall be directed to existing Council drainage (western catchment) or the existing overland flow path (eastern catchment).

Stormwater quality best practice targets can be met using the described treatment nodes, which can be constructed inside the retarding basin.

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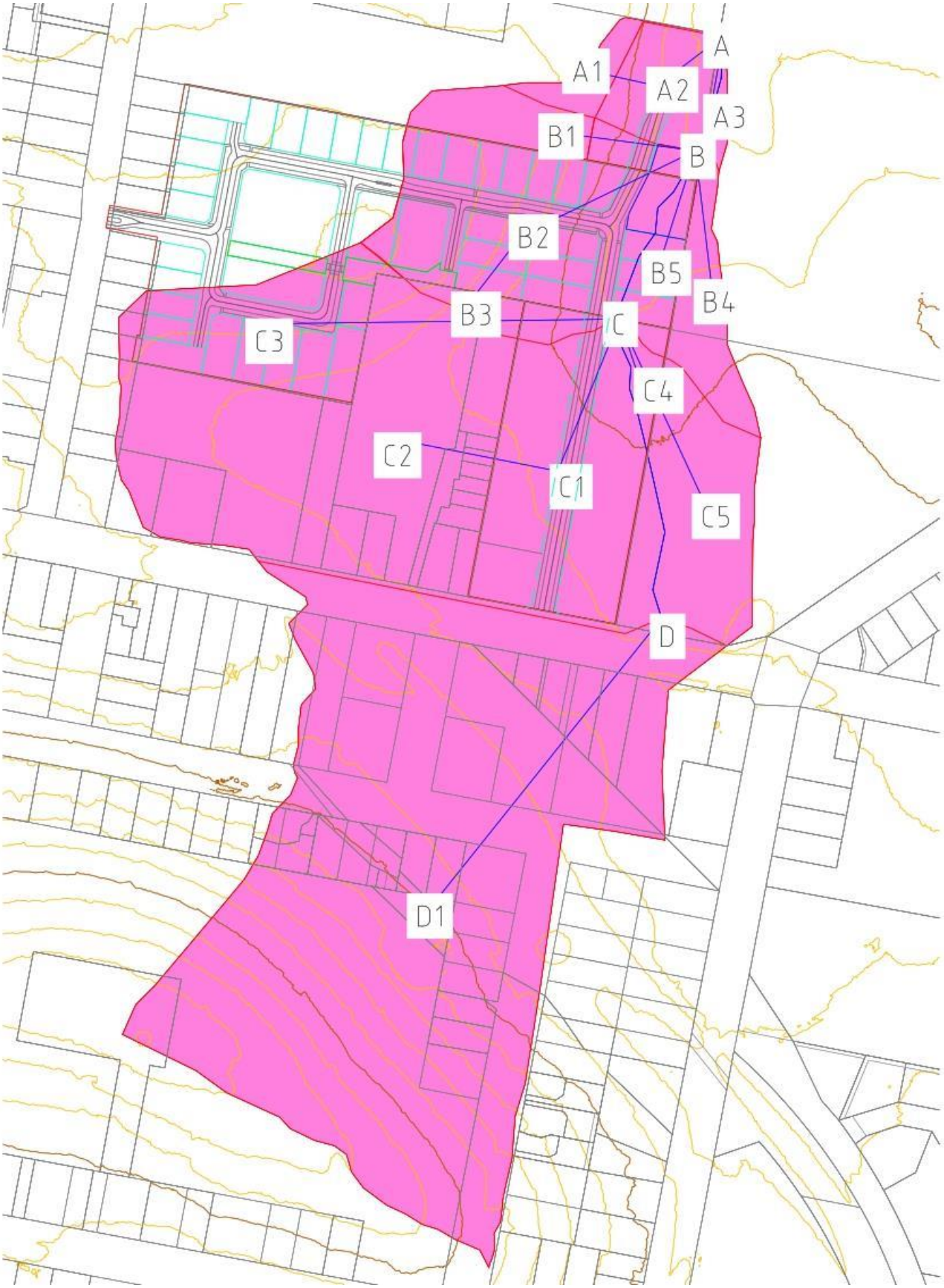
APPENDIX A



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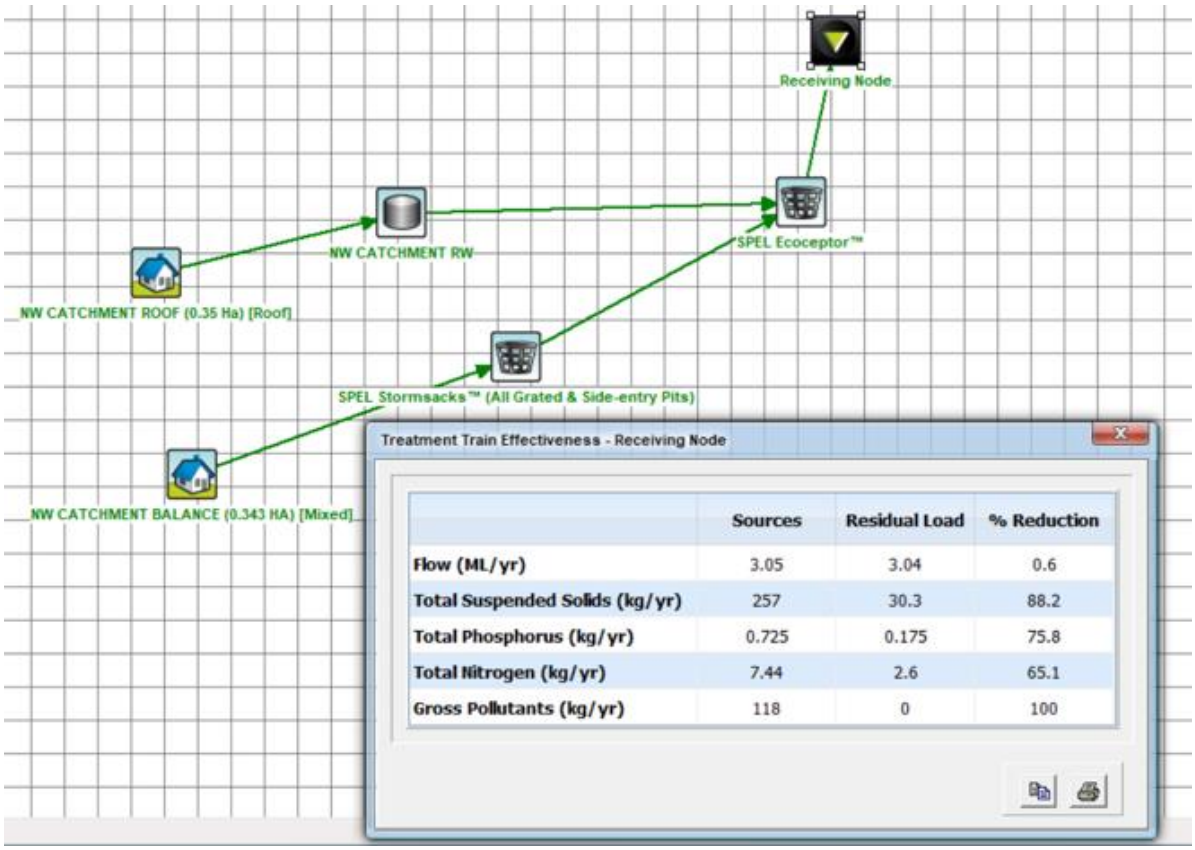
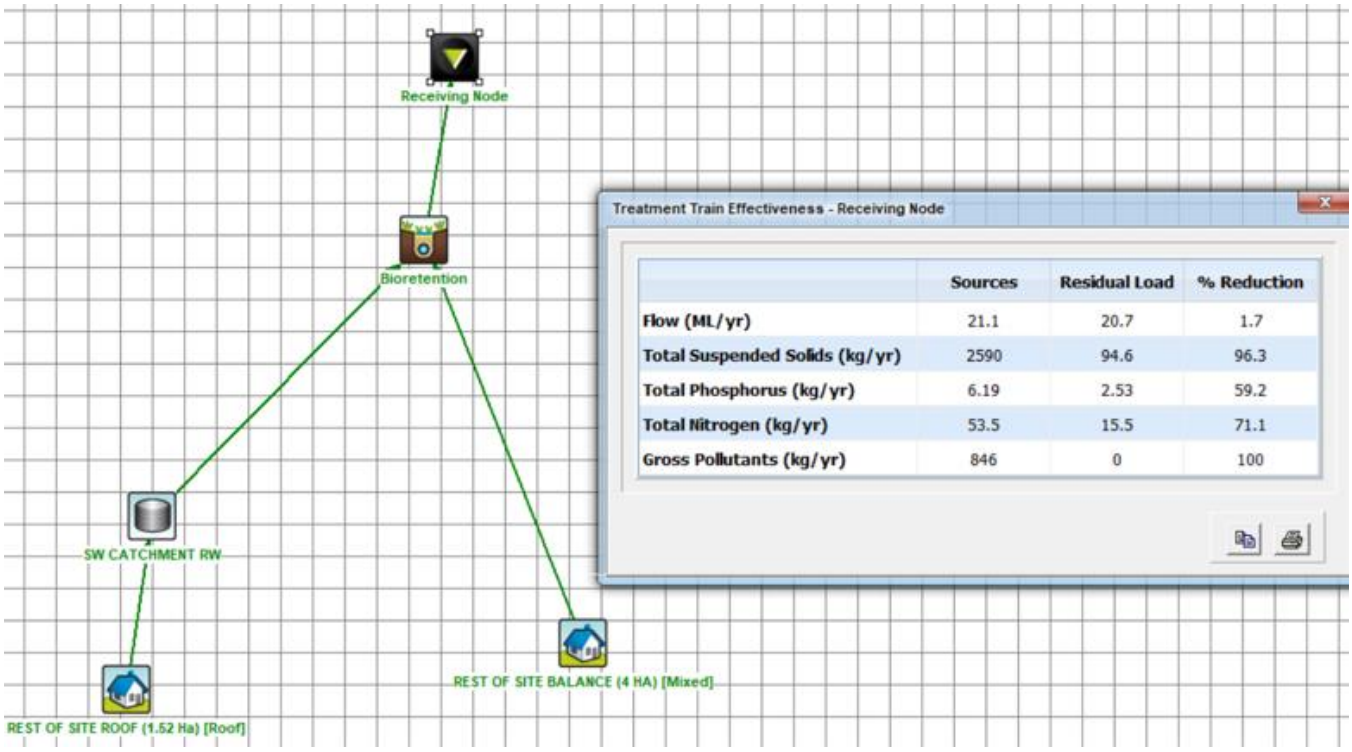
APPENDIX B

Northwest Catchment



	Sources	Residual Load	% Reduction
Flow (ML/yr)	3.05	3.04	0.6
Total Suspended Solids (kg/yr)	257	30.3	88.2
Total Phosphorus (kg/yr)	0.725	0.175	75.8
Total Nitrogen (kg/yr)	7.44	2.6	65.1
Gross Pollutants (kg/yr)	118	0	100

Balance of Site



	Sources	Residual Load	% Reduction
Flow (ML/yr)	21.1	20.7	1.7
Total Suspended Solids (kg/yr)	2590	94.6	96.3
Total Phosphorus (kg/yr)	6.19	2.53	59.2
Total Nitrogen (kg/yr)	53.5	15.5	71.1
Gross Pollutants (kg/yr)	846	0	100

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APPENDIX C

RORBWin Output File
****

Program version 6.45 (last updated 20th March 2019)
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Date run: 01 Feb 2022 16:55

Vector file : P:\Project 861 - 880\863 - 17 Smith St, Daylesford\863 - 17 Smith Street, Daylesford Stage 1\7. Road & Drainage\STORMWATER STRATEGY\December 2020\SMITH ST POST-DEV DETN 2 21Jan.catg
Storm file : P:\Project 861 - 880\863 - 17 Smith St, Daylesford\863 - 17 Smith Street, Daylesford Stage 1\7. Road & Drainage\STORMWATER STRATEGY\27 January 2021\Output Files\SMITH ST POST-DEV DETN 2 21Jan_ aep20_du2hour.stm
Output information: Flows & all input data

Data checks:
****
Next data to be read & checked:

Catchment name & reach type flag
Control vector & storage data
Code no. 5 7.0 Location read as D
Code no. 17 7.0 Location read as C
Code no. 35 16.0
Code no. 36 7.0 Location read as B
Code no. 38 7.0 Location read as A
Sub-area areas
Impervious flag
Fractions impervious
Initial storm data
Rainfall burst times
Pluviograph 1
Sub-area rainfalls

Data check completed

Data:
****

SMITH STREET DAYLESFORD

Time data, in increments from initial time
SMITH STREET DAYLESFORD: 2 hour 20% Design Storm No.4 Temporal Patte
Time increment (hours)= 0.08

	Start	Finish
Rainfall times:	0	24

End of hyeto/hydrographs: 24
Duration of calculations: 70

Pluviograph data (time in incs, rainfall in mm, in increment following time shown)

Time	1:Temporal pattern (% of depth 1
0	3.81
1	16.91
2	5.44
3	2.31
4	2.59
5	2.31
6	2.03
7	1.72
8	1.22
9	1.84
10	2.19
11	4.31
12	6.00
13	4.41
14	4.34
15	7.66
16	3.91
17	13.09

18	4.72
19	1.19
20	1.19
21	2.22
22	2.50
23	2.09

Total 100.0

DESIGN run control vector

Step	Code	Description
1	1	Add sub-area 'A' inflow & route thru normal storage 1
2	2	Add sub-area 'B' inflow & route thru normal storage 2
3	3	Store hydrograph from step 2; reset hydrograph to zero
4	1	Add sub-area 'C' inflow & route thru normal storage 3
5	7.0	Print hydrograph, D
6	5	Route hydrograph thru normal storage 4
7	4	Add h-graph ex step 3 to h-graph ex step 6
8	3	Store hydrograph from step 7; reset hydrograph to zero
9	1	Add sub-area 'D' inflow & route thru normal storage 5
10	4	Add h-graph ex step 8 to h-graph ex step 9
11	3	Store hydrograph from step 10; reset hydrograph to zero
12	1	Add sub-area 'E' inflow & route thru normal storage 6
13	4	Add h-graph ex step 11 to h-graph ex step 12
14	3	Store hydrograph from step 13; reset hydrograph to zero
15	1	Add sub-area 'F' inflow & route thru normal storage 7
16	4	Add h-graph ex step 14 to h-graph ex step 15
17	7.0	Print hydrograph, C
18	5	Route hydrograph thru normal storage 8
19	3	Store hydrograph from step 18; reset hydrograph to zero
20	1	Add sub-area 'G' inflow & route thru normal storage 9
21	2	Add sub-area 'H' inflow & route thru normal storage 10
22	4	Add h-graph ex step 19 to h-graph ex step 21
23	3	Store hydrograph from step 22; reset hydrograph to zero
24	1	Add sub-area 'I' inflow & route thru normal storage 11
25	4	Add h-graph ex step 23 to h-graph ex step 24
26	3	Store hydrograph from step 25; reset hydrograph to zero
27	1	Add sub-area 'J' inflow & route thru normal storage 12
28	4	Add h-graph ex step 26 to h-graph ex step 27
29	3	Store hydrograph from step 28; reset hydrograph to zero
30	1	Add sub-area 'K' inflow & route thru normal storage 13
31	4	Add h-graph ex step 29 to h-graph ex step 30
32	3	Store hydrograph from step 31; reset hydrograph to zero
33	1	Add sub-area 'L' inflow & route thru normal storage 14
34	4	Add h-graph ex step 32 to h-graph ex step 33
35	16.0	Route thru existing storage, BASIN 1
36	7.0	Print hydrograph, B
37	5	Route hydrograph thru normal storage 15
38	7.0	Print hydrograph, A
39	0	**********End of control vector**********

Sub-area data

Sub-area	Area km²	Dist. km*	Fraction impervious
A	3.80E-02	4.33E-01	0.05
B	1.70E-02	3.18E-01	0.60
C	9.10E-02	6.68E-01	0.40
D	1.00E-03	2.56E-01	0.60
E	1.00E-02	3.42E-01	0.05
F	1.20E-02	4.48E-01	0.60
G	1.00E-03	2.73E-01	0.05
H	1.80E-02	2.11E-01	0.60
I	5.00E-03	1.79E-01	0.40
J	5.00E-03	1.78E-01	0.05
K	3.00E-03	1.63E-01	0.60
L	8.00E-03	1.63E-01	0.50

Total 2.090E-01

For whole catchment ; Av. Dist., km* = 0.48
For interstation area 1; Av. Dist., km* = 0.48; ISA Factor = 1.000

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* or other function of reach properties related to travel time

Normal storage data

Storage no.	Length km*	Rel. delay time	Type	Slope percent
1	0.1	0.242	Natural	
2	0.1	0.011	Lined	7.800
3	0.3	0.119	Unlined	10.300
4	0.2	0.433	Natural	
5	0.0	0.005	Lined	6.200
6	0.1	0.282	Natural	
7	0.2	0.032	Lined	3.000
8	0.1	0.267	Natural	
9	0.1	0.130	Natural	
10	0.1	0.014	Lined	13.400
11	0.1	0.046	Unlined	13.400
12	0.1	0.204	Natural	
13	0.1	0.027	Lined	0.500
14	0.1	0.038	Unlined	18.500
15	0.1	0.170	Natural	

* or other function of reach properties related to travel time

Special storage data

Storage: BASIN 1
Initial water level at cease to flow elevation
Storage (m^3) - Discharge (m^3/s) table

0.000E+00	0.000
9.200E+01	0.020
2.060E+02	0.420
3.440E+02	0.460
4.390E+02	0.480
9.000E+02	1.000

Elevation (m) - Storage (m^3) table

590.00	0.000E+00
590.20	1.050E+02
590.40	2.360E+02
590.60	3.920E+02
590.80	5.760E+02
590.90	9.000E+02

Input of parameters:
****

SMITH STREET DAYLESFORD
DESIGN Run
SMITH STREET DAYLESFORD: 2 hour 20% Design Storm No.4 Temporal Patte
Time increment = 0.08 hours

Constant loss model selected

Rainfall, mm, in time inc. following time shown

Time Incs	Catch ment	Sub-Area A	B	C	D	E	F	G	H	I	J	K	L
0	1.1	1	1	1	1	1	1	1	1	1	1	1	1
1	5.0	5	5	5	5	5	5	5	5	5	5	5	5
2	1.6	2	2	2	2	2	2	2	2	2	2	2	2
3	0.7	1	1	1	1	1	1	1	1	1	1	1	1
4	0.8	1	1	1	1	1	1	1	1	1	1	1	1
5	0.7	1	1	1	1	1	1	1	1	1	1	1	1
6	0.6	1	1	1	1	1	1	1	1	1	1	1	1
7	0.5	1	1	1	1	1	1	1	1	1	1	1	1
8	0.4	0	0	0	0	0	0	0	0	0	0	0	0
9	0.5	1	1	1	1	1	1	1	1	1	1	1	1
10	0.6	1	1	1	1	1	1	1	1	1	1	1	1
11	1.3	1	1	1	1	1	1	1	1	1	1	1	1
12	1.8	2	2	2	2	2	2	2	2	2	2	2	2
13	1.3	1	1	1	1	1	1	1	1	1	1	1	1
14	1.3	1	1	1	1	1	1	1	1	1	1	1	1
15	2.3	2	2	2	2	2	2	2	2	2	2	2	2

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16	1.2	1	1	1	1	1	1	1	1	1	1	1	
17	3.9	4	4	4	4	4	4	4	4	4	4	4	
18	1.4	1	1	1	1	1	1	1	1	1	1	1	
19	0.4	0	0	0	0	0	0	0	0	0	0	0	
20	0.4	0	0	0	0	0	0	0	0	0	0	0	
21	0.7	1	1	1	1	1	1	1	1	1	1	1	
22	0.7	1	1	1	1	1	1	1	1	1	1	1	
23	0.6	1	1	1	1	1	1	1	1	1	1	1	
Tot.	29.6	30	30	30	30	30	30	30	30	30	30	30	30
Pluvi. ref. no.		1	1	1	1	1	1	1	1	1	1	1	

Rainfall-excess, mm, in time inc. following time shown

Time Incs	Catch ment	Sub-Area A	B	C	D	E	F	G	H	I	J	K	L
0	0.0	0	0	0	0	0	0	0	0	0	0	0	
1	0.0	0	0	0	0	0	0	0	0	0	0	0	
2	0.0	0	0	0	0	0	0	0	0	0	0	0	
3	0.0	0	0	0	0	0	0	0	0	0	0	0	
4	0.0	0	0	0	0	0	0	0	0	0	0	0	
5	0.0	0	0	0	0	0	0	0	0	0	0	0	
6	0.0	0	0	0	0	0	0	0	0	0	0	0	
7	0.1	0	0	0	0	0	0	0	0	0	0	0	
8	0.1	0	0	0	0	0	0	0	0	0	0	0	
9	0.1	0	0	0	0	0	0	0	0	0	0	0	
10	0.1	0	1	0	1	0	1	0	1	0	0	1	0
11	0.3	0	1	0	1	0	1	0	1	0	0	1	1
12	0.5	0	2	0	2	0	2	0	2	0	0	2	2
13	0.8	0	1	1	1	0	1	0	1	1	0	1	1
14	0.8	0	1	1	1	0	1	0	1	1	0	1	1
15	1.5	0	2	2	2	0	2	0	2	2	0	2	2
16	0.7	0	1	1	1	0	1	0	1	1	0	1	1
17	2.8	0	4	4	4	0	4	0	4	4	0	4	4
18	1.2	1	1	1	1	1	1	1	1	1	1	1	1
19	0.1	0	0	0	0	0	0	0	0	0	0	0	0
20	0.1	0	0	0	0	0	0	0	0	0	0	0	0
21	0.4	0	1	0	1	0	1	0	1	0	0	1	0
22	0.5	0	1	1	1	0	1	0	1	1	0	1	1
23	0.4	0	0	0	0	0	0	0	0	0	0	0	0
Tot.	10.6	3	17	12	17	3	17	3	17	12	3	17	14

Routing results:
****
SMITH STREET DAYLESFORD
SMITH STREET DAYLESFORD: 2 hour 20% Design Storm No.4 Temporal Patte
DESIGN run no. 1

Parameters: kc = 0.43 m = 0.80

Loss parameters	Initial loss (mm)	Cont. loss (mm/h)
	26.00	4.30

*** Calculated hydrograph, D

Hydrograph Calc.	
Peak discharge,m³/s	0.7323
Time to peak,h	1.58
Volume,m³	1.06E+03
Time to centroid,h	1.54
Lag (c.m. to c.m.),h	0.105
Lag to peak,h	0.153

*** Calculated hydrograph, C

Hydrograph Calc.	
Peak discharge,m³/s	0.7548
Time to peak,h	1.58
Volume,m³	1.68E+03
Time to centroid,h	1.68
Lag (c.m. to c.m.),h	0.266

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Lag to peak,h 0.174

Results of routing through special storage BASIN 1
Peak elevation= 590.69 m
Peak outflow = 0.52 m³/s
Peak storage = 4.76E+02 m³

*** Special storage : BASIN 1

	Hydrograph Outflow	Inflow
Peak discharge,m³/s	0.5215	0.8407
Time to peak,h	1.83	1.58
Volume,m³	2.20E+03	2.22E+03
Time to centroid,h	1.98	1.73
Lag (c.m. to c.m.),h	0.587	0.332
Lag to peak,h	0.440	0.190

*** Calculated hydrograph, B

	Hydrograph Calc.
Peak discharge,m³/s	0.5215
Time to peak,h	1.83
Volume,m³	2.20E+03
Time to centroid,h	1.98
Lag (c.m. to c.m.),h	0.587
Lag to peak,h	0.440

*** Calculated hydrograph, A

	Hydrograph Calc.
Peak discharge,m³/s	0.5142
Time to peak,h	1.92
Volume,m³	2.20E+03
Time to centroid,h	2.07
Lag (c.m. to c.m.),h	0.676
Lag to peak,h	0.523

Hydrograph summary
****

Site	Description
01	Calculated hydrograph, D
02	Calculated hydrograph, C
03	Special storage : BASIN 1 - Outflow
04	Special storage : BASIN 1 - Inflow
05	Calculated hydrograph, B
06	Calculated hydrograph, A

Inc	Time	Hyd0001	Hyd0002	Hyd0003	Hyd0004	Hyd0005	Hyd0006
0	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1	0.08	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.17	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	0.25	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	0.33	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.42	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	0.50	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	0.58	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8	0.67	0.0000	0.0247	0.0006	0.0206	0.0006	0.0001
9	0.75	0.0000	0.0302	0.0022	0.0306	0.0022	0.0004
10	0.83	0.0000	0.0314	0.0043	0.0382	0.0043	0.0013
11	0.92	0.0000	0.0520	0.0072	0.0624	0.0072	0.0029
12	1.00	0.0000	0.0972	0.0126	0.1212	0.0126	0.0057
13	1.08	0.0000	0.1606	0.0600	0.2261	0.0600	0.0195
14	1.17	0.1129	0.1355	0.1742	0.2414	0.1742	0.0730
15	1.25	0.2937	0.1657	0.2221	0.2516	0.2221	0.1513
16	1.33	0.4573	0.3453	0.2972	0.3996	0.2972	0.2243
17	1.42	0.4545	0.3873	0.3774	0.4343	0.3774	0.3039
18	1.50	0.6861	0.6783	0.4317	0.7409	0.4317	0.3771
19	1.58	0.7323	0.7548	0.4612	0.8407	0.4612	0.4286
20	1.67	0.2370	0.5547	0.4786	0.6500	0.4786	0.4597
21	1.75	0.0768	0.4417	0.5133	0.5857	0.5133	0.4872
22	1.83	0.0854	0.3277	0.5215	0.5018	0.5215	0.5103

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23	1.92	0.1335	0.3200	0.5092	0.4571	0.5092	0.5142
24	2.00	0.1394	0.2756	0.4851	0.3965	0.4851	0.5011
25	2.08	0.0781	0.2136	0.4730	0.3101	0.4730	0.4843
26	2.17	0.0225	0.1447	0.4608	0.2359	0.4608	0.4711
27	2.25	0.0086	0.1118	0.4401	0.1835	0.4401	0.4555
28	2.33	0.0040	0.0765	0.3855	0.1413	0.3855	0.4234
29	2.42	0.0021	0.0591	0.2136	0.1080	0.2136	0.3322
30	2.50	0.0012	0.0423	0.1350	0.0832	0.1350	0.2203
31	2.58	0.0007	0.0331	0.0938	0.0642	0.0938	0.1489
32	2.67	0.0004	0.0249	0.0691	0.0501	0.0691	0.1057
33	2.75	0.0003	0.0198	0.0526	0.0394	0.0526	0.0782
34	2.83	0.0002	0.0156	0.0409	0.0314	0.0409	0.0597
35	2.92	0.0001	0.0125	0.0322	0.0252	0.0322	0.0466
36	3.00	0.0001	0.0101	0.0257	0.0204	0.0257	0.0370
37	3.08	0.0001	0.0083	0.0208	0.0167	0.0208	0.0297
38	3.17	0.0001	0.0068	0.0197	0.0138	0.0197	0.0249
39	3.25	0.0000	0.0056	0.0193	0.0114	0.0193	0.0222
40	3.33	0.0000	0.0047	0.0187	0.0095	0.0187	0.0206
41	3.42	0.0000	0.0040	0.0181	0.0080	0.0181	0.0195
42	3.50	0.0000	0.0033	0.0174	0.0068	0.0174	0.0187
43	3.58	0.0000	0.0028	0.0167	0.0058	0.0167	0.0179
44	3.67	0.0000	0.0024	0.0160	0.0049	0.0160	0.0171
45	3.75	0.0000	0.0021	0.0153	0.0042	0.0153	0.0164
46	3.83	0.0000	0.0018	0.0146	0.0036	0.0146	0.0157
47	3.92	0.0000	0.0016	0.0138	0.0032	0.0138	0.0150
48	4.00	0.0000	0.0014	0.0132	0.0027	0.0132	0.0143
49	4.08	0.0000	0.0012	0.0125	0.0024	0.0125	0.0136
50	4.17	0.0000	0.0010	0.0118	0.0021	0.0118	0.0129
51	4.25	0.0000	0.0009	0.0112	0.0018	0.0112	0.0123
52	4.33	0.0000	0.0008	0.0106	0.0016	0.0106	0.0117
53	4.42	0.0000	0.0007	0.0100	0.0014	0.0100	0.0111
54	4.50	0.0000	0.0006	0.0095	0.0013	0.0095	0.0105
55	4.58	0.0000	0.0006	0.0090	0.0011	0.0090	0.0099
56	4.67	0.0000	0.0005	0.0085	0.0010	0.0085	0.0094
57	4.75	0.0000	0.0004	0.0080	0.0009	0.0080	0.0089
58	4.83	0.0000	0.0004	0.0076	0.0008	0.0076	0.0084
59	4.92	0.0000	0.0004	0.0071	0.0007	0.0071	0.0080
60	5.00	0.0000	0.0003	0.0067	0.0007	0.0067	0.0075
61	5.08	0.0000	0.0003	0.0063	0.0006	0.0063	0.0071
62	5.17	0.0000	0.0003	0.0060	0.0005	0.0060	0.0067
63	5.25	0.0000	0.0002	0.0056	0.0005	0.0056	0.0063
64	5.33	0.0000	0.0002	0.0053	0.0004	0.0053	0.0060
65	5.42	0.0000	0.0002	0.0050	0.0004	0.0050	0.0056
66	5.50	0.0000	0.0002	0.0047	0.0004	0.0047	0.0053
67	5.58	0.0000	0.0002	0.0044	0.0003	0.0044	0.0050
68	5.67	0.0000	0.0002	0.0042	0.0003	0.0042	0.0047
69	5.75	0.0000	0.0001	0.0039	0.0003	0.0039	0.0045
70	5.83	0.0000	0.0001	0.0037	0.0003	0.0037	0.0042

APPENDIX D

RESULTS FROM ARR RFFE 2015 MODEL

Datetime: 2021-01-28 09:11
Region name: East Coast
Region code: 1
Site name: Catchment1
Latitude at catchment outlet (degree) = -37.338
Longitude at catchment outlet (degree) = 144.155
Latitude at catchment centroid (degree) = -37.341
Longitude at catchment centroid (degree) = 144.153
Distance of the nearest gauged catchment in the database (km) = 15.04
Catchment area (sq km) = 0.2
Design rainfall intensity, 1 in 2 AEP and 6 hr duration (mm/h): 5.357612
Design rainfall intensity, 1 in 50 AEP and 6 hr duration (mm/h): 12.375106
Shape factor of the ungauged catchment: 0.84

ESTIMATED FLOOD QUANTILES:

AEP (%)	Expected quantiles (m^3/s)	5% CL m^3/s	95% CL m^3/s
50	0.180	0.0600	0.550
20	0.340	0.120	0.950
10	0.460	0.160	1.34
5	0.610	0.210	1.80
2	0.820	0.260	2.58
1	1.01	0.310	3.32

DATA FOR FITTING MULTI-NORMAL DISTRIBUTION FOR BUILDING CONFIDENCE LIMITS:

1 Mean (loge flow) = -1.718
2 St dev (loge flow) = 0.712
3 Skew (loge flow) = 0.090

Moments and correlations:

No	Most probable	Std dev	Correlation		
1	-1.718	0.676	1.000		
2	0.712	0.232	-0.330	1.000	
3	0.090	0.030	0.170	-0.280	1.000

WARNING: The catchment is outside the recommended catchment size of 0.5 to 1,000 sq km. Results have lower accuracy and may not be directly applicable in practice.

This is the end of output file.

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APPENDIX E

RETENTION SYSTEM - RATIONAL METHOD

PROJECT : 17 SMITH ST
Project Number : 863
Designed : DS Date : 11-05-21 Checked : Date :
Locality DAYLESFORD

Gross Catchment Area	A	1.9216	ha (Not to exceed 8ha)
Average Recurrence Interval, Y	ARI	5	years [AEP 20 %]
Coefficient of Runoff, 10 years	C10	0.84	
Coefficient of Runoff, Y years	Cy	0.76	
Equivalent Impervious Area	Ae	1.4527	ha
Time of Concentration	tc	6.0	minutes
Rainfall Intensity at tc	Ic	82	mm / hr for ARI above
Peak Inflow Discharge	Qp	0.332	m^3 / s at tc
Allowable Outflow Discharge	Qo	0.172	m^3 / s Uniform rate after tc
Upper Limit of Storm Duration	tu	36	minutes (tc + tdi*N)
Storm Duration Interval	tdi	1	minutes
Number of (Integer) Intervals	N	30	Limit 30
Maximum Storage Volume	Vs, max	47.0	m^3

n	td	I,td From Coeff's	Qp,t	INFLOW VOLUME	OUTFLOW VOLUME	STORAGE VOLUME	
	minutes	mm / hr	m^3 / s	m ^ 3	m ^ 3	m ^ 3	
0	6.00	82	0.33	119.4	76.8	42.6	
1	7.00	78	0.31	131.4	86.2	45.2	
2	8.00	73	0.30	142.2	95.5	46.6	
3	9.00	70	0.28	151.9	104.9	47.0	MAX
4	10.00	66	0.27	160.8	114.3	46.5	
5	11.00	63	0.26	168.9	123.7	45.2	
6	12.00	61	0.24	176.4	133.1	43.3	
7	13.00	58	0.23	183.2	142.4	40.7	
8	14.00	56	0.23	189.8	151.9	37.9	
9	15.00	54	0.22	195.8	161.3	34.5	
10	16.00	52	0.21	201.4	170.7	30.7	
11	17.00	50	0.20	206.6	180.1	26.5	
12	18.00	49	0.20	211.8	189.6	22.2	
13	19.00	47	0.19	216.2	199.0	17.3	
14	20.00	46	0.18	220.8	208.4	12.4	
15	21.00	44	0.18	225.9	218.0	7.9	
16	22.00	43	0.17	230.3	227.5	2.8	
17	23.00	42	0.17	234.2	236.9		
18	24.00	41	0.16	237.6	246.4		
19	25.00	40	0.16	240.3	255.7		
20	26.00	39	0.16	244.4	265.3		
21	27.00	38	0.15	248.0	274.8		
22	28.00	37	0.15	251.2	284.3		
23	29.00	36	0.15	254.0	293.8		
24	30.00	35	0.14	256.4	303.2		
25	31.00	35	0.14	260.7	312.9		
26	32.00	34	0.14	264.7	322.6		
27	33.00	34	0.14	268.5	332.2		
28	34.00	33	0.13	271.9	341.9		
29	35.00	32	0.13	275.1	351.5		
30	36.00	32	0.13	278.1	361.1		
				Maximum Storage Volume, m^3		**47.0**	

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APPENDIX F

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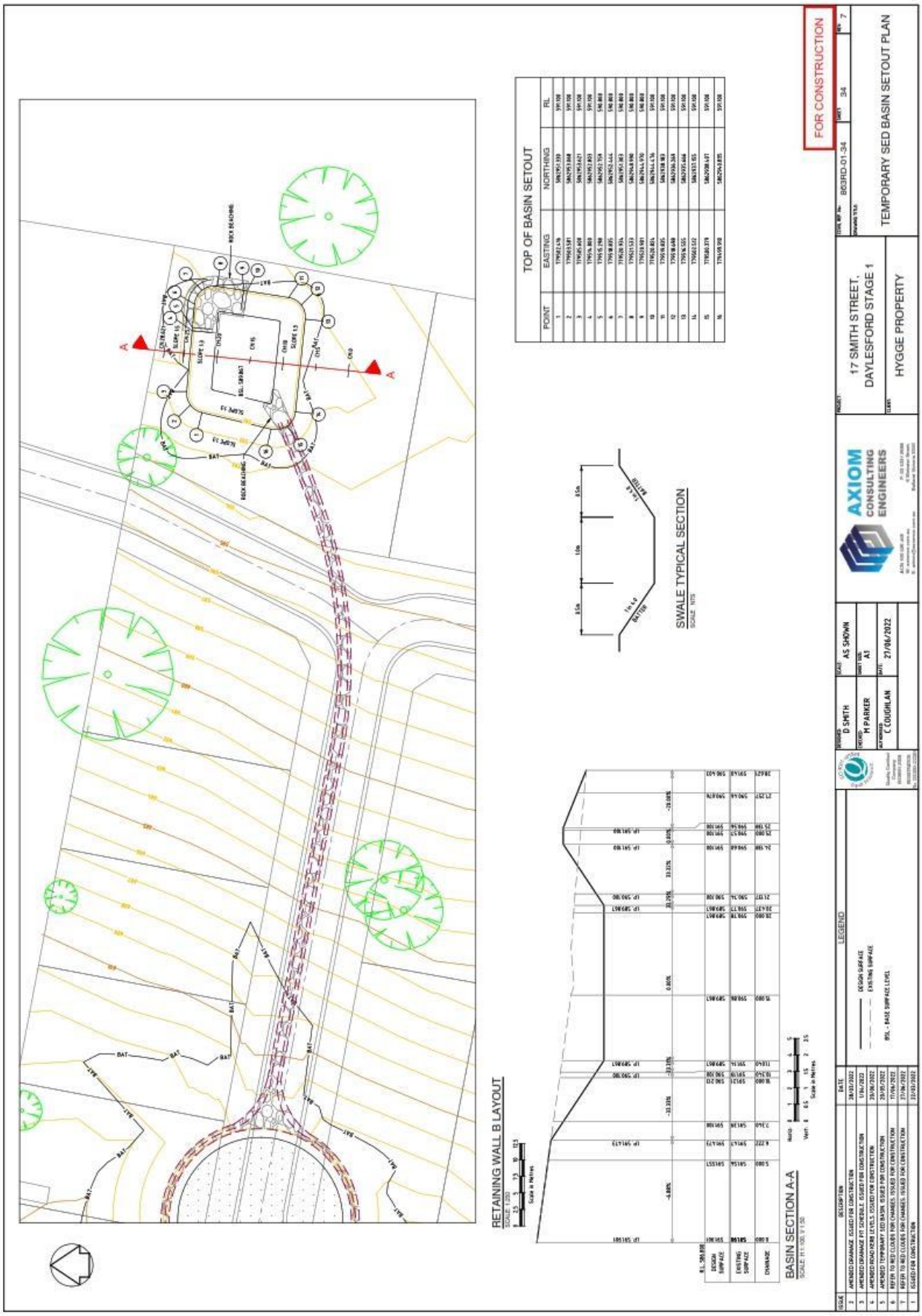
APPENDIX G



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Appendix 6 – ESD Report

SHARED SPACE ARCHITECTURE

SUSTAINABILITY MANAGEMENT PLAN

3 August 2022

for

Middleton Field

development at

17 Smith Street, Daylesford, Victoria 3460

Revision 02

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INTRODUCTION

This Sustainability Management Plan (SMP) is provided to outline the environmental commitments of the Eco-Village component of the Middleton Field development to Hepburn Shire Council in favour of a planning permit for the proposal to proceed.

This component of the development is intended to demonstrate best practice environmental strategies as part of the commitment ultimately guaranteed to the homeowners of each dwelling. The sustainability management provides a commitment summary to Hepburn Shire Council for the purposes of approving a planning permit and subsequent building permit and construction.

The built environment is an industry which can affect the most change in practice and behaviour when considering its interaction with the environment. Development is not an environmentally friendly act and it has side-effects which detriment the environment if not carefully considered. The Eco-Village is designed by a responsible Architect to advising and monitoring the environmental effect of the development and further has undertaken to achieve a high-performance building envelope, reducing the overall energy usage of each dwelling.

'Home in the Landscape' is the architectural ethos of this project. This drives the necessity to do things differently and make conscious decisions around all aspects of the village.

Figure 1: Visualisation of development provided by Breathe Architecture

DOCUMENTS

The following documents were used in the preparation of this SMP:

1. 220525_Consultant Kcik off_Daylesford EcoVillage.pdf
    - Intent, Preliminary Drawings, Visualisations
    - 51 pages
    - Breathe Architecture
2. Compressed_220715_DRAFT_Town Planning_17 Smith Street, Daylesford.pdf
    - 27 pages
    - Breathe Architecture
3. 220621_Daylesford_Roof Plan.pdf
    - Calculations for Solar PV
    - 1 page
    - Breathe Architecture
4. MiddletonField_DesignGuideines.pdf
    - 22 pages
    - Hygge Property
5. CAD Drawings
    - To confirm measurements for NatHERS ratings
    - 14 *.dwg files
    - Breathe Architecture
6. 220627_Daylesford_ESD.pdf
    - 2 A1 pages of each dwelling type for modelling
    - 2 pages
    - Breathe Architecture
7. 220802_Hygge_Smith St_SD.pdf
    - 54 pages
    - ACRE
8. Short-History-of-Daylesford-Updated-Dec-2019.pdf
    - 2 pages
    - Daylesford Regional Visitor Information Centre
9. Hepburn PS All Ordinance.pdf
    - 1023 pages
    - Victorian Planning Authority

Project Name: 17 Smith Street, Daylesford, Victoria 3460

Project Number: 0110

Versions:

00	Initial Submission	24/07/2022	AS
01	Revision 1: STORM + NatHERS update	29/07/2022	AS
02	Updates as per Feedback from Hygge	03/08/2022	AS

RELEVANT TEAM

Development Manager - Client
Hygge Property.
Primary POC - Jason Webster. jason@hygge.com.au. 0427 935 816.

Architecture
Breathe Architecture.
Primary POC - Jeremy McLeod. jeremy@breathe.com.au. 03 9381 2007.

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CONTEXT

Site Location

17 Smith Street is located around 1km from the town centre of Daylesford, to the North-East. Daylesford itself connects to townships within a 10km radius and also Woodend, a town around 35km away and Daylesford's gateway to Melbourne and the National Highway network.

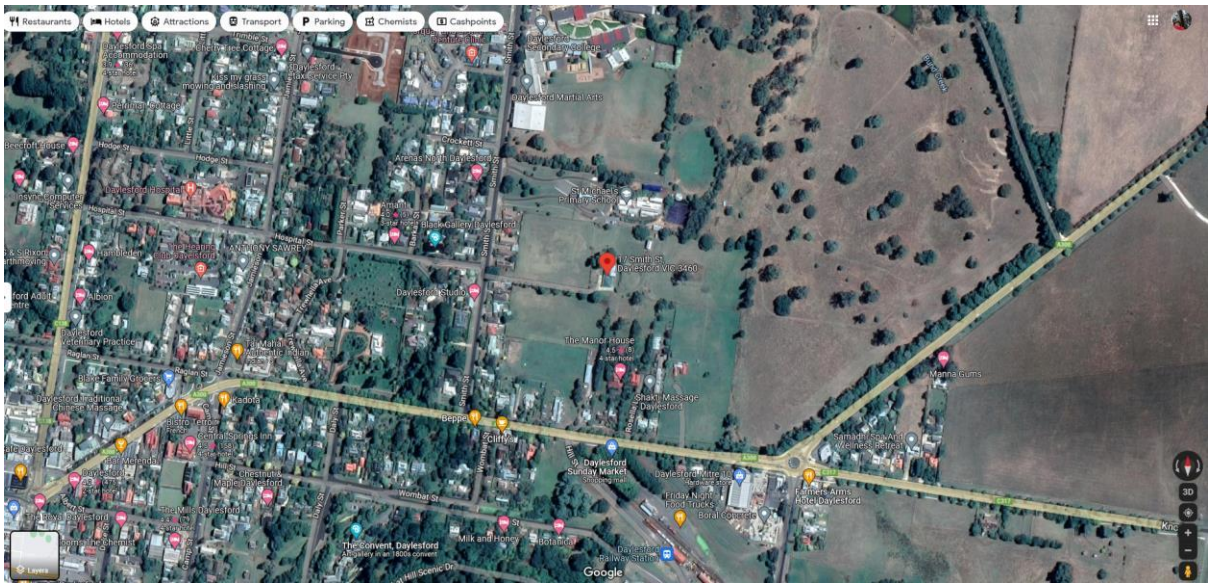

Figure 2: Site Context and Access to Facilities (view appendix 4 for larger image)

Region Statistics

Daylesford forms part of the Victorian Central Highlands Regional Growth Plan. The median house price is just shy of $900,000 with a recent growth of around 18%. The median age is 55 and the 2021 Census data shows a population of 2,781, 714 families and 1,967 private dwellings.

The average number of vehicles per dwelling is 1.6 and the median mortgage repayment amount is $1,532 per month. At a 5% yield, this repayment substantiates a mortgage of around $370,000.

Building Occupation

The proposed dwellings are 31 townhouses of two storeys each. The dwellings are to remain within the landscape and the development has an emphasis on reducing impervious area.

Between the townhouses and the apartment block, a green lane has been included, introducing natural light, vegetation and fenceless boundaries to the dwellings on the block.

The site has been measured to be around 48.6 hectares and it lies within two Environmental Significance Overlays (ESO1 and ESO2).

The proposal also includes the retention of a Heritage Cottage between the Eastern Block of townhouses (Zone 3) and the other three zones (Zone 1, 2 and 4).

Environmentally Sustainable Design Drivers

The development is determined to tread as lightly as possible on the environment and the following are the major drivers which have been discussed with both the development manager and the architect.

1. All Electric
2. All Renewable
3. 100% Green Power
4. Onsite Water Capture and Storage
5. Onsite Power Generation and Storage
6. Responsible Low Carbon Materials
7. Waste Minimisation
8. Community Facilities
9. Increase in Vegetation

Low Energy Use promotes a reduction before affording generation of energy for use. 40% of our energy use exists in space heating and cooling and a further 20% of our energy use in hot water production and storage.

Sharing is Caring. By reducing the number of individual resources required to main a comfortable home and lifestyle, a shared scale of economy reduces the amount of resource required for each home. Where possible, centralised systems have been committed to, to maintain this community benefit.

Water run-off is a major contributor to environmental imbalance. By paving and asphalting the roads required by councils to access driveways and garages the ground is not exposed to water and moisture and the water is taken elsewhere, concentrated and has the potential to erode natural landforms once in place.

By reducing the number of kerbs and channels, stormwater is more evenly distributed across the surface of the block and neighbourhood. The development aims to minimise impervious surfaces and aspires to retain and use 100% of stormwater runoff on site with the use of water tanks, rain gardens and swales throughout. The proposed paved roads, kerbs and channels wrap around the block and do not form part of Middleton Field's property boundary.

The YourHome website demonstrates that materials contribute to around 50% of the embodied energy of a building for a lifecycle of 50 years. The initiative is to reduce this impact by sourcing materials which last longer, use less energy to produce and are as local as possible.

100% Green Power is easy to subscribe to. An embedded network is proposed to allow each dwelling to use 100% Green Power throughout the year when site generation is not able to satisfy the energy requirements of the proposal.

ENERGY USE

"Hepburn Shire Council and community groups have committed to a target of 100 percent renewable electricity supply, zero-net energy by 2025 and zero net emissions by 2030."
(Hepburn Shire Planning Scheme)

Daylesford is predominantly a heating climate. The climate data demonstrates the following:

	January	February	March	April	May	June	July	August	September	October	November	December
Avg. Temperature °C	19.4 °C	19 °C	16.7 °C	13.2 °C	9.8 °C	7.4 °C	6.7 °C	7.2 °C	9.3 °C	11.9 °C	14.8 °C	17.1 °C
(°F)	(66.9) °F	(66.1) °F	(62) °F	(55.7) °F	(49.6) °F	(45.4) °F	(44) °F	(45) °F	(48.8) °F	(53.5) °F	(58.7) °F	(62.8) °F
Min. Temperature °C	13.8 °C	13.8 °C	12.1 °C	9.4 °C	7 °C	5 °C	4.2 °C	4.3 °C	5.8 °C	7.6 °C	10 °C	11.7 °C
(°F)	(56.8) °F	(56.9) °F	(53.9) °F	(49) °F	(44.5) °F	(41) °F	(39.6) °F	(39.8) °F	(42.5) °F	(45.7) °F	(50) °F	(53.1) °F
Max. Temperature °C	26 °C	25.3 °C	22.4 °C	17.9 °C	13.4 °C	10.6 °C	9.8 °C	10.8 °C	13.5 °C	16.8 °C	20.4 °C	23.1 °C
(°F)	(78.9) °F	(77.5) °F	(72.2) °F	(64.2) °F	(56.2) °F	(51.1) °F	(49.6) °F	(51.4) °F	(56.4) °F	(62.3) °F	(68.8) °F	(73.6) °F
Precipitation / Rainfall	43	36	28	37	49	58	59	69	69	60	58	51
mm (in)	(1)	(1)	(1)	(1)	(1)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
Humidity(%)	51%	56%	59%	67%	78%	85%	84%	80%	74%	65%	61%	54%
Rainy days (d)	4	4	3	4	6	7	8	8	8	7	6	5
avg. Sun hours (hours)	11.0	10.2	8.7	7.1	5.0	4.0	3.9	4.8	6.2	7.7	9.2	10.5

The above image provides an overview of the hottest and coolest months, along with the wettest months and average Sun hours. Daylesford is unlikely to reach 30°C and is therefore, predominately a heating climate. It rains between 10 and 25% of the month and 19% of the year. Minimum Sun hours sit at 3.9 in July and most months have more than 4.5 sunlight hours per day (from August to May), which means there is a benefit when sizing a solar PV system, when compared with a climate like Melbourne's.

The development inspires to a minimum NatHERS Star rating of 7.5 Stars and is situated in NatHERS Climate Zone 66 – Ballarat Aerodrome.

Each dwelling type has been modelled in HERO Software to gain an understanding of energy use and provide studies around the efficiency of the building envelope.

Heating and Cooling Load Commitment

Middleton Field commits to a minimum 7.0 Stars, the Eco-Village area we are assessing in this report commits to 7.5 Star rating for that areas only and the calculation of solar PV in this SMP honours this commitment. Where a dwelling is unable to meet the 7.5 Star minimum requirement due to unfavourable internal volume, and orientation, any living rooms and bedrooms aspire to meet 7.5 Stars.

The concession targets the understanding that Living Rooms and Bedrooms are where people spend most of their time indoors and that it is not economically viable to change the construction specification to allow other, less used areas to meet the 7.5 Star target.

Dwelling Types

The development is set up in four blocks of townhouses. The larger portion of land has three blocks oriented East to West with a North/South aspect and crossflow ventilation, these are described as North, Middle and South.

On the smaller portion of land there is one block of townhouses, oriented North to South with an East/West aspect and crossflow ventilation.

Figure 3: Plan of Site showing 4 blocks of townhouses provided by Breathe Architecture

Dwelling Type Modelling Specifications

A NatHERS star rating has been achieved based on the performance of the building envelope. The following performance has been used to model each dwelling and is not a commitment as a star rating can be achieved a number of ways and these will ultimately be determined by the builder and will align with the most cost-effective option at the time.

For the modelling of dwelling types in this report, the following performance values were used:

- Concrete Slab on Ground: R2.0 Under Slab, R1.0 Slab Edge
- Suspended Floor exposed to outside: R2.0
- External Walls: R2.5
- Internal Walls adjacent to garages and wet areas: R2.5
- Sliding Doors: U1.84 and SHGC 0.51
- All other windows: U2.73 and SHGC 0.37
- Ceiling: R5.0
- Roof: Reflective foil facing down to ceiling space
- Floor Coverings: Bathroom/WC (Tiles or similar), Garages (exposed), all other areas (Timber)
- Exhaust Fans, Downlights and other penetrations sealed and insulated
- 1,200mm ceiling fans to living areas and bedrooms

For a more detailed summary of the building envelope specifications, please see appendix 3.

Dwelling Type Star Rating

Dwelling Types attained the following star ratings:

North Bookend	Middle 1 Bed	Middle 1 Bed North
7.6	7.6	7.2 (living/bed min. 7.9)

Middle 3 Bed	South Bookend	East Bookend
7.5	7.7	7.2 (living/bed min. 8.1)

Middle 2 Bed
7.9

Slab Edge Detail

The edge of slabs are typically weak points for heat to escape into the environment. Given that Daylesford's climate is predominately a heating climate, performance improvement can be guaranteed by insulating the concrete slab and further improved by insulating the slab edge.

In the current NatHERS modelling, along with under slab insulation of R2.0, slab edge insulation is indicated as R1.0.

Renewable Energy Generation

The available roof area of the development is around 2,700m². The Middleton Field Design Guidelines outline a minimum of 3.0kW of PV panels per dwelling. This equates to an aspiration of around 9 solar PV panels and 14m² per dwelling.

However, a 7.5 Star dwelling in the Ballarat Climate Zone [66] has a threshold of 117MJ per m² per year energy load for heating and cooling. This equates to 32.5kWh per m². The climate data outlines around 6.5 hours of sunlight per day and solar PV calculations typically assume 4.5 hours of sunlight per day. Winter in Daylesford is typically sunny according to data from the Bureau of Meteorology, represented on the website climate-data.org. The months with less than 4.5 hours of sunlight per day are June and July.

It is recommended to base sizing calculations on an assumed 4.5 hours per day sunlight.

There is no requirement by Hepburn Shire Council to incorporate any renewable energy into a development. The following dwelling types do not take into account bookends or middle apartments and they demonstrate the varying sizes on the proposal in relation to floor area. The following breakdown outlines an aspiration for sizing a solar PV system based on a 7.5 Star minimum and 4.5 sunlight hours per day:

Dwelling Type	Floor Area	No. Dwellings	Dwelling target PV
North 3 Bed	170.5m²	6	6.07 kW
Middle 1 Bed	73.0m²	4	2.60 kW
Middle 2 Bed	135.33m²	6	4.82 kW
Middle 3 Bed	193.51m²	2	6.89 kW
South 3 Bed	201.4m²	8	7.17 kW
East 3 Bed	218.34m²	5	7.77 kW
		Total System Target	185.72 kW
		Average PV per dwelling	**6.00 kW**

The eco-village component of Middleton Field aspires to install the above specified solar PV systems to dwellings if agreements can be made with future land owners and the cost of the aspired sizing meets the budget. These exceed the 3.0 kW minimum stipulated in the Middleton Field design guide and cater for heating/cooling loads throughout the year based on NatHERS thresholds.

By sharing the solar PV electricity generation across the village's roof space, it is possible to meet these requirements for all dwellings and the eco-village aspires to meet the above recommendations pending the placement of area required for other services which use roof area, eg. solar-boosted hot water if specified.

Energy Storage

The development has a goal to install a battery bank as it would provide the proposed solar PV system with more capacity to serve shoulder months of the year and compensate where the solar PV system's allowances do not meet rain days and/or sunlight hours assumptions.

It is our recommendation that Lithium batteries are avoided and a more environmentally friendly alternative is used in the proposal. Iron-Core batteries are available in Victoria, are modular and can provide a recyclable alternative to lithium.

The intent for batteries is to cover the deficit created by cloudy days and months with less sunlight hours in a day than that proposed in the Solar PV panel system sizing sunlight hours assumption of 4.5 hours.

By converting the deficit of sun hours and rain days into a ratio, a multiplier of 1.79 is calculated including a 15% buffer for unusual rain days. The battery bank needs to supply 0.79 of this multiplier, while the Solar PV system covers 1.0 of this 1.79.

The aspirational Solar PV system is sized at 20W per m² of floor area. The aspirational battery bank therefore is sized at 15.77W per m². The table on the next page shows an overall goal for the battery size for the village of 82.27kW. There is no requirement from Hepburn Shire Council for battery storage, however, this size is recommended as a good target for the development's goal of onsite batteries.

Dwelling Type	Floor Area (m²)	No. Dwellings	Battery Watts	Battery Size (Wh)
North 3 Bed	170.5	6	15.77	2688.65
Middle 1 Bed	73	4	15.7692	1151.15
Middle 2 Bed	135.33	6	15.7692	2134.05
Middle 3 Bed	193.51	2	15.7692	3051.50
South 3 Bed	201.4	8	15.7692	3175.92
East 3 Bed	218.34	5	15.7692	3443.05
			Total System Target (kWh)	82.27
			Average PV per dwelling (kWh)	**2.65**

Selection of In-situ Dwelling Ratings

At this stage of the design process a selection has been made for dwellings which are likely to be the worst performing based on orientation, size and adjacency. The values are subject to change as the proposal is detailed in the future. The commitment still stands as 7.5 stars with an aspiration that all bedrooms and living rooms meet 7.5 stars if dwellings are just shy of the overall ratings due to a lower rating in less-trafficked areas.

Dwelling ratings higher than 7.5 stars should drop if an efficient cost-saving can be achieved as a result. These dwellings are marked up on a site plan on the next page.

The following ratings have been achieved:

01	02	03
South Bookend **7.7**	Middle 1 Bed **7.9**	North Bookend **8.2**
04	**05**	**06**
North Bookend **8.3**	East Bookend **7.3** (living/bed min. 7.9)	East Bookend **7.4** (living/bed min. 8.2)
07	**08**	**09**
Middle 2 Bed **8.4**	Middle 1 Bed North **7.7**	South Bookend **7.7**

Unaccredited 'Preview Certificates' have been included as attachments to this report as proof of calculation of unaccredited Star Ratings.

Figure 4: Site plan overview showing selection of dwellings used in in-situ NatHERS assessment

Hot Water

The proposed development is committed to being 'all electric'. The hot water service is proposed to be installed at individual units and will be one of two options.

1. CO2 Heat Pump, preferably one made in Australia
2. Instantaneous Electric

The selection depends on the efficiencies of the system and the ability of the electrical network to maintain a high draw if using instantaneous electric hot water units at all dwellings.

Airtightness

It is likely that the townhouses will have an air changes per hour (ACH) rate of 3.0 with the inclusion of an external membrane and plasterboard lining. The latest version of HERO (version 3) includes a non-regulatory mode with a blower-door test result and we have tested the NatHERS models against this input with an ACH of 3.0 with the following results.

- Dwelling Types: Increase in rating of between 0.7 and 1.0 Stars
- In-Situ Townhouses: Increase in rating of between 0.6 and 1.2 Stars

It is likely that the dwellings will perform better than their advertised Star Rating due to the commitment for a high-quality build. No airtightness commitment is proposed.

100% Green Power!

The development team is working with B Energy as an option for a provider of embedded networks to find a solution to power Middleton Field. The energy supplied by B Energy is 100% Green Power.

The development aspires to adopt the use of 100% Green Power and be fully electric without the use of coal-fired power plants or use of Natural or LP Gas, either through B-Energy or another provider.

MATERIAL USE

There are currently no requirements from Hepburn Shire Council for the restriction of any materials to be used beyond the requirement of the NCC. The following aspirations have been made in this development voluntarily to promote a sound environmental consideration and are subject to viability and budget.

Construction

1. Diversion and sorting of Construction Waste away from landfill, targeting a maximum of 90% waste in landfill
2. Specification and use of either re-used or certified timbers
3. Avoiding use of PVC, or where necessary, the use of PVC which fits the guidelines of the Green Building Council of Australia (GBCA)
4. Keeping materials as local as possible
5. FSC Certified Timbers only

Occupant (Indoor Environment Quality)

1. Use of ultra-low or zero VOC paints
2. Consideration of multiple Ventilation opportunities
3. An inclusion of at least double-glazing on all residential windows for both thermal and acoustic benefits to the occupants
4. Lighting is considered and glare is reduced
5. Views have been considered in the development from all occupied zones
6. Thermal comfort is maintained and specified as calculated and explained previously in this report

Embodied Energy

50% of CO2 emissions is found to be embodied in the material used in construction. Studies into materials have formed the following aspirations:

- Timber stud wall of 90mm (timber and insulation material sourced locally if possible)
- Carbon Neutral Brick Veneer Wall (sourced locally if possible)
- Insulated Truss and Rafter Roof
- High Performance windows to maintain insulative properties of façade and a reduction in energy use (approach local manufacture first for costing and scope before approaching overseas imports)

Bushfire Attack Level

The village is in a BAL 12.5 zone. If this is not reviewed and reduced prior to commencement of construction some considerations need to be adhered to:

- External wall covering to be non-combustible or complying timber species within 400mm of surface level. All joints are to be less than 3 mm and vents to be screened.
- Openable portions of windows screened with aluminium, steel or bronze fly screen. All glazing greater than 400 mm from the ground, deck etc. shall be annealed glass within metal frames (or complying timber). Less than 400 mm from ground, decks etc. shall be Grade A safety glass minimum 4mm thick.
- Doors have similar requirements to windows in regards to frames and glazing. Screening not required.
- Roof material to be non-combustible and fully sarked. All joins to be sealed and roof penetrations to be screened to prevent the entry of embers.

WATER USE

Water collection, use and re-use are considered for the proposal. This demonstrates exceptional responsibility in maintaining a viable water source into the future. The following aspirations are above and beyond the council requirements:

Water Reduction Strategies

1. Specification and Installation of highly efficient fixtures and fittings. WELS ratings for all fixtures are to be within 1 Star from the maximum available.
2. Sub-metering of water-use. Including per dwelling, for landscape and hot water (if centralised)
3. Rainwater to be used on site with landscaping and in the building for toilet flushing as a minimum. Plumbing to laundry for clothes washing should be considered (though not a commitment).
4. Focus on Native and low-water demand planting. Productive gardening must include wicking beds and mulch where practicable.

Stormwater Management

The overall development already includes detention and treatment of stormwater to best practice standards (in a downstream retarding basin located in the northeast corner of Middleton Field). However, in addition to that facility, the eco-village itself aims to further reduce run-off through more locally implemented measures.

Reducing the number of driveways and internal roads is incredibly important to maintain an effective redirection of stormwater. The proposal aspires to retain and process 100% of its stormwater on site through the use of water tanks, rain gardens and swales.

Working closely with the Landscape Architect and Civil Engineer, the development team have been keen to reduce impervious surfaces on the development.

The worst case includes fewer bedrooms than the proposal outlines (the STORM calculator rounds the number of bedrooms in the selection). The best-case scenario models more bedrooms. Both scenarios exclude any impervious surface on driveways within the property.

The proposal includes 79 bedrooms. The STORM calc with fewer bedrooms caters for 70 bedrooms and the STORM calc with more bedrooms caters for 90 bedrooms.

Results of both scenarios:

1. Fewer Bedrooms: 115%
2. More Bedrooms: 129%

A STORM report for scenario 1 has been included as an appendix.

The actual result lies somewhere in between these two modelled scenarios and would require a more accurate redistribution of areas split over bedrooms within a proposed block.

URBAN ECOLOGY

The location of the block is in currently situated in the middle of a field and it is surrounded by single storey low-density dwellings.

Originally the land was lived on by the Dja Dja Wurrung tribe before white settlement which developed the locality into farming land with a number of pastoral runs. There are a number of culturally significant landmarks and areas around Daylesford and surrounding townships. Not long after settlement, in 1851 Gold was found in the bed of Wombat Creek and the town became a gold mining town.

Since then, the town has developed into an urban centre for a wider farming community, which has also developed an environmental conscience. Farming communities were formed, following the gold miners and today most of the main street is comprised of older building stock.

The original land near a creek, provided a water source and healthy soil and large forests. During the gold rush, many, many trees were felled to provide material for construction and also to fuel fireplaces to heat homes and other buildings. The result of this felling is open fields.

The proposal seeks to provide 'home in the landscape' and in conjunction with the Landscape Architect and Architect it is encouraged that more trees are planted to shelter the dwellings from harsh environments. Planting trees also provides adequate shading to reduce cooling energy costs in Summer and create a warmer micro-climate in Winter.

Planting trees is in line with Hepburn Shire Council's mission to 'protect and manage the municipality's valued landscapes from unsympathetic development or major change' and it reverts the land to a state before felling. The planning scheme also outlines the importance of vegetation for habitat, landscape and Dja Dja Warrung Clans cultural values.

The block is 7,120m² in size (for the purpose of calculating the footprint, vegetation and ratio of the development).

The roofed area of the proposal is currently around 3,100m², which determines a plot ratio of 42%. If the Western portions of the driveway were hard landscaped, this adds around 680m² to impervious areas.

It is recommended that minimal impervious landscape be introduced as part of the development and that each driveway is carefully considered with advice from both the landscape architect and civil engineer.

Figure 5: Existing site showing bounding fields

TRANSPORT AND ACCESS

The site is located within close proximity to the central road of Daylesford. This allows future homeowners to access community facilities by foot. With a population of under 3,000 people, density is also not likely to inhibit bicycle riders' commutes.

Bus connections exist to Hepburn Springs, Creswick, Ballan, Ballarat, Castlemaine and Woodend. Some of which townships include access to larger cities and interstate travel.

Local Facilities and Attractions

The following facilities and attractions are available to occupants of the Middleton Field development (distance 'as the crow flies'):

- Daylesford Hospital (600 metres)
- Nearest Bus Stop (1.10km)
- Vincent Street (Daylesford's main road) (C141) (1.0km)
- Schools: including adjacent St Michael's Primary School (100m), Daylesford Secondary College (200m) and Daylesford Primary School (1.1km)
- Shopping Precincts Vincent Street (C141) and Albert Street (A300)

Human Powered Transport Options

Middleton Field being located close to the centre of town, most places can be access by foot. Near the project there are a number of bicycle trails which can be easily accessed.

The proposal inspires to incorporate the following bike parking allowances per dwelling based on the number of bedrooms within the dwelling:

Bedrooms	Bike Parking Spots
1 Bedroom	2
2 Bedrooms	4
3 Bedrooms	5

This would amount to 137 bike parking spots. These parking spots would be located in the garage associated with each dwelling.

Electric Vehicles

At least one 3-phase outlet is proposed for each Garage. This provides adequate amperage to provision fast electric car chargers. A super charge community charger is also proposed for the communal roadway to the East of Zones 1, 2 and 4.

Electric vehicles are becoming more readily available and the necessity to encourage electric transport options adds an additional benefit for the future owners of Middleton Field.

Walkscore

Walkscore gives a car-dependant rating for this site. It must be considered that the commute is modelled to Ballarat, which is one hour away by car. It must also be considered that the town centre is only 1km away from the site and easy to access by foot or bicycle.

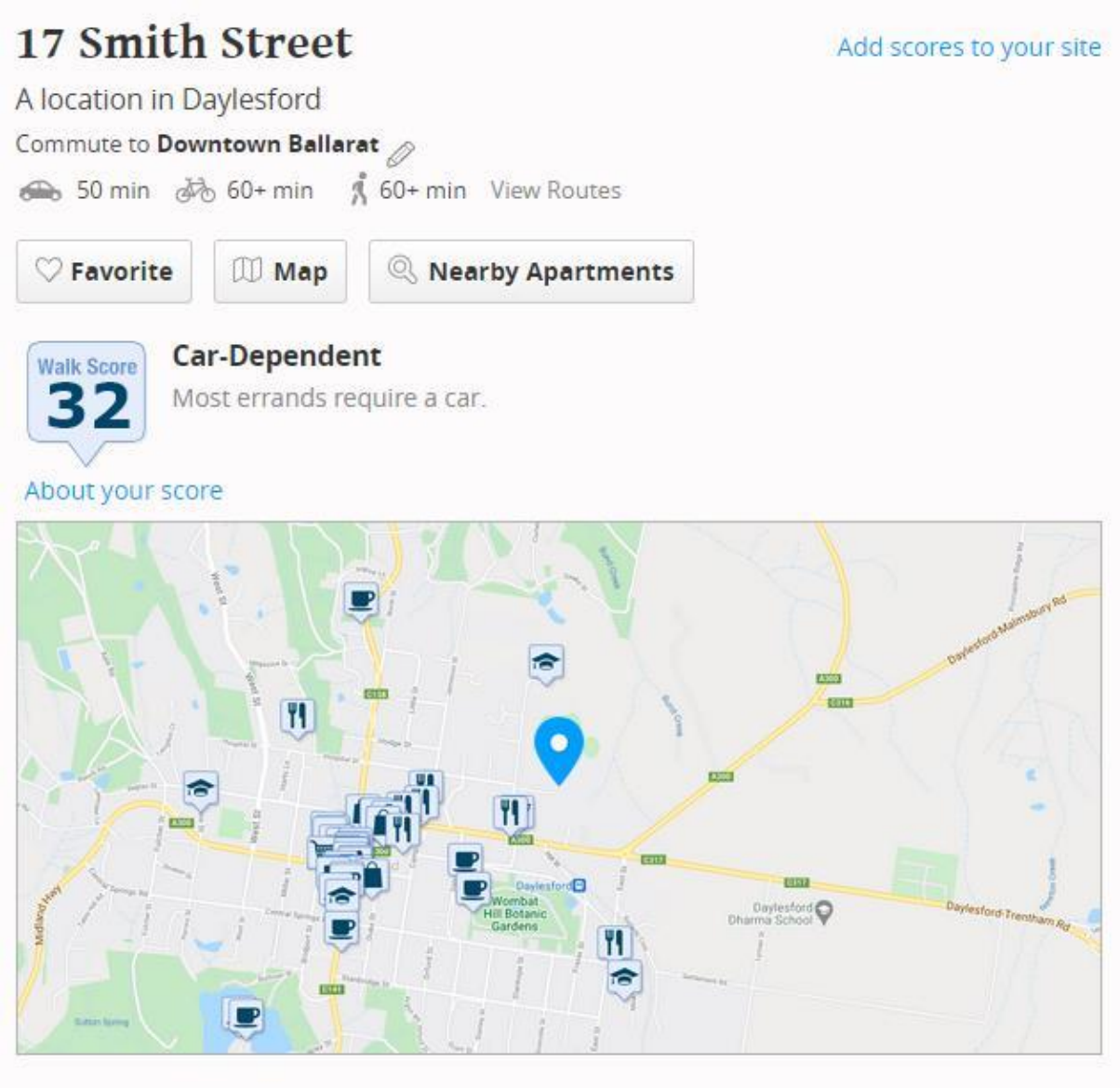

Figure 6: Walkscore demonstrating a high level of access

Walkscore is also able to demonstrate how far one can journey on a bicycle and in the diagram below, a limit of 20 minutes has been set as the extent of bicycle travel. This covers a fair amount to the East if the proposal and limited amounts, where bicycle access is difficult, to the West.

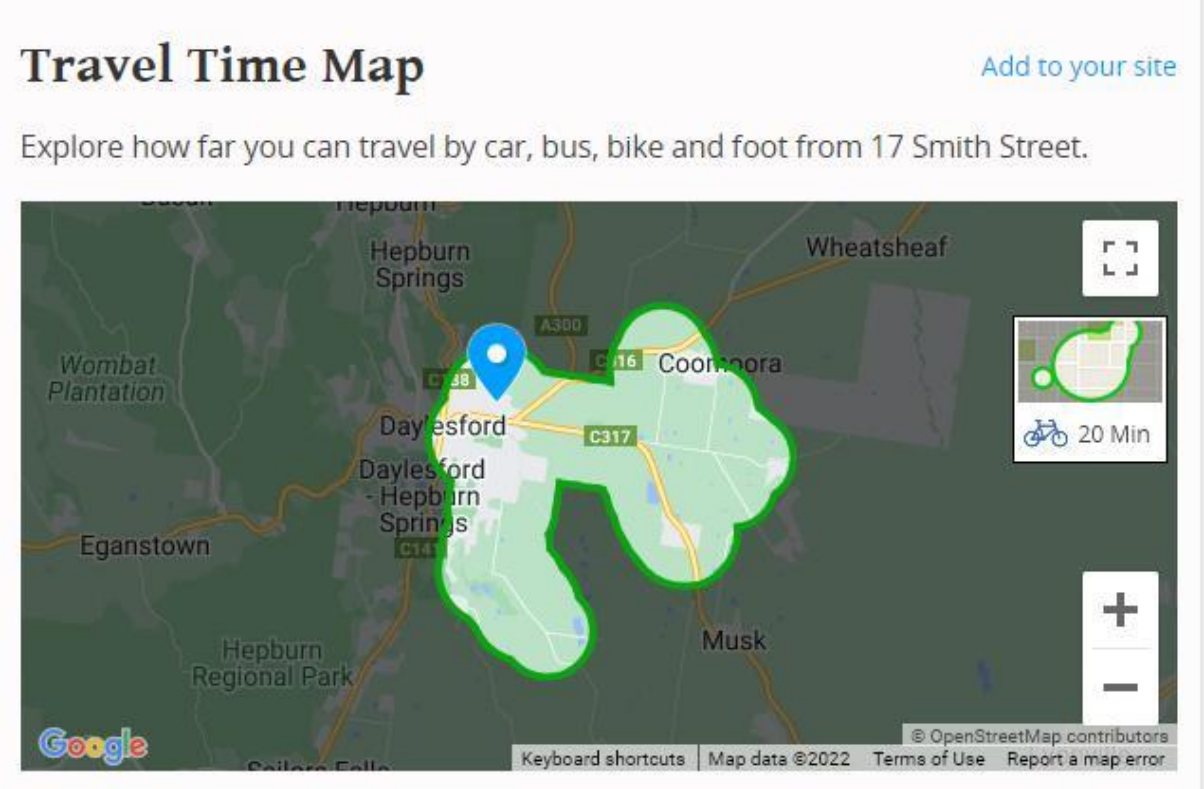

Figure 7: Walkscore demonstrating an accessible area by bicycle

Car Use and Parking

There are 31 dwellings in the proposal and 48 car parking places. This quantity is in line with the census data of 1.6 cars per dwelling.

The smaller dwellings do not include an adjacent carpark which encourages strategies like community car sharing and also provides an affordable opportunity for people without cars to secure a home. There is however an allocation of carparking on the driveway for one bedroom units.

WASTE MANAGEMENT

The development will aim to recycle or sort through 90% of construction waste. This construction waste will thereby be diverted from landfill.

Waste separation is occupant's responsibility and waste is to be disposed of within shared facilities on site. Also, within the home, smaller fridges reduce food waste and discourage over-purchase. Lots 1 to 18 are in Zones 1 and 2 and share bin facilities as follows:

- General Waste – 3 bins
- Recycling – 9 bins
- Organics – 2 bins
- Soft Plastic – 3 bins
- Glass Recycling – 1 bin

It is proposed that other lots will share waste facilities at a similar ratio in other communal bin rooms.

CONSTRUCTION AND BUILDING MANAGEMENT

The proposal seeks to uphold the following construction and building management strategies, despite there being a lesser requirement from Hepburn Shire Council.

1. Waste Management
    - Separated Waste Management allowing each type of resource to be processed based on its recycling/disposal requirements
2. Plastic
    - A reduction in the use of plastic on site and in materials within dwellings, including requests from suppliers to provide building materials unwrapped where possible
3. Site Induction
    - Trades on site to be made aware of the emphasis of sustainable construction and associated processes to avoid excessive contribution to waste and carbon emissions
4. Local Materials
    - Where possible, source local materials which meet or exceed the architectural specifications
5. Local Trades
    - Where possible, employ local trades to avoid excessive private transport use

CONCLUSION

Middleton Field demonstrates best practice by leading sustainable architects and an environmentally focussed development manager. The included commitments, aspirations and goals have been made on the basis that a deep consideration of the environment is necessary to provide integrity to any design. Importantly a restoration of environment and an integration of dwellings into the restored environment provides an exceptional quality to the dwellings and is ultimately a benefit to the future homeowners.

The following aspects have been explored and a one-line summary for each has been provided as a reference for the exploration and research taken to prepare this report:

1. **Context:** The site is bounded by fields and located among single storey houses
2. **Energy:** The development seeks to achieve a minimum of 7.5 Stars across all dwellings and if this is not economically achievable, aspires to maintain a minimum of 7.5 Stars in Bedrooms and Living Rooms of the dwellings which do not meet 7.5 Stars.
3. **Material:** There is an aspiration to source materials with low-embodied carbon and low VOCs to sustainably source and avoid occupant discomfort. A further consideration of embodied energy determines the choice of materiality.
4. **Water:** Highly-efficient fixtures are to be specified, rainwater collected and fire system discharge to be reused.
5. **Urban Ecology:** A consideration of trees demonstrates a consideration to restore the environment to a previous and indigenous state
6. **Transport and Access**: The site is car dependent; however, the centre of Daylesford is less than 1km away. Bicycle and Electric vehicle facilities also provided.
7. **Waste:** The development targets 90% recycling and sorting through construction waste. Communal Bin Rooms provide sortable waste management.
8. **Construction and Building Management:** Awareness is key to management on site. Local Materials and Trades where possible. Waste managed and recycled where possible. A reduction in the use of plastic.

REFERENCES

Abs.gov.au. 2022. *2021 Daylesford, Census All persons QuickStats | Australian Bureau of Statistics*. [online] Available at: <https://www.abs.gov.au/census/find-census-data/quickstats/2021/SAL20721> [Accessed 19 July 2022].

Daylesford, C. and Daylesford, a., 2022. *Daylesford climate: Average Temperature, weather by month, Daylesford weather averages - Climate-Data.org*. [online] En.climate-data.org. Available at: <https://en.climate-data.org/oceania/australia/victoria/daylesford-12859/> [Accessed 17 July 2022].

APPENDICES

Appendix 1. NatHERS Results Dwelling Types

HERO Software version 3.0 was used to run preliminary NatHERS ratings on the townhouse types within the proposal. The following tables show results for all types:

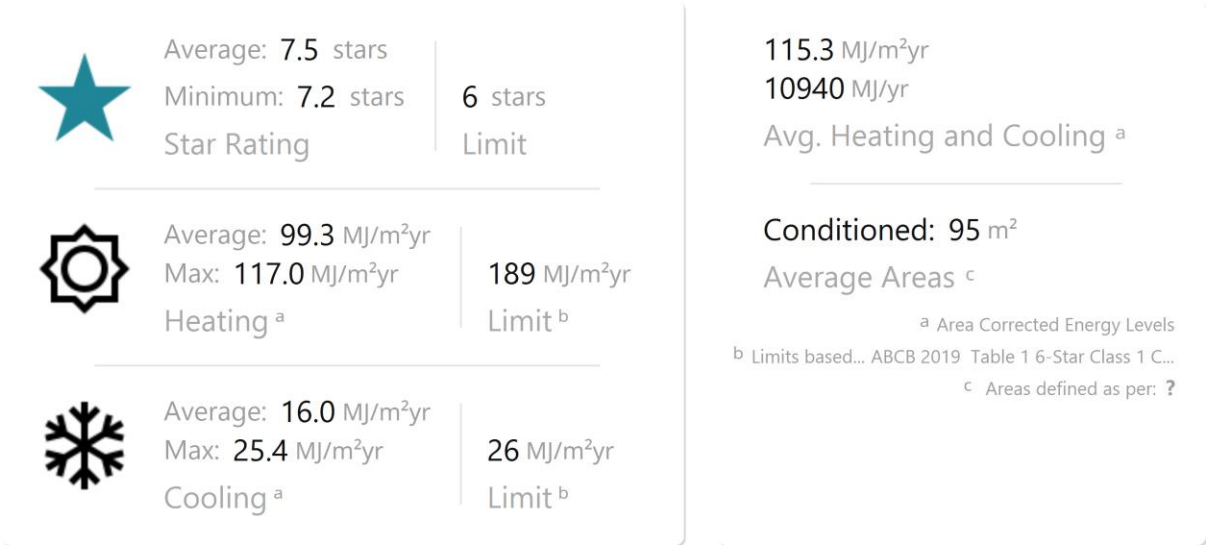

Figure 8: Graph from HERO Software showing a summary of results and an average 7.5 star rating

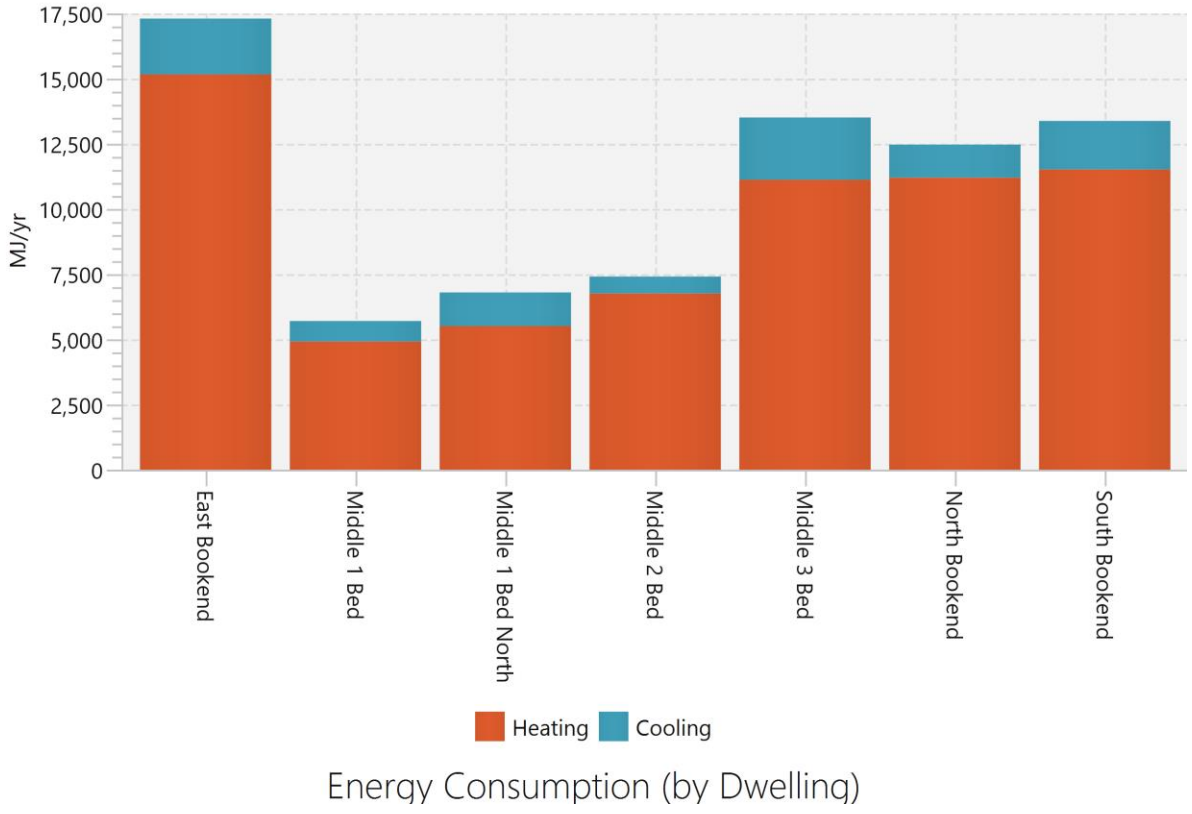

Figure 9: Graph from HERO Software showing the distribution of energy within the selection of dwellings

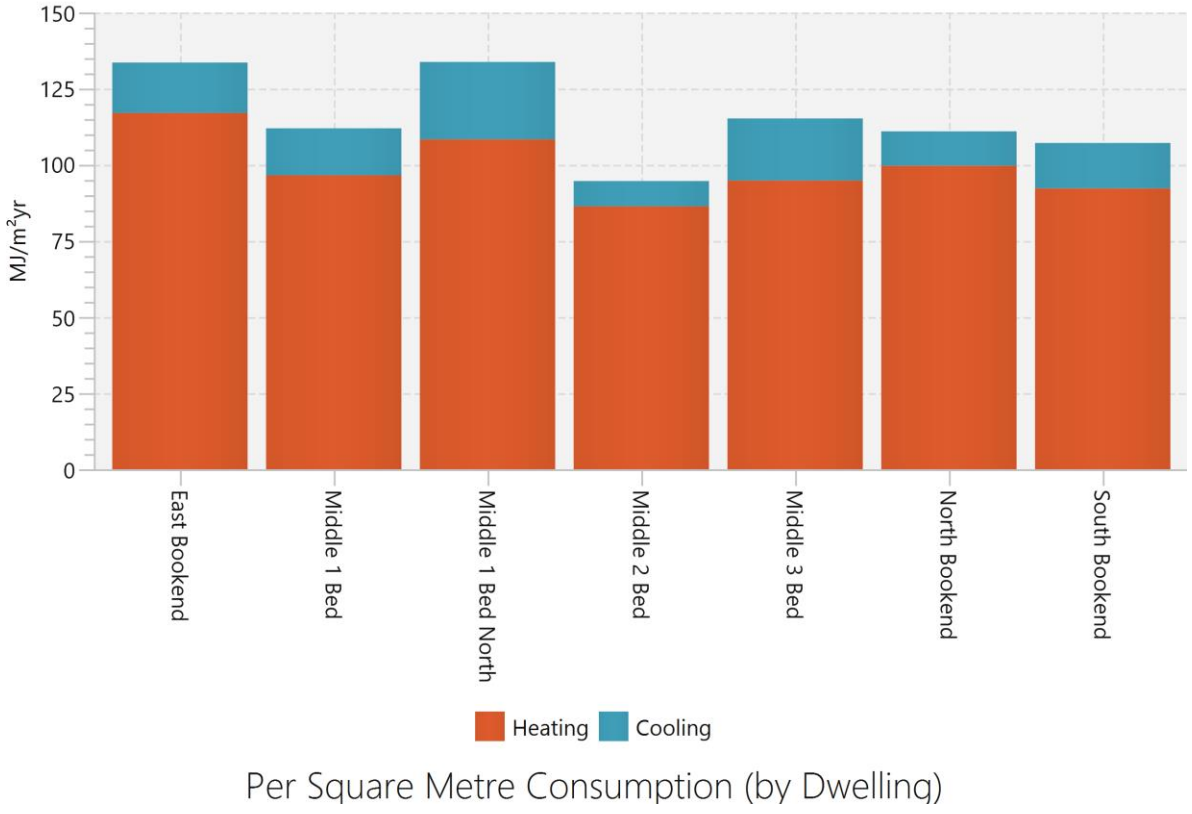

Figure 10: Square metre energy consumption per townhouse selected

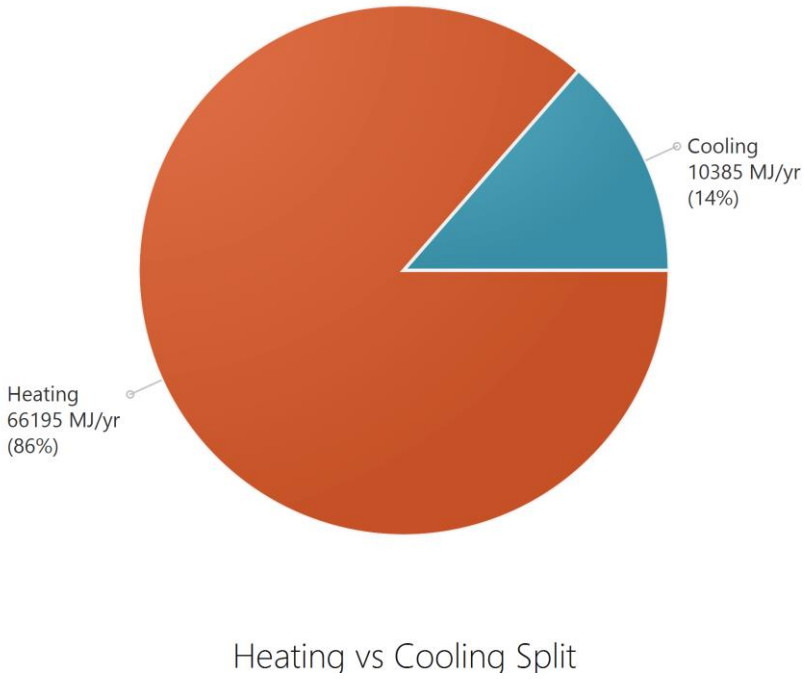

Figure 11: Ratio between heating and cooling energy

The individual apartment results are:

Dwelling	Rating	Rating Limit	Total (MJ/yr)	Total (MJ/m²yr)	Heating (MJ/yr)	Heating (MJ/m²yr)	Heating Limit (MJ/m²yr)	Cooling (MJ/yr)	Cooling (MJ/m²yr)	Cooling Limit (MJ/m²yr)
East Bookend	7.2	6	17305	133.57	15163	117.03	189	2142	16.53	26
Middle 1 Bed	7.6	6	5704	111.98	4919	96.55	189	786	15.42	26
Middle 1 Bed North	7.2	6	6800	133.76	5509	108.37	189	1291	25.40	26
Middle 2 Bed	7.9	6	7410	94.66	6761	86.37	189	649	8.29	26
Middle 3 Bed	7.5	6	13510	115.21	11122	94.85	189	2388	20.37	26
North Bookend	7.6	6	12471	110.97	11203	99.69	189	1268	11.28	26
South Bookend	7.7	6	13379	107.16	11518	92.25	189	1861	14.90	26

Appendix 2. NatHERS Results In-situ Dwelling Samples

HERO Software version 3.0 was used to run preliminary NatHERS ratings on a selection of townhouses. The following tables show results of the townhouses chosen:

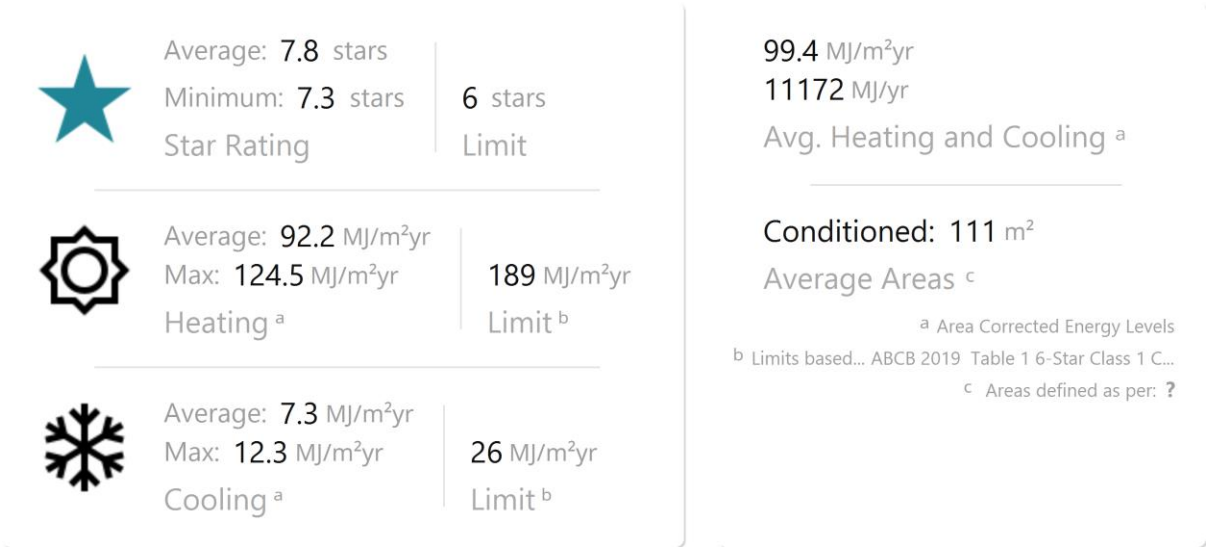

Figure 12: Graph from HERO Software showing a summary of results and an average 7.8 star rating

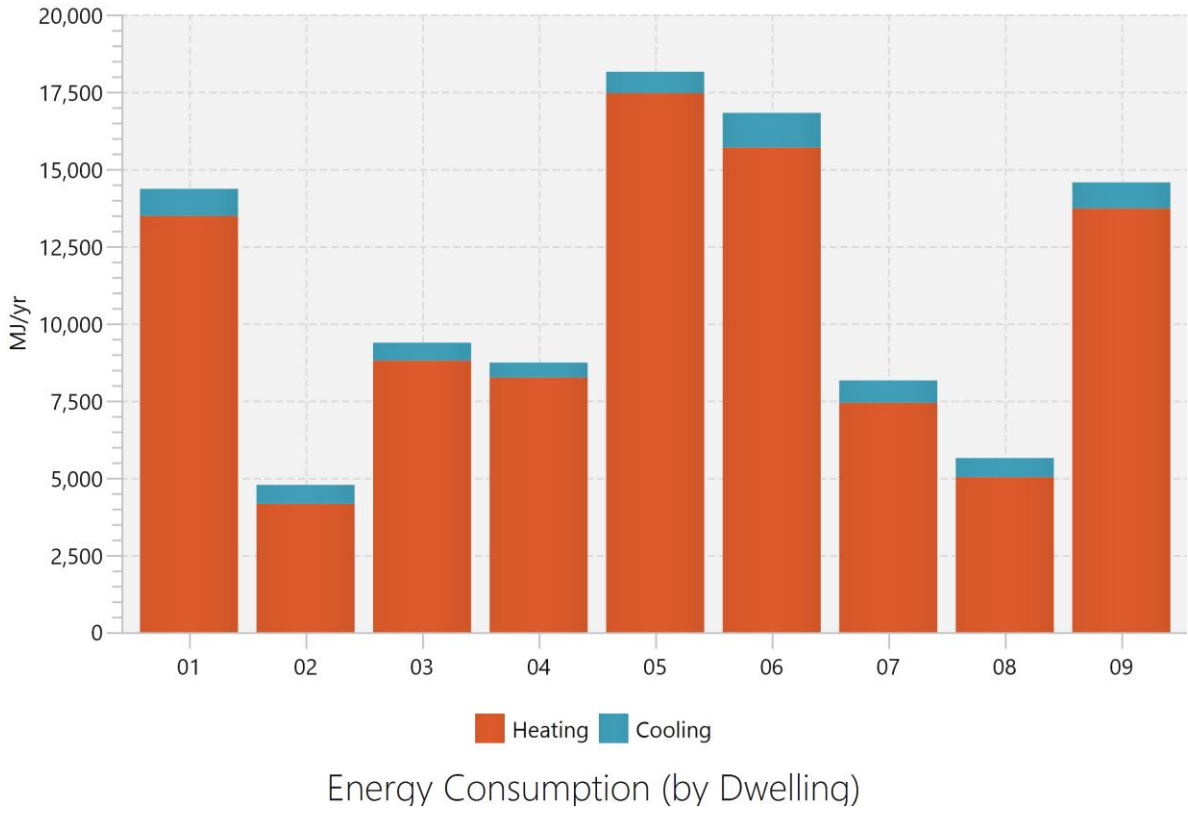

Figure 13: Graph from HERO Software showing the distribution of energy within the selection of dwellings

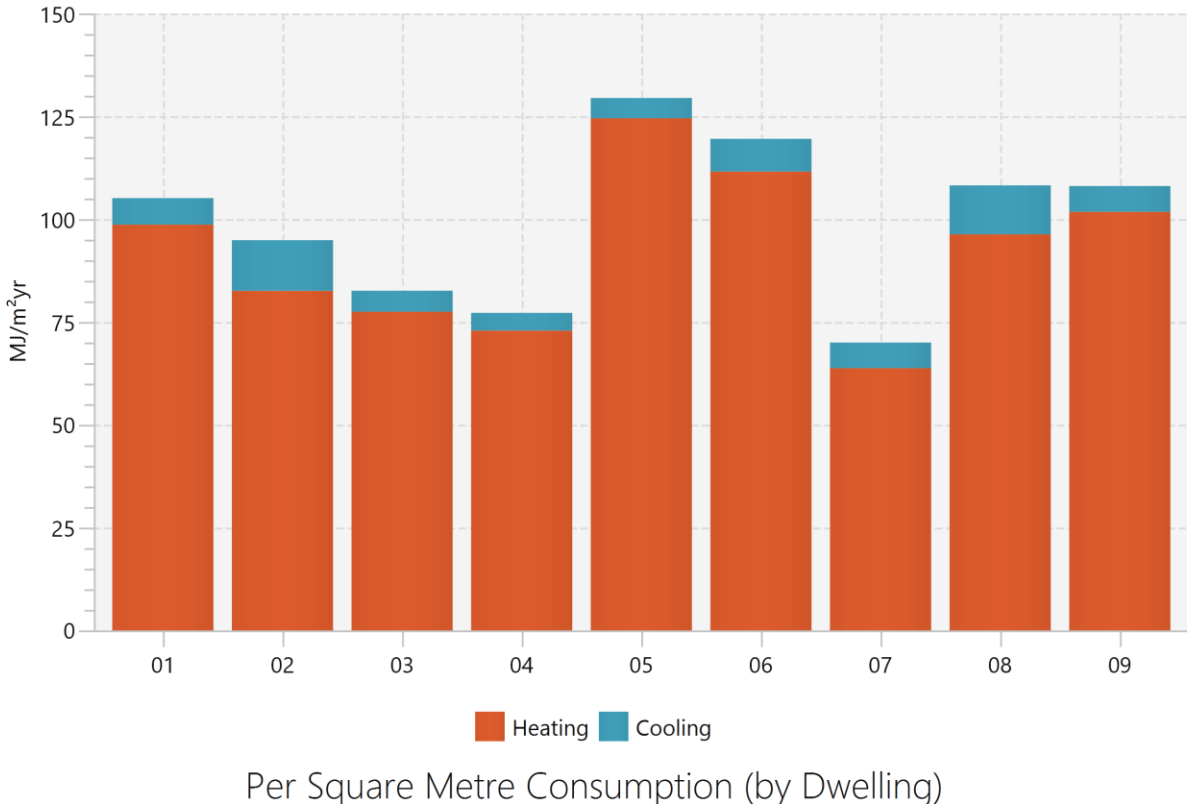

Figure 14: Square metre energy consumption per apartment selected

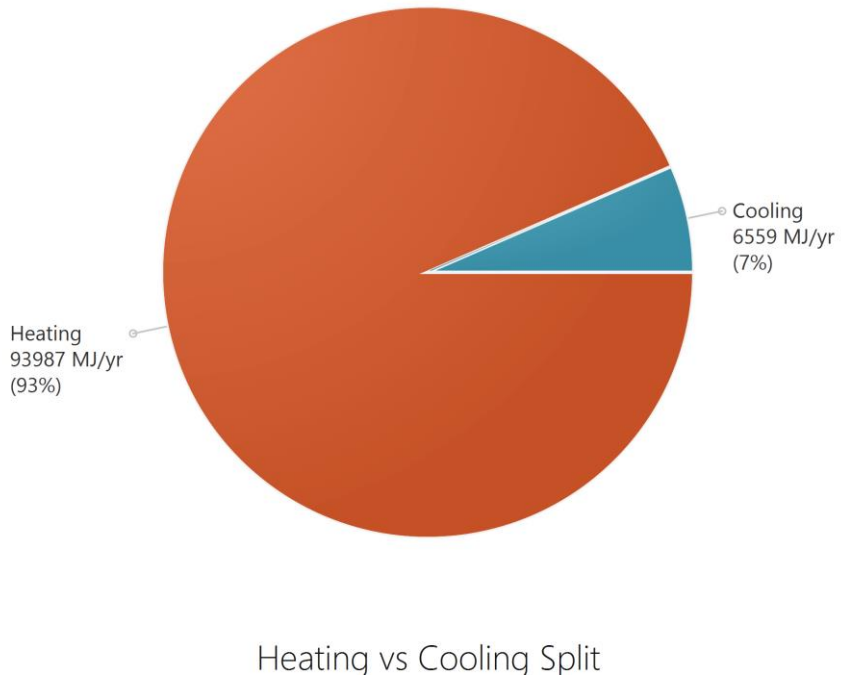

Figure 15: Ratio between heating and cooling energy

The individual apartment results are:

Dwelling	Rating	Rating Limit	Total (MJ/yr)	Total (MJ/m²yr)	Heating (MJ/yr)	Heating (MJ/m²yr)	Heating Limit (MJ/m²yr)	Cooling (MJ/yr)	Cooling (MJ/m²yr)	Cooling Limit (MJ/m²yr)
01	7.7	6	14355	105.11	13476	98.67	189	879	6.44	26
02	7.9	6	4770	94.88	4151	82.56	189	619	12.31	26
03	8.2	6	9374	82.59	8794	77.48	189	580	5.11	26
04	8.3	6	8730	77.20	8245	72.92	189	484	4.28	26
05	7.3	6	18146	129.45	17456	124.53	189	690	4.92	26
06	7.4	6	16815	119.52	15695	111.56	189	1120	7.96	26
07	8.4	6	8153	69.98	7428	63.76	189	724	6.22	26
08	7.7	6	5639	108.20	5019	96.32	189	619	11.88	26
09	7.7	6	14564	108.04	13721	101.79	189	843	6.25	26

Appendix 3. Preliminary NatHERS Assumptions

Floors

Concrete Slab on Ground (ground): R2.0 added and R1.0 slab edge insulation

Intermediate Floors: R2.0 added

External Walls

Brick Veneer R2.5 added

Timber Clad R2.5 added

Internal Walls

Neighbouring Walls: Fibre-Cement Sheet clad walls: R2.5

Internal Plasterboard Walls Generally: R2.5 min to wet areas and garages

Ceilings

External Ceilings Generally: R5.0 to ceiling

Under Roof: Reflective foil, reflective side facing down

Windows

Generally: Average of U2.73 and SHGC of 0.37 (substitution range between 0.34 and 0.41)

Sliding Doors: U-Value of 1.8 and SHGC of 0.51 (substitution range between 0.46 and 0.56)

Penetrations

All Downlights, Exhaust Fans and other penetrations sealed and insulated

Ceiling Fans

Ceiling fans modelled in all living areas and bedrooms.

Appendix 4. Melbourne Water's STORM Calculator Results

Melbourne Water

STORM Rating Report

TransactionID:	1416278
Municipality:	HEPBURN
Rainfall Station:	DAYLESFORD
Address:	17 Smith Street
	DAYLESFORD
	VIC 3460
Assessor:	Alex Slater
Development Type:	Residential - Multiunit
Allotment Site (m2):	7,120.00
STORM Rating %:	115

Description	Impervious Area (m2)	Treatment Type	Treatment Area/Volume (m2 or L)	Occupants / Number Of Bedrooms	Treatment %	Tank Water Supply Reliability (%)
North Block Roof	537.24	Rainwater Tank	22,400.00	15	124.20	94.90
Middle West Block Roof	435.65	Rainwater Tank	22,400.00	10	122.60	97.30
Middle East Block Roof	435.65	Rainwater Tank	22,400.00	10	122.60	97.30
South Block Roof	815.60	Rainwater Tank	22,400.00	20	109.30	96.20
East Block Roof	742.65	Rainwater Tank	22,400.00	15	104.40	97.90
Heritage Cottage Roof	94.00	Raingarden 300mm	7.00	0	133.35	0.00

Figure 16: Melbourne Water's STORM tool showing compliance with the worst-case scenario regarding bedrooms under each roofed area

Appendix 5. Files attached to this report

220729_DAYLESFORD_Preview_Certificates-Dwelling_Types-v5_COMBINED.pdf
220729_DAYLESFORD_Preview_Certificates-In-Situ-v5_COMBINED.pdf
210724_DAYLESFORD_STORM-Fewer_Beds.pdf

Nationwide House Energy Rating Scheme — Class 1 Summary
NatHERS Certificate No.

Generated on 29 July 2022 using Hero 3.0

Property

Address 17 Smith Street, DAYLESFORD, VIC, 3460

Lot/DP

NatHERS climate zone 66 - Ballarat Aerodrome

Accredited assessor

Alex Slater
Shared Space Architecture
alex@sharedspacearchitecture.com.au
+61 406376341
Accreditation No. DMN/21/2003
Assessor Accrediting Organisation DMN

Verification

DRAFT PREVIEW ISSUE - NOT TO BE USED FOR CERTIFICATION

Summary of all dwellings

Certificate number and link	Unit Number	Heating load (MJ/m²)	Cooling load (MJ/m²)	Total load (MJ/m²)	Star rating
	02a	96.6	15.4	112.0	7.6
	02b	108.4	25.4	133.8	7.2
	01	99.7	11.3	111.0	7.6
	03	94.8	20.4	115.2	7.5

National Construction Code (NCC) requirements

The NCC's requirements for NatHERS-rated houses are detailed in 3.12.0(a)(i) and 3.12.5 of the NCC Volume Two. For apartments the requirements are detailed in J0.2 and J5 to J8 of the NCC Volume One.

In NCC 2019, these requirements include minimum star ratings and separate heating and cooling load limits that need to be met by buildings and apartments through the NatHERS assessment. Requirements additional to the NatHERS assessment that must also be satisfied include, but are not limited to: insulation installation methods, thermal breaks, building sealing, water heating and pumping, and artificial lighting requirements. The NCC and NatHERS Heating and Cooling Load Limits (Australian Building Codes Board Standard) are available at www.abcb.gov.au.

State and territory variations and additions to the NCC may also apply

Summary of all dwellings

Certificate number and link	Unit Number	Heating load (MJ/m²)	Cooling load (MJ/m²)	Total load (MJ/m²)	Star rating
	04	92.3	14.9	107.2	7.7
	05	117.0	16.5	133.6	7.2
	06	86.4	8.3	94.7	7.9
Maximum Loads and Minimum Rating		117.0	25.4	133.8	7.2
Average	7x (Total)	99.3	16.0	115.3	7.5

Explanatory Notes

About this report

This summary rating is the ratings of all NCC Class 1 dwellings in a development. The individual dwellings' ratings are a comprehensive, dynamic computer modelling evaluation of a home, using the floorplans, elevations and specifications to estimate the energy load. It addresses the building layout, orientation and fabric (i.e. walls, windows, floors, roofs and ceilings), but does not cover the water or energy use of appliances, or energy production of solar panels. For more details about an individual dwelling's assessment, refer to the individual dwelling's NatHERS Certificate (accessible via link).

Accredited Assessors

To ensure the NatHERS Certificate is of a high quality, always use an accredited or licenced assessor. NatHERS accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO). AAOs have specific quality assurance processes in place, and continuing professional development requirements, to maintain a high and consistent standard of assessments across the country.

Any questions or concerns about this report should be directed to the assessor in the first instance. If the assessor is unable to address these questions or concerns, the AAO specified on the front of this certificate should be contacted.

Disclaimer

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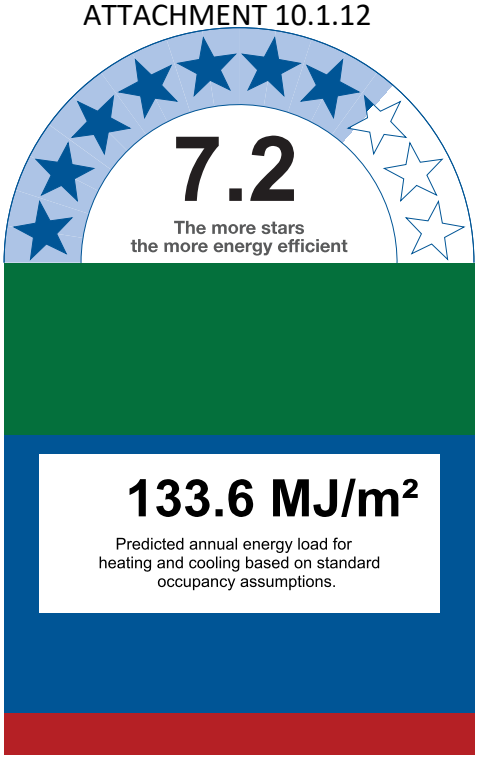
Nationwide House Energy Rating Scheme NatHERS Certificate No.

Generated on 29 July 2022 using Hero 3.0



Property

Address	05, 17 Smith Street, DAYLESFORD, VIC, 3460
Lot/DP	
NCC Class*	1a
Type	New

Plans

Main Plan	ESD 220627
Prepared by	Breathe Architecture

Construction and environment

Assessed floor area (m²)*		**Exposure Type**
Conditioned*	129.6	Suburban
Unconditioned*	15.0	**NatHERS climate zone**
Total	183.9	66 - Ballarat Aerodrome
Garage	39.3	

Thermal Performance

Heating	**Cooling**
117.0	**16.5**
MJ/m²	MJ/m²

About the rating

NatHERS software models the expected thermal energy loads using information about the design and construction, climate and common patterns of household use. The software does not take into account appliances, apart from the airflow impacts from ceiling fans.

Accredited assessor

Name	Alex Slater
Business name	Shared Space Architecture
Email	alex@sharedspacearchitecture.com.au
Phone	+61 406376341
Accreditation No.	DMN/21/2003
Assessor Accrediting Organisation	DMN
Declaration of interest	No Conflict of Interest

Verification

DRAFT PREVIEW ISSUE - NOT TO BE USED FOR CERTIFICATION

National Construction Code (NCC) requirements

The NCC's requirements for NatHERS-rated houses are detailed in 3.12.0(a)(i) and 3.12.5 of the NCC Volume Two. For apartments the requirements are detailed in J0.2 and J5 to J8 of the NCC Volume One.

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Ceiling penetrations*

Does the 'number' and 'type' of ceiling penetrations (e.g. downlights, exhaust fans, etc) shown on the stamped plans or installed, match what is shown in this Certificate?

Windows

Does the installed window meet the substitution tolerances (SHGC and U-value) and window type, of the window shown on this Certificate?

Apartment entrance doors

Does the 'External Door Schedule' show apartment entrance doors? Please note that an "external door" between the modelled dwelling and a shared space, such as an enclosed corridor or foyer, should not be included in the assessment (because it overstates the possible ventilation) and would invalidate the Certificate.

Exposure*

Has the appropriate exposure level (terrain) been applied? For example, it is unlikely that a ground-floor apartment is "exposed" or a top floor high-rise apartment is "protected".

Provisional* values

Have provisional values been used in the assessment and, if so, noted in "additional notes" below?

Window and glazed door *type and performance*

Default* windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
None					

Custom* windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
CAP-116-21 B	Capral Futureline 54W Awning Window DG 5LBrdg-12Ar-5	2.73	0.37	0.35	0.39
REY-029-06 A	Slim Patio 68 Sliding Door Embed Frm DG 6Clr-12Ar-6LightBridge	1.84	0.51	0.48	0.54

Window and glazed door *schedule*

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orient-ation	Shading device*
BATHROOM	CAP-116-21 B	W07	1800	725	Awning	90	N	None
BED 01	CAP-116-21 B	W08	1800	765	Awning	90	N	None

Window and glazed door *schedule*

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orient-ation	Shading device*
BED 01	CAP-116-21 B	W09	1800	885	Awning	90	E	None
BED 02	CAP-116-21 B	W06	1800	845	Awning	90	N	None
BED 02	CAP-116-21 B	W05	1800	820	Awning	90	W	None
BED 03	REY-029-06 A	W04	2400	2380	Sliding	45	W	None
KIT/LIV/DIN	REY-029-06 A	W11	2400	4395	Sliding	45	N	None
KIT/LIV/DIN	REY-029-06 A	W03	2400	4665	Sliding	45	E	None
LOWER ENTRY	CAP-116-21 B	W01	1800	920	Awning	90	E	None
STAIRS	CAP-116-21 B	W02	1800	860	Awning	90	E	None
STAIRS	CAP-116-21 B	W10	1800	890	Awning	90	W	None

Roof window *type and performance value*

Default* roof windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
None					

Custom* roof windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
None					

Roof window *schedule*

Location	Window ID	Window no.	Opening %	Height (mm)	Width (mm)	Orient-ation	Outdoor shade	Indoor shade
None								

Skylight *type and performance*

Skylight ID	Skylight description
None	

Skylight *schedule*

Location	Skylight ID	Skylight No.	Skylight shaft length (mm)	Area (m^2)	Orient-ation	Outdoor shade	Diffuser	Shaft Reflectance
None								

External door *schedule*

Location	Height (mm)	Width (mm)	Opening %	Orientation
CORRIDOR	2040	950	90	W
GARAGE	2040	4770	90	E
LOWER ENTRY	2040	920	90	E

External wall *type*

Wall ID	Wall Type	Solar absorptance	Wall Colour	Bulk insulation (R-value)	Reflective wall wrap*
BV-NONREFL-CAV	Brick Veneer Stud Wall with Non-Reflective Sarking	0.50	Medium	2.70	No
CONCBLOCK-190-FCF-PB	Concrete Block 190mm Fully Core-Filled - Plasterboard Internally	0.50	Medium	2.50	No
MC-NONREFL-CAV	Metal Clad Battened (Non-Refl Cavity) Stud Wall	0.50	Medium	2.70	No

External wall *schedule*

Location	Wall ID	Height (mm)	Width (mm)	Orient-ation	Horizontal shading feature* projection (mm)	Vertical shading feature
BATHROOM	MC-NONREFL-CAV	2800	1818	N		No
BED 01	MC-NONREFL-CAV	2800	3659	N		No
BED 01	MC-NONREFL-CAV	2800	3088	E		Yes
BED 02	MC-NONREFL-CAV	2800	3783	N		No
BED 02	MC-NONREFL-CAV	2800	3090	W	1436	Yes
BED 03	MC-NONREFL-CAV	2800	2897	W	1436	Yes
BIN ROOM	CONCBLOCK-190-FCF-PB	2800	2019	N		No
BIN ROOM	CONCBLOCK-190-FCF-PB	2800	4633	W		No
CORRIDOR	MC-NONREFL-CAV	2800	1650	W		Yes
GARAGE	BV-NONREFL-CAV	2800	5513	E		No
GARAGE	CONCBLOCK-190-FCF-PB	2800	883	W		No
GARAGE	BV-NONREFL-CAV	2800	1476	N		Yes
KIT/LIV/DIN	MC-NONREFL-CAV	2800	5562	N	932	Yes
KIT/LIV/DIN	MC-NONREFL-CAV	2800	726	W		Yes
KIT/LIV/DIN	MC-NONREFL-CAV	2800	5391	E	2992	Yes
LOWER ENTRY	BV-NONREFL-CAV	2800	2810	N		No

		(mm)	(mm)	ation	projection (mm)	feature
LOWER ENTRY	BV-NONREFL-CAV	2800	2284	E	1856	Yes
STAIRS	MC-NONREFL-CAV	2800	4140	N		No
STAIRS	MC-NONREFL-CAV	2800	2207	E		No
STAIRS	MC-NONREFL-CAV	2800	2207	W		Yes
STAIRS LOWER	CONCBLOCK-190-FCF-PB	2800	2284	W		No
STAIRS LOWER	BV-NONREFL-CAV	2800	2730	N		No

Internal wall *type*

Wall ID	Wall Type	Area (m^2)	Bulk insulation
INT-PARTY	Internal PARTY Plasterboard Stud Wall	78.6	5.00
INT-PB	Internal Plasterboard Stud Wall	85.7	2.50
INT-PB	Internal Plasterboard Stud Wall	53.3	0.00

Floor *type*

Location	Construction	Area (m^2)	Sub-floor ventilation	Added insulation (R-value)	Covering
BATHROOM	CSOG-100: Concrete Slab on Ground (100mm)	5.6	N/A	2.00	Timber
BED 01	CSOG-100: Concrete Slab on Ground (100mm)	11.3	N/A	2.00	Timber
BED 02	CSOG-100: Concrete Slab on Ground (100mm)	11.7	N/A	2.00	Timber
BED 03	CSOG-100: Concrete Slab on Ground (100mm)	11.6	N/A	2.00	Timber
BIN ROOM	CSOG-100: Concrete Slab on Ground (100mm)	9.4	N/A	2.00	Timber
CORRIDOR	CSOG-100: Concrete Slab on Ground (100mm)	13.3	N/A	2.00	Timber
ENSUITE	CSOG-100: Concrete Slab on Ground (100mm)	6.7	N/A	2.00	Timber
GARAGE	CSOG-100: Concrete Slab on Ground (100mm)	39.3	N/A	2.00	Timber
KIT/LIV/DIN	TIMB-001: Suspended Timber Floor	31.5	N/A	2.00	Timber
KIT/LIV/DIN	CSOG-100: Concrete Slab on Ground (100mm)	16.8	N/A	2.00	Timber
LAUNDRY	CSOG-100: Concrete Slab on Ground (100mm)	3.2	N/A	2.00	Timber
LOWER ENTRY	CSOG-100: Concrete Slab on Ground (100mm)	7.0	N/A	2.00	Timber
PANTRY	CSOG-100: Concrete Slab on Ground (100mm)	2.9	N/A	2.00	Timber

STAIRS	TIMB-001: Suspended Timber Floor	8.9	N/A	2.00	Timber
STAIRS	CSOG-100: Concrete Slab on Ground (100mm)	0.3	N/A	2.00	Timber
STAIRS LOWER	CSOG-100: Concrete Slab on Ground (100mm)	5.6	N/A	2.00	Timber
WIR	CSOG-100: Concrete Slab on Ground (100mm)	4.1	N/A	2.00	Timber

Ceiling *type*

Location	Construction	Bulk insulation (R-value)	Reflective wrap*
BATHROOM	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	No
BED 01	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	No
BED 02	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	No
BED 03	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	No
BIN ROOM	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	No
CORRIDOR	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	No
ENSUITE	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	No
GARAGE	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	No
KIT/LIV/DIN	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	No
LAUNDRY	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	No
LOWER ENTRY	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	No
PANTRY	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	No
STAIRS	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	No
STAIRS LOWER	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	No
WIR	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	No

Ceiling *penetrations**

Location	Quantity	Type	Diameter (mm)	Sealed /unsealed
BATHROOM	1	Exhaust Fan	350	Sealed
ENSUITE	1	Exhaust Fan	350	Sealed
KIT/LIV/DIN	1	Exhaust Fan	350	Sealed

Ceiling *fans*

Location	Quantity	Diameter (mm)
BED 01	1	1200
BED 02	1	1200
BED 03	1	1200

Roof *type*

Construction	Added insulation (R-value)	Solar absorptance	Roof Colour
FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	0.00	0.50	Medium

Explanatory Notes

About this report

A NatHERS rating is a comprehensive, dynamic computer modelling evaluation of a home, using the floorplans, elevations and specifications to estimate an energy load. It addresses the building layout, orientation and fabric (i.e. walls, windows, floors, roofs and ceilings), but does not cover the water or energy use of appliances or energy production of solar panels.

Ratings are based on a unique climate zone where the home is located and are generated using standard assumptions, including occupancy patterns and thermostat settings. The actual energy consumption of a home may vary significantly from the predicted energy load, as the assumptions used in the rating will not match actual usage patterns. For example, the number of occupants and personal heating or cooling preferences will vary.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparing different dwelling designs and to demonstrate that the design meets the energy efficiency requirements in the National Construction Code. Homes that are energy efficient use less energy, are warmer on cool days, cooler on hot days and cost less to run. The higher the star rating the more thermally efficient the dwelling is.

Accredited assessors

To ensure the NatHERS Certificate is of a high quality, always use an accredited or licenced assessor. NatHERS accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

Australian Capital Territory (ACT) licensed assessors may only produce assessments for regulatory purposes using software for which they have a licence endorsement. Licence endorsements can be confirmed on the ACT licensing register

AAOs have specific quality assurance processes in place, and continuing professional development requirements, to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any ongoing training requirements.

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The predicted annual energy load in this NatHERS Certificate is an estimate based on an assessment of the building by the assessor. It is not a prediction of actual energy use, but may be used to compare how other buildings are likely to perform when used in a similar way.

Information presented in this report relies on a range of standard assumptions (both embedded in NatHERS accredited software and made by the assessor who prepared this report), including assumptions about occupancy, indoor air temperature and local climate.

Not all assumptions that may have been made by the assessor while using the NatHERS accredited software tool are presented in this report and further details or data files may be available from the assessor.

Glossary

Annual energy load	the predicted amount of energy required for heating and cooling, based on standard occupancy assumptions.
Assessed floor area	the floor area modelled in the software for the purpose of the NatHERS assessment. Note, this may not be consistent with the floor area in the design documents.
Ceiling penetrations	features that require a penetration to the ceiling, including downlights, vents, exhaust fans, rangehoods, chimneys and flues. Excludes fixtures attached to the ceiling with small holes through the ceiling for wiring, e.g. ceiling fans; pendant lights, and heating and cooling ducts.
Conditioned	a zone within a dwelling that is expected to require heating and cooling based on standard occupancy assumptions. In some circumstances it will include garages.
Custom windows	windows listed in NatHERS software that are available on the market in Australia and have a WERS (Window Energy Rating Scheme) rating.
Default windows	windows that are representative of a specific type of window product and whose properties have been derived by statistical methods.
Entrance door	these signify ventilation benefits in the modelling software and must not be modelled as a door when opening to a minimally ventilated corridor in a Class 2 building.
Exposure category - exposed	terrain with no obstructions e.g. flat grazing land, ocean-frontage, desert, exposed high-rise unit (usually above 10 floors).
Exposure category - open	terrain with few obstructions at a similar height e.g. grasslands with few well scattered obstructions below 10m, farmland with scattered sheds, lightly vegetated bush blocks, elevated units (e.g. above 3 floors).
Exposure category - suburban	terrain with numerous, closely spaced obstructions below 10m e.g. suburban housing, heavily vegetated bushland areas.
Exposure category - protected	terrain with numerous, closely spaced obstructions over 10 m e.g. city and industrial areas.
Horizontal shading feature	provides shading to the building in the horizontal plane, e.g. eaves, verandahs, pergolas, carports, or overhangs or balconies from upper levels.
National Construction Code (NCC) Class	the NCC groups buildings by their function and use, and assigns a classification code. NatHERS software models NCC Class 1, 2 or 4 buildings and attached Class 10a buildings. Definitions can be found at www.abcb.gov.au.
Opening percentage	the openability percentage or operable (moveable) area of doors or windows that is used in ventilation calculations.
Provisional value	an assumed value that does not represent an actual value. For example, if the wall colour is unspecified in the documentation, a provisional value of 'medium' must be modelled. Acceptable provisional values are outlined in the NatHERS Technical Note and can be found at www.nathers.gov.au
Reflective wrap (also known as foil)	can be applied to walls, roofs and ceilings. When combined with an appropriate airgap and emissivity value, it provides insulative properties.
Roof window	for NatHERS this is typically an operable window (i.e. can be opened), will have a plaster or similar light well if there is an attic space, and generally does not have a diffuser.
Shading device	a device fixed to windows that provides shading e.g. window awnings or screens but excludes eaves.
Shading features	includes neighbouring buildings, fences, and wing walls, but excludes eaves.
Solar heat gain coefficient (SHGC)	the fraction of incident solar radiation admitted through a window, both directly transmitted as well as absorbed and subsequently released inward. SHGC is expressed as a number between 0 and 1. The lower a window's SHGC, the less solar heat it transmits.
Skylight (also known as roof lights)	for NatHERS this is typically a moulded unit with flexible reflective tubing (light well) and a diffuser at ceiling level.
U-value	the rate of heat transfer through a window. The lower the U-value, the better the insulating ability.
Unconditioned	a zone within a dwelling that is assumed to not require heating and cooling based on standard occupancy assumptions
Vertical shading features	provides shading to the building in the vertical plane and can be parallel or perpendicular to the subject wall/window. Includes privacy screens, other walls in the building (wing walls), fences, other buildings, vegetation (protected or listed heritage trees).

Nationwide House Energy Rating Scheme NatHERS Certificate No.

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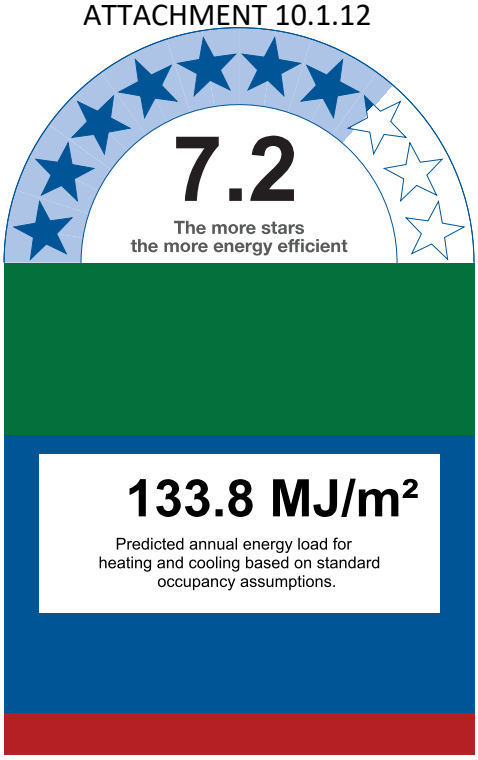

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Name	Alex Slater
Business name	Shared Space Architecture
Email	alex@sharedspacearchitecture.com.au
Phone	+61 406376341
Accreditation No.	DMN/21/2003
Assessor Accrediting Organisation	DMN
Declaration of interest	No Conflict of Interest

Thermal Performance

Heating	Cooling
108.4	**25.4**
MJ/m²	MJ/m²

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Has the appropriate exposure level (terrain) been applied? For example, it is unlikely that a ground-floor apartment is "exposed" or a top floor high-rise apartment is "protected".

Provisional* values

Have provisional values been used in the assessment and, if so, noted in "additional notes" below?

Window and glazed door *type and performance*

Default* windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
None					

Custom* windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
CAP-116-21 B	Capral Futureline 54W Awning Window DG 5LBrdg-12Ar-5	2.73	0.37	0.35	0.39
REY-029-06 A	Slim Patio 68 Sliding Door Embed Frm DG 6Clr-12Ar-6LightBridge	1.84	0.51	0.48	0.54

Window and glazed door *schedule*

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orient-ation	Shading device*
BED 01	CAP-116-21 B	W04	1800	1015	Awning	90	W	None
KIT/LIV/DIN	CAP-116-21 B	W02	1800	2145	Awning	45	W	None

Window and glazed door *schedule*

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orient-ation	Shading device*
KIT/LIV/DIN	REY-029-06 A	W01	2400	3335	Sliding	45	N	None
VOID	CAP-116-21 B	W03	1800	3375	Awning	30	N	None

Roof window *type and performance value*

Default* roof windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
None					

Custom* roof windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
None					

Roof window *schedule*

Location	Window ID	Window no.	Opening %	Height (mm)	Width (mm)	Orient-ation	Outdoor shade	Indoor shade
None								

Skylight *type and performance*

Skylight ID	Skylight description
None	

Skylight *schedule*

Location	Skylight ID	Skylight No.	Skylight shaft length (mm)	Area (m^2)	Orient-ation	Outdoor shade	Diffuser	Shaft Reflectance
None								

External door *schedule*

Location	Height (mm)	Width (mm)	Opening %	Orientation
ENTRY	2040	920	90	N

External wall *type*

Wall ID	Wall Type	Solar absorptance	Wall Colour	Bulk insulation (R-value)	Reflective wall wrap*
BV-NONREFL-CAV	Brick Veneer Stud Wall with Non-Reflective Sarking	0.50	Medium	2.50	No

External wall *type*

Wall ID	Wall Type	Solar absorptance	Wall Colour	Bulk insulation (R-value)	Reflective wall wrap*
MC-NONREFL-CAV	Metal Clad Battened (Non-Refl Cavity) Stud Wall	0.50	Medium	2.50	No

External wall *schedule*

Location	Wall ID	Height (mm)	Width (mm)	Orient-ation	Horizontal shading feature* projection (mm)	Vertical shading feature
BATHROOM	BV-NONREFL-CAV	2800	2497	S		No
BATHROOM	MC-NONREFL-CAV	2800	1589	W		No
BED 01	MC-NONREFL-CAV	2800	3588	W		No
BED 01	BV-NONREFL-CAV	2800	2158	S		No
ENTRY	BV-NONREFL-CAV	2800	980	N	1429	Yes
KIT/LIV/DIN	BV-NONREFL-CAV	2800	6626	W		No
KIT/LIV/DIN	BV-NONREFL-CAV	2800	3677	N	1068	Yes
KIT/LIV/DIN	BV-NONREFL-CAV	2800	3677	S		No
VOID	MC-NONREFL-CAV	2800	4773	N	1149	No
VOID	MC-NONREFL-CAV	2800	1226	W		No
W/C	BV-NONREFL-CAV	2800	980	S		No

Internal wall *type*

Wall ID	Wall Type	Area (m^2)	Bulk insulation
INT-PARTY	Internal PARTY Plasterboard Stud Wall	35.7	5.00
INT-PB	Internal Plasterboard Stud Wall	22.2	0.00
INT-PB	Internal Plasterboard Stud Wall	16.2	2.50

Floor *type*

Location	Construction	Area (m^2)	Sub-floor ventilation	Added insulation (R-value)	Covering
BATHROOM	TIMB-001: Suspended Timber Floor	4.0	N/A	2.00	Timber
BED 01	TIMB-001: Suspended Timber Floor	16.3	N/A	2.00	Timber
BED 01	TIMB-002: Suspended Timber Floor - Lined Below	0.2	N/A	2.00	Timber

Floor *type*

Location	Construction	Area (m^2)	Sub-floor ventilation	Added insulation (R-value)	Covering
ENTRY	CSOG-100: Concrete Slab on Ground (100mm)	2.9	N/A	2.00	Timber
KIT/LIV/DIN	CSOG-100: Concrete Slab on Ground (100mm)	26.0	N/A	2.00	Timber
STAIR	TIMB-001: Suspended Timber Floor	3.4	N/A	2.00	Timber
STAIR	TIMB-002: Suspended Timber Floor - Lined Below	0.5	N/A	2.00	Timber
VOID	TIMB-001: Suspended Timber Floor	5.5	N/A	2.00	Timber
VOID	TIMB-002: Suspended Timber Floor - Lined Below	0.4	N/A	2.00	Timber
W/C	CSOG-100: Concrete Slab on Ground (100mm)	1.9	N/A	2.00	Timber

Ceiling *type*

Location	Construction	Bulk insulation (R-value)	Reflective wrap*
BATHROOM	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	Yes
BED 01	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	Yes
ENTRY	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	Yes
KIT/LIV/DIN	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	Yes
STAIR	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	Yes
VOID	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	Yes
W/C	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	Yes

Ceiling *penetrations**

Location	Quantity	Type	Diameter (mm)	Sealed /unsealed
BATHROOM	1	Exhaust Fan	350	Sealed
W/C	1	Exhaust Fan	350	Sealed

Ceiling *fans*

Location	Quantity	Diameter (mm)
BED 01	1	1200
KIT/LIV/DIN	1	1200

Roof *type*

Construction	Added insulation (R-value)	Solar absorptance	Roof Colour
FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	0.00	0.50	Medium

Explanatory Notes

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While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparing different dwelling designs and to demonstrate that the design meets the energy efficiency requirements in the National Construction Code. Homes that are energy efficient use less energy, are warmer on cool days, cooler on hot days and cost less to run. The higher the star rating the more thermally efficient the dwelling is.

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Glossary

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Conditioned	a zone within a dwelling that is expected to require heating and cooling based on standard occupancy assumptions. In some circumstances it will include garages.
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Exposure category - exposed	terrain with no obstructions e.g. flat grazing land, ocean-frontage, desert, exposed high-rise unit (usually above 10 floors).
Exposure category - open	terrain with few obstructions at a similar height e.g. grasslands with few well scattered obstructions below 10m, farmland with scattered sheds, lightly vegetated bush blocks, elevated units (e.g. above 3 floors).
Exposure category - suburban	terrain with numerous, closely spaced obstructions below 10m e.g. suburban housing, heavily vegetated bushland areas.
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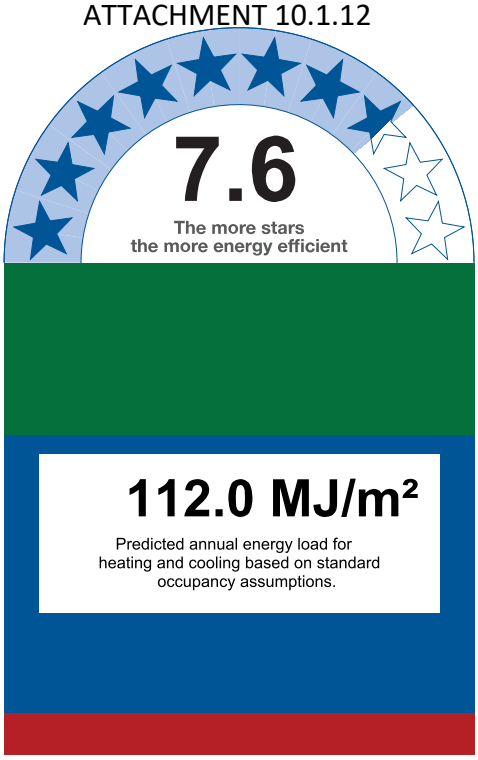
Horizontal shading feature	provides shading to the building in the horizontal plane, e.g. eaves, verandahs, pergolas, carports, or overhangs or balconies from upper levels.
National Construction Code (NCC) Class	the NCC groups buildings by their function and use, and assigns a classification code. NatHERS software models NCC Class 1, 2 or 4 buildings and attached Class 10a buildings. Definitions can be found at www.abcb.gov.au.
Opening percentage	the openability percentage or operable (moveable) area of doors or windows that is used in ventilation calculations.
Provisional value	an assumed value that does not represent an actual value. For example, if the wall colour is unspecified in the documentation, a provisional value of 'medium' must be modelled. Acceptable provisional values are outlined in the NatHERS Technical Note and can be found at www.nathers.gov.au
Reflective wrap (also known as foil)	can be applied to walls, roofs and ceilings. When combined with an appropriate airgap and emissivity value, it provides insulative properties.
Roof window	for NatHERS this is typically an operable window (i.e. can be opened), will have a plaster or similar light well if there is an attic space, and generally does not have a diffuser.
Shading device	a device fixed to windows that provides shading e.g. window awnings or screens but excludes eaves.
Shading features	includes neighbouring buildings, fences, and wing walls, but excludes eaves.
Solar heat gain coefficient (SHGC)	the fraction of incident solar radiation admitted through a window, both directly transmitted as well as absorbed and subsequently released inward. SHGC is expressed as a number between 0 and 1. The lower a window's SHGC, the less solar heat it transmits.
Skylight (also known as roof lights)	for NatHERS this is typically a moulded unit with flexible reflective tubing (light well) and a diffuser at ceiling level.
U-value	the rate of heat transfer through a window. The lower the U-value, the better the insulating ability.
Unconditioned	a zone within a dwelling that is assumed to not require heating and cooling based on standard occupancy assumptions
Vertical shading features	provides shading to the building in the vertical plane and can be parallel or perpendicular to the subject wall/window. Includes privacy screens, other walls in the building (wing walls), fences, other buildings, vegetation (protected or listed heritage trees).

Nationwide House Energy Rating Scheme NatHERS Certificate No.

Generated on 29 July 2022 using Hero 3.0



Property

Address	02a, 17 Smith Street, DAYLESFORD, VIC, 3460
Lot/DP	
NCC Class*	1a
Type	New

Plans

Main Plan	ESD 220627
Prepared by	Breathe Architecture

Construction and environment

Assessed floor area (m²)*		**Exposure Type**
Conditioned*	50.9	Suburban
Unconditioned*	4.1	**NatHERS climate zone**
Total	55.0	66 - Ballarat Aerodrome
Garage	0.0	

Accredited assessor

Name	Alex Slater
Business name	Shared Space Architecture
Email	alex@sharedspacearchitecture.com.au
Phone	+61 406376341
Accreditation No.	DMN/21/2003
Assessor Accrediting Organisation	DMN
Declaration of interest	No Conflict of Interest

Thermal Performance

Heating	Cooling
96.6	**15.4**
MJ/m²	MJ/m²

About the rating

NatHERS software models the expected thermal energy loads using information about the design and construction, climate and common patterns of household use. The software does not take into account appliances, apart from the airflow impacts from ceiling fans.

Verification

DRAFT PREVIEW ISSUE - NOT TO BE USED FOR CERTIFICATION

National Construction Code (NCC) requirements

The NCC's requirements for NatHERS-rated houses are detailed in 3.12.0(a)(i) and 3.12.5 of the NCC Volume Two. For apartments the requirements are detailed in J0.2 and J5 to J8 of the NCC Volume One.

In NCC 2019, these requirements include minimum star ratings and separate heating and cooling load limits that need to be met by buildings and apartments through the NatHERS assessment. Requirements additional to the NatHERS assessment that must also be satisfied include, but are not limited to: insulation installation methods, thermal breaks, building sealing, water heating and pumping, and artificial lighting requirements. The NCC and NatHERS Heating and Cooling Load Limits (Australian Building Codes Board Standard) are available at www.abcb.gov.au.

State and territory variations and additions to the NCC may also apply.

Certificate Check

Ensure the dwelling is designed and then built as per the NatHERS Certificate. While you need to check the accuracy of the whole Certificate, the following spot check covers some important items impacting the dwelling's rating.

Genuine certificate

Does this Certificate match the one available at the web address or QR code in the verification box on the front page? Does the set of NatHERS-stamped plans for the dwelling have a Certificate number on the stamp that matches this Certificate?

Ceiling penetrations*

Does the 'number' and 'type' of ceiling penetrations (e.g. downlights, exhaust fans, etc) shown on the stamped plans or installed, match what is shown in this Certificate?

Windows

Does the installed window meet the substitution tolerances (SHGC and U-value) and window type, of the window shown on this Certificate?

Apartment entrance doors

Does the 'External Door Schedule' show apartment entrance doors? Please note that an "external door" between the modelled dwelling and a shared space, such as an enclosed corridor or foyer, should not be included in the assessment (because it overstates the possible ventilation) and would invalidate the Certificate.

Exposure*

Has the appropriate exposure level (terrain) been applied? For example, it is unlikely that a ground-floor apartment is "exposed" or a top floor high-rise apartment is "protected".

Provisional* values

Have provisional values been used in the assessment and, if so, noted in "additional notes" below?

Window and glazed door *type and performance*

Default* windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
None					

Custom* windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
CAP-116-21 B	Capral Futureline 54W Awning Window DG 5LBrdg-12Ar-5	2.73	0.37	0.35	0.39
REY-029-06 A	Slim Patio 68 Sliding Door Embed Frm DG 6Clr-12Ar-6LightBridge	1.84	0.51	0.48	0.54

Window and glazed door *schedule*

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orient-ation	Shading device*
BATHROOM	CAP-116-21 B	W02	1800	900	Awning	90	N	None
BEDROOM	CAP-116-21 B	W01	1800	1015	Awning	90	W	None

Window and glazed door *schedule*

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orient-ation	Shading device*
KIT/LIV/DIN	REY-029-06 A	W04	1800	3590	Sliding	45	N	None
KIT/LIV/DIN	REY-029-06 A	W05	2400	2735	Sliding	45	S	None
STAIR	CAP-116-21 B	W03	1800	895	Awning	90	N	None

Roof window *type and performance value*

Default* roof windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
None					

Custom* roof windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
None					

Roof window *schedule*

Location	Window ID	Window no.	Opening %	Height (mm)	Width (mm)	Orient-ation	Outdoor shade	Indoor shade
None								

Skylight *type and performance*

Skylight ID	Skylight description
None	

Skylight *schedule*

Location	Skylight ID	Skylight No.	Skylight shaft length (mm)	Area (m^2)	Orient-ation	Outdoor shade	Diffuser	Shaft Reflectance
None								

External door *schedule*

Location	Height (mm)	Width (mm)	Opening %	Orientation
ENTRY	2040	980	90	S

External wall *type*

Wall ID	Wall Type	Solar absorptance	Wall Colour	Bulk insulation (R-value)	Reflective wall wrap*
BV-NONREFL-CAV	Brick Veneer Stud Wall with Non-Reflective Sarking	0.50	Medium	2.50	No
MC-NONREFL-CAV	Metal Clad Battened (Non-Refl Cavity) Stud Wall	0.50	Medium	2.50	No

External wall *schedule*

Location	Wall ID	Height (mm)	Width (mm)	Orient-ation	Horizontal shading feature* projection (mm)	Vertical shading feature
BATHROOM	MC-NONREFL-CAV	2800	2494	N	1172	Yes
BATHROOM	MC-NONREFL-CAV	2800	1640	W		Yes
BEDROOM	MC-NONREFL-CAV	2800	3597	W		Yes
BEDROOM	MC-NONREFL-CAV	2800	875	N	1172	Yes
ENTRY	BV-NONREFL-CAV	2800	980	S	890	No
KIT/LIV/DIN	BV-NONREFL-CAV	2800	6637	W		No
KIT/LIV/DIN	BV-NONREFL-CAV	2800	3590	N	1169	Yes
KIT/LIV/DIN	BV-NONREFL-CAV	2800	3590	S		Yes
STAIR	MC-NONREFL-CAV	2800	1145	W		Yes
STAIR	MC-NONREFL-CAV	2800	1101	N	1172	Yes
STAIR	BV-NONREFL-CAV	2800	4691	S		Yes
WC	BV-NONREFL-CAV	2800	1014	N	1169	Yes

Internal wall *type*

Wall ID	Wall Type	Area (m^2)	Bulk insulation
INT-PARTY	Internal PARTY Plasterboard Stud Wall	36.6	5.00
INT-PB	Internal Plasterboard Stud Wall	24.5	0.00
INT-PB	Internal Plasterboard Stud Wall	16.6	2.50

Floor *type*

Location	Construction	Area (m^2)	Sub-floor ventilation	Added insulation (R-value)	Covering
BATHROOM	TIMB-001: Suspended Timber Floor	4.1	N/A	2.00	Timber

Floor *type*

Location	Construction	Area (m^2)	Sub-floor ventilation	Added insulation (R-value)	Covering
BEDROOM	TIMB-001: Suspended Timber Floor	14.3	N/A	2.00	Timber
ENTRY	CSOG-100: Concrete Slab on Ground (100mm)	2.8	N/A	2.00	Timber
KIT/LIV/DIN	CSOG-100: Concrete Slab on Ground (100mm)	25.5	N/A	2.00	Timber
STAIR	TIMB-001: Suspended Timber Floor	10.6	N/A	2.00	Timber
STAIR	TIMB-002: Suspended Timber Floor - Lined Below	0.5	N/A	3.50	Timber
WC	CSOG-100: Concrete Slab on Ground (100mm)	2.1	N/A	2.00	Tile

Ceiling *type*

Location	Construction	Bulk insulation (R-value)	Reflective wrap*
BATHROOM	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	Yes
BEDROOM	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	Yes
KIT/LIV/DIN	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	Yes
STAIR	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	Yes

Ceiling *penetrations**

Location	Quantity	Type	Diameter (mm)	Sealed /unsealed
BATHROOM	1	Exhaust Fan	350	Sealed
KIT/LIV/DIN	1	Exhaust Fan	350	Sealed
WC	1	Exhaust Fan	350	Sealed

Ceiling *fans*

Location	Quantity	Diameter (mm)
BEDROOM	1	1200
KIT/LIV/DIN	1	1200

Roof *type*

Construction	Added insulation (R-value)	Solar absorptance	Roof Colour
FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	0.00	0.50	Medium

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Exposure category - open	terrain with few obstructions at a similar height e.g. grasslands with few well scattered obstructions below 10m, farmland with scattered sheds, lightly vegetated bush blocks, elevated units (e.g. above 3 floors).
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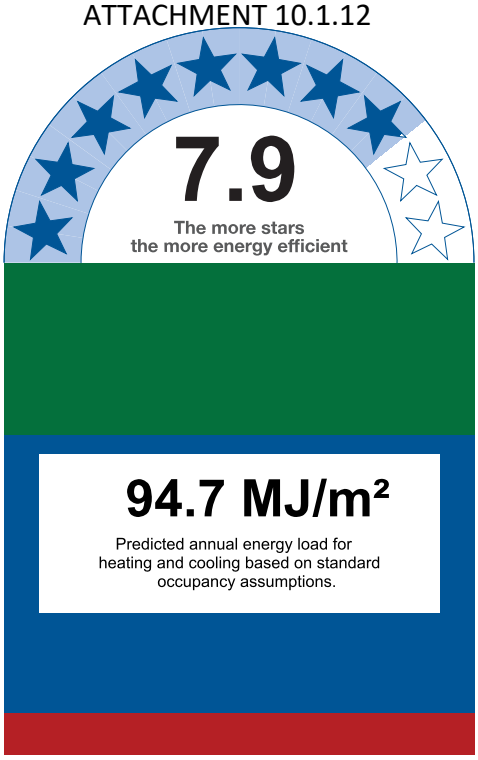
Nationwide House Energy Rating Scheme NatHERS Certificate No.

Generated on 29 July 2022 using Hero 3.0



Property

Address	06, 17 Smith Street, DAYLESFORD, VIC, 3460
Lot/DP	
NCC Class*	1a
Type	New

Plans

Main Plan	ESD 220627
Prepared by	Breathe Architecture

Construction and environment

Assessed floor area (m²)*		**Exposure Type**
Conditioned*	78.3	Suburban
Unconditioned*	4.1	**NatHERS climate zone**
Total	106.8	66 - Ballarat Aerodrome
Garage	24.4	

Thermal Performance

Heating	Cooling
86.4	**8.3**
MJ/m²	MJ/m²

About the rating

NatHERS software models the expected thermal energy loads using information about the design and construction, climate and common patterns of household use. The software does not take into account appliances, apart from the airflow impacts from ceiling fans.

Accredited assessor

Name	Alex Slater
Business name	Shared Space Architecture
Email	alex@sharedspacearchitecture.com.au
Phone	+61 406376341
Accreditation No.	DMN/21/2003
Assessor Accrediting Organisation	DMN
Declaration of interest	No Conflict of Interest

Verification

DRAFT PREVIEW ISSUE - NOT TO BE USED FOR CERTIFICATION

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Does the 'External Door Schedule' show apartment entrance doors? Please note that an "external door" between the modelled dwelling and a shared space, such as an enclosed corridor or foyer, should not be included in the assessment (because it overstates the possible ventilation) and would invalidate the Certificate.

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Has the appropriate exposure level (terrain) been applied? For example, it is unlikely that a ground-floor apartment is "exposed" or a top floor high-rise apartment is "protected".

Provisional* values

Have provisional values been used in the assessment and, if so, noted in "additional notes" below?

Window and glazed door *type and performance*

Default* windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
None					

Custom* windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
CAP-116-21 B	Capral Futureline 54W Awning Window DG 5LBrdg-12Ar-5	2.73	0.37	0.35	0.39
REY-029-06 A	Slim Patio 68 Sliding Door Embed Frm DG 6Clr-12Ar-6LightBridge	1.84	0.51	0.48	0.54

Window and glazed door *schedule*

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orient-ation	Shading device*
BEDROOM 1	CAP-116-21 B	W05	1800	885	Awning	90	S	None
BEDROOM 1	CAP-116-21 B	W06	1800	905	Awning	90	S	None

Window and glazed door *schedule*

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orient-ation	Shading device*
BEDROOM 2	CAP-116-21 B	W03	1800	1000	Awning	90	N	None
BEDROOM 2	CAP-116-21 B	W04	1800	985	Awning	90	N	None
KIT/LIV/DIN	REY-029-06 A	W01	2400	3928	Sliding	45	N	None
KIT/LIV/DIN	REY-029-06 A	W02	2400	2185	Sliding	45	S	None

Roof window *type and performance value*

Default* roof windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
None					

Custom* roof windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
None					

Roof window *schedule*

Location	Window ID	Window no.	Opening %	Height (mm)	Width (mm)	Orient-ation	Outdoor shade	Indoor shade
None								

Skylight *type and performance*

Skylight ID	Skylight description
None	

Skylight *schedule*

Location	Skylight ID	Skylight No.	Skylight shaft length (mm)	Area (m^2)	Orient-ation	Outdoor shade	Diffuser	Shaft Reflectance
None								

External door *schedule*

Location	Height (mm)	Width (mm)	Opening %	Orientation
ENTRY	2040	979	90	S
GARAGE	2040	2535	90	N
GARAGE	2040	970	90	S

External wall *type*

Wall ID	Wall Type	Solar absorptance	Wall Colour	Bulk insulation (R-value)	Reflective wall wrap*
BV-NONREFL-CAV	Brick Veneer Stud Wall with Non-Reflective Sarking	0.50	Medium	2.50	No
MC-NONREFL-CAV	Metal Clad Battened (Non-Refl Cavity) Stud Wall	0.50	Medium	2.50	No

External wall *schedule*

Location	Wall ID	Height (mm)	Width (mm)	Orient-ation	Horizontal shading feature* projection (mm)	Vertical shading feature
BEDROOM 1	BV-NONREFL-CAV	2800	3928	S		Yes
BEDROOM 2	MC-NONREFL-CAV	2800	3928	N	1446	Yes
ENTRY	BV-NONREFL-CAV	2800	1117	S	1003	Yes
ENTRY	BV-NONREFL-CAV	2800	3007	W		No
GARAGE	BV-NONREFL-CAV	2800	3465	N		No
GARAGE	BV-NONREFL-CAV	2800	1335	E		Yes
GARAGE	BV-NONREFL-CAV	2800	771	N		Yes
GARAGE	BV-NONREFL-CAV	2800	4236	S		Yes
KIT/LIV/DIN	BV-NONREFL-CAV	2800	118	S		No
KIT/LIV/DIN	BV-NONREFL-CAV	2800	4508	W		No
KIT/LIV/DIN	BV-NONREFL-CAV	2800	3928	N	1388	Yes
KIT/LIV/DIN	BV-NONREFL-CAV	2800	11244	E		No
KIT/LIV/DIN	BV-NONREFL-CAV	2800	2693	S		Yes
KIT/LIV/DIN	BV-NONREFL-CAV	2800	118	W		Yes
STAIRS	BV-NONREFL-CAV	2800	3493	W		No

Internal wall *type*

Wall ID	Wall Type	Area (m^2)	Bulk insulation
INT-PARTY	Internal PARTY Plasterboard Stud Wall	91.1	5.00
INT-PB	Internal Plasterboard Stud Wall	33.3	0.00
INT-PB	Internal Plasterboard Stud Wall	14.2	2.50

Floor *type*

Location	Construction	Area (m^2)	Sub-floor ventilation	Added insulation (R-value)	Covering
BATHROOM	TIMB-001: Suspended Timber Floor	4.1	N/A	2.00	Timber
BEDROOM 1	TIMB-001: Suspended Timber Floor	11.5	N/A	2.00	Timber
BEDROOM 1	TIMB-002: Suspended Timber Floor - Lined Below	0.4	N/A	2.00	Timber
BEDROOM 2	TIMB-001: Suspended Timber Floor	12.2	N/A	2.00	Timber
ENSUITE	TIMB-001: Suspended Timber Floor	4.0	N/A	2.00	Timber
ENTRY	CSOG-100: Concrete Slab on Ground (100mm)	3.4	N/A	2.00	Timber
GARAGE	CSOG-100: Concrete Slab on Ground (100mm)	24.4	N/A	2.00	Timber
KIT/LIV/DIN	CSOG-100: Concrete Slab on Ground (100mm)	36.3	N/A	2.00	Timber
STAIRS	TIMB-001: Suspended Timber Floor	9.8	N/A	2.00	Timber
STAIRS	TIMB-002: Suspended Timber Floor - Lined Below	0.5	N/A	2.00	Timber
STAIRS	CSOG-100: Concrete Slab on Ground (100mm)	3.5	N/A	2.00	Timber

Ceiling *type*

Location	Construction	Bulk insulation (R-value)	Reflective wrap*
BATHROOM	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	Yes
BEDROOM 1	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	Yes
BEDROOM 2	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	Yes
ENSUITE	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	Yes
GARAGE	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	Yes
KIT/LIV/DIN	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	Yes
STAIRS	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	Yes

Ceiling *penetrations**

Location	Quantity	Type	Diameter (mm)	Sealed /unsealed
BATHROOM	1	Exhaust Fan	350	Sealed
ENSUITE	1	Exhaust Fan	350	Sealed

Ceiling *fans*

Location	Quantity	Diameter (mm)
BEDROOM 1	1	1200
BEDROOM 2	1	1200
KIT/LIV/DIN	1	1200

Roof *type*

Construction	Added insulation (R-value)	Solar absorptance	Roof Colour
FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	0.00	0.50	Medium

Explanatory Notes

About this report

A NatHERS rating is a comprehensive, dynamic computer modelling evaluation of a home, using the floorplans, elevations and specifications to estimate an energy load. It addresses the building layout, orientation and fabric (i.e. walls, windows, floors, roofs and ceilings), but does not cover the water or energy use of appliances or energy production of solar panels.

Ratings are based on a unique climate zone where the home is located and are generated using standard assumptions, including occupancy patterns and thermostat settings. The actual energy consumption of a home may vary significantly from the predicted energy load, as the assumptions used in the rating will not match actual usage patterns. For example, the number of occupants and personal heating or cooling preferences will vary.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparing different dwelling designs and to demonstrate that the design meets the energy efficiency requirements in the National Construction Code. Homes that are energy efficient use less energy, are warmer on cool days, cooler on hot days and cost less to run. The higher the star rating the more thermally efficient the dwelling is.

Accredited assessors

To ensure the NatHERS Certificate is of a high quality, always use an accredited or licenced assessor. NatHERS accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

Australian Capital Territory (ACT) licensed assessors may only produce assessments for regulatory purposes using software for which they have a licence endorsement. Licence endorsements can be confirmed on the ACT licensing register

AAOs have specific quality assurance processes in place, and continuing professional development requirements, to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any ongoing training requirements.

Any questions or concerns about this report should be directed to the assessor in the first instance. If the assessor is unable to address these questions or concerns, the AAO specified on the front of this certificate should be contacted.

Disclaimer

The format of the NatHERS Certificate was developed by the NatHERS Administrator. However the content of each individual certificate is entered and created by the assessor to create a NatHERS Certificate. It is the responsibility of the assessor who prepared this certificate to use NatHERS accredited software correctly and follow the NatHERS Technical Notes to produce a NatHERS Certificate.

The predicted annual energy load in this NatHERS Certificate is an estimate based on an assessment of the building by the assessor. It is not a prediction of actual energy use, but may be used to compare how other buildings are likely to perform when used in a similar way.

Information presented in this report relies on a range of standard assumptions (both embedded in NatHERS accredited software and made by the assessor who prepared this report), including assumptions about occupancy, indoor air temperature and local climate.

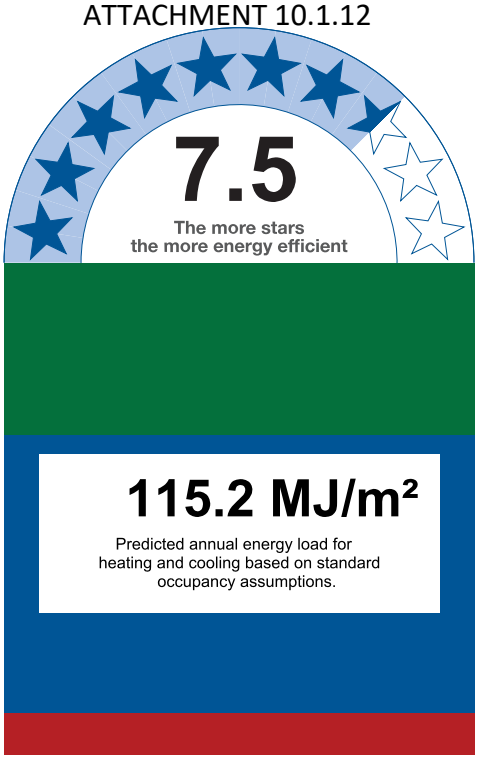
Not all assumptions that may have been made by the assessor while using the NatHERS accredited software tool are presented in this report and further details or data files may be available from the assessor.

Glossary

Annual energy load	the predicted amount of energy required for heating and cooling, based on standard occupancy assumptions.
Assessed floor area	the floor area modelled in the software for the purpose of the NatHERS assessment. Note, this may not be consistent with the floor area in the design documents.
Ceiling penetrations	features that require a penetration to the ceiling, including downlights, vents, exhaust fans, rangehoods, chimneys and flues. Excludes fixtures attached to the ceiling with small holes through the ceiling for wiring, e.g. ceiling fans; pendant lights, and heating and cooling ducts.
Conditioned	a zone within a dwelling that is expected to require heating and cooling based on standard occupancy assumptions. In some circumstances it will include garages.
Custom windows	windows listed in NatHERS software that are available on the market in Australia and have a WERS (Window Energy Rating Scheme) rating.
Default windows	windows that are representative of a specific type of window product and whose properties have been derived by statistical methods.
Entrance door	these signify ventilation benefits in the modelling software and must not be modelled as a door when opening to a minimally ventilated corridor in a Class 2 building.
Exposure category - exposed	terrain with no obstructions e.g. flat grazing land, ocean-frontage, desert, exposed high-rise unit (usually above 10 floors).
Exposure category - open	terrain with few obstructions at a similar height e.g. grasslands with few well scattered obstructions below 10m, farmland with scattered sheds, lightly vegetated bush blocks, elevated units (e.g. above 3 floors).
Exposure category - suburban	terrain with numerous, closely spaced obstructions below 10m e.g. suburban housing, heavily vegetated bushland areas.
Exposure category - protected	terrain with numerous, closely spaced obstructions over 10 m e.g. city and industrial areas.
Horizontal shading feature	provides shading to the building in the horizontal plane, e.g. eaves, verandahs, pergolas, carports, or overhangs or balconies from upper levels.
National Construction Code (NCC) Class	the NCC groups buildings by their function and use, and assigns a classification code. NatHERS software models NCC Class 1, 2 or 4 buildings and attached Class 10a buildings. Definitions can be found at www.abcb.gov.au.
Opening percentage	the openability percentage or operable (moveable) area of doors or windows that is used in ventilation calculations.
Provisional value	an assumed value that does not represent an actual value. For example, if the wall colour is unspecified in the documentation, a provisional value of 'medium' must be modelled. Acceptable provisional values are outlined in the NatHERS Technical Note and can be found at www.nathers.gov.au
Reflective wrap (also known as foil)	can be applied to walls, roofs and ceilings. When combined with an appropriate airgap and emissivity value, it provides insulative properties.
Roof window	for NatHERS this is typically an operable window (i.e. can be opened), will have a plaster or similar light well if there is an attic space, and generally does not have a diffuser.
Shading device	a device fixed to windows that provides shading e.g. window awnings or screens but excludes eaves.
Shading features	includes neighbouring buildings, fences, and wing walls, but excludes eaves.
Solar heat gain coefficient (SHGC)	the fraction of incident solar radiation admitted through a window, both directly transmitted as well as absorbed and subsequently released inward. SHGC is expressed as a number between 0 and 1. The lower a window's SHGC, the less solar heat it transmits.
Skylight (also known as roof lights)	for NatHERS this is typically a moulded unit with flexible reflective tubing (light well) and a diffuser at ceiling level.
U-value	the rate of heat transfer through a window. The lower the U-value, the better the insulating ability.
Unconditioned	a zone within a dwelling that is assumed to not require heating and cooling based on standard occupancy assumptions
Vertical shading features	provides shading to the building in the vertical plane and can be parallel or perpendicular to the subject wall/window. Includes privacy screens, other walls in the building (wing walls), fences, other buildings, vegetation (protected or listed heritage trees).

Nationwide House Energy Rating Scheme NatHERS Certificate No.

Generated on 29 July 2022 using Hero 3.0



Property

Address	03, 17 Smith Street, DAYLESFORD, VIC, 3460
Lot/DP	
NCC Class*	1a
Type	New

Plans

Main Plan	ESD 220627
Prepared by	Breathe Architecture

Construction and environment

Assessed floor area (m²)*		**Exposure Type**
Conditioned*	117.3	Suburban
Unconditioned*	5.0	**NatHERS climate zone**
Total	122.3	66 - Ballarat Aerodrome
Garage	0.0	

Accredited assessor

Name	Alex Slater
Business name	Shared Space Architecture
Email	alex@sharedspacearchitecture.com.au
Phone	+61 406376341
Accreditation No.	DMN/21/2003
Assessor Accrediting Organisation	DMN
Declaration of interest	No Conflict of Interest

Thermal Performance

Heating	Cooling
94.8	**20.4**
MJ/m²	MJ/m²

About the rating

NatHERS software models the expected thermal energy loads using information about the design and construction, climate and common patterns of household use. The software does not take into account appliances, apart from the airflow impacts from ceiling fans.

Verification

DRAFT PREVIEW ISSUE - NOT TO BE USED FOR CERTIFICATION

National Construction Code (NCC) requirements

The NCC's requirements for NatHERS-rated houses are detailed in 3.12.0(a)(i) and 3.12.5 of the NCC Volume Two. For apartments the requirements are detailed in J0.2 and J5 to J8 of the NCC Volume One.

In NCC 2019, these requirements include minimum star ratings and separate heating and cooling load limits that need to be met by buildings and apartments through the NatHERS assessment. Requirements additional to the NatHERS assessment that must also be satisfied include, but are not limited to: insulation installation methods, thermal breaks, building sealing, water heating and pumping, and artificial lighting requirements. The NCC and NatHERS Heating and Cooling Load Limits (Australian Building Codes Board Standard) are available at www.abcb.gov.au.

State and territory variations and additions to the NCC may also apply.

Certificate Check

Ensure the dwelling is designed and then built as per the NatHERS Certificate. While you need to check the accuracy of the whole Certificate, the following spot check covers some important items impacting the dwelling's rating.

Genuine certificate

Does this Certificate match the one available at the web address or QR code in the verification box on the front page? Does the set of NatHERS-stamped plans for the dwelling have a Certificate number on the stamp that matches this Certificate?

Ceiling penetrations*

Does the 'number' and 'type' of ceiling penetrations (e.g. downlights, exhaust fans, etc) shown on the stamped plans or installed, match what is shown in this Certificate?

Windows

Does the installed window meet the substitution tolerances (SHGC and U-value) and window type, of the window shown on this Certificate?

Apartment entrance doors

Does the 'External Door Schedule' show apartment entrance doors? Please note that an "external door" between the modelled dwelling and a shared space, such as an enclosed corridor or foyer, should not be included in the assessment (because it overstates the possible ventilation) and would invalidate the Certificate.

Exposure*

Has the appropriate exposure level (terrain) been applied? For example, it is unlikely that a ground-floor apartment is "exposed" or a top floor high-rise apartment is "protected".

Provisional* values

Have provisional values been used in the assessment and, if so, noted in "additional notes" below?

Window and glazed door *type and performance*

Default* windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
None					

Custom* windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
CAP-116-21 B	Capral Futureline 54W Awning Window DG 5LBrdg-12Ar-5	2.73	0.37	0.35	0.39
REY-029-06 A	Slim Patio 68 Sliding Door Embed Frm DG 6Clr-12Ar-6LightBridge	1.84	0.51	0.48	0.54

Window and glazed door *schedule*

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orient-ation	Shading device*
BATHROOM	CAP-116-21 B	W07	1800	800	Awning	90	S	None
BED 01	CAP-116-21 B	W12	1800	900	Awning	90	W	None

Window and glazed door *schedule*

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orient-ation	Shading device*
BED 01	REY-029-06 A	W06	2400	2975	Sliding	45	N	None
BED 02	CAP-116-21 B	W11	1800	900	Awning	90	W	None
BED 03	CAP-116-21 B	W09	1800	805	Awning	90	S	None
BED 03	CAP-116-21 B	W10	1800	900	Awning	90	W	None
ENSUITE	CAP-116-21 B	W08	1800	870	Awning	90	N	None
KIT/LIV/DIN	CAP-116-21 B	W03	1800	870	Awning	90	W	None
KIT/LIV/DIN	CAP-116-21 B	W04	2400	4290	Fixed	0	W	None
KIT/LIV/DIN	CAP-116-21 B	W05	1800	908	Awning	90	W	None
KIT/LIV/DIN	REY-029-06 A	W01	2400	3195	Sliding	45	N	None
KIT/LIV/DIN	REY-029-06 A	W02	2400	3170	Sliding	45	S	None

Roof window *type and performance value*

Default* roof windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
None					

Custom* roof windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
None					

Roof window *schedule*

Location	Window ID	Window no.	Opening %	Height (mm)	Width (mm)	Orient-ation	Outdoor shade	Indoor shade
None								

Skylight *type and performance*

Skylight ID	Skylight description
None	

Skylight *schedule*

Location	Skylight ID	Skylight No.	Skylight shaft length (mm)	Area (m^2)	Orient-ation	Outdoor shade	Diffuser	Shaft Reflectance
None								

External door *schedule*

Location	Height (mm)	Width (mm)	Opening %	Orientation
FRONT ENTRY	2040	985	90	S
REAR ENTRY	2040	920	90	N

External wall *type*

Wall ID	Wall Type	Solar absorptance	Wall Colour	Bulk insulation (R-value)	Reflective wall wrap*
BV-NONREFL-CAV	Brick Veneer Stud Wall with Non-Reflective Sarking	0.50	Medium	2.50	No
MC-NONREFL-CAV	Metal Clad Battened (Non-Refl Cavity) Stud Wall	0.50	Medium	2.50	No

External wall *schedule*

Location	Wall ID	Height (mm)	Width (mm)	Orient-ation	Horizontal shading feature* projection (mm)	Vertical shading feature
BATHROOM	BV-NONREFL-CAV	2800	2113	S		No
BED 01	MC-NONREFL-CAV	2800	3018	W		No
BED 01	MC-NONREFL-CAV	2800	3585	N	1522	Yes
BED 02	MC-NONREFL-CAV	2800	3001	W		No
BED 03	BV-NONREFL-CAV	2800	3585	S		Yes
BED 03	MC-NONREFL-CAV	2800	3002	W		No
ENSUITE	MC-NONREFL-CAV	2800	2131	N	1522	No
FRONT ENTRY	BV-NONREFL-CAV	2800	1793	S		No
FRONT ENTRY	BV-NONREFL-CAV	2800	103	W		No
KIT/LIV/DIN	BV-NONREFL-CAV	2800	3002	W		No
KIT/LIV/DIN	BV-NONREFL-CAV	2800	754	N		Yes
KIT/LIV/DIN	BV-NONREFL-CAV	2800	5057	W	750	Yes
KIT/LIV/DIN	BV-NONREFL-CAV	2800	754	S		Yes
KIT/LIV/DIN	BV-NONREFL-CAV	2800	3314	W		Yes

External wall *schedule*

Location	Wall ID	Height (mm)	Width (mm)	Orient-ation	Horizontal shading feature* projection (mm)	Vertical shading feature
KIT/LIV/DIN	BV-NONREFL-CAV	2800	3951	N	1442	Yes
KIT/LIV/DIN	BV-NONREFL-CAV	2800	3951	S		Yes
REAR ENTRY	BV-NONREFL-CAV	2800	1749	N		Yes
WIR	MC-NONREFL-CAV	2800	2000	W		No

Internal wall *type*

Wall ID	Wall Type	Area (m^2)	Bulk insulation
INT-PARTY	Internal PARTY Plasterboard Stud Wall	62.1	5.00
INT-PB	Internal Plasterboard Stud Wall	39.7	2.50
INT-PB	Internal Plasterboard Stud Wall	64.0	0.00

Floor *type*

Location	Construction	Area (m^2)	Sub-floor ventilation	Added insulation (R-value)	Covering
BATHROOM	TIMB-001: Suspended Timber Floor	0.8	N/A	2.00	Timber
BATHROOM	CSOG-100: Concrete Slab on Ground (100mm)	4.2	N/A	2.00	Timber
BED 01	TIMB-001: Suspended Timber Floor	13.2	N/A	2.00	Timber
BED 02	TIMB-001: Suspended Timber Floor	8.5	N/A	2.00	Timber
BED 02	TIMB-002: Suspended Timber Floor - Lined Below	2.3	N/A	3.50	Timber
BED 03	TIMB-001: Suspended Timber Floor	10.8	N/A	2.00	Timber
ENSUITE	TIMB-001: Suspended Timber Floor	4.9	N/A	2.00	Timber
ENSUITE	CSOG-100: Concrete Slab on Ground (100mm)	0.3	N/A	2.00	Timber
FRONT ENTRY	CSOG-100: Concrete Slab on Ground (100mm)	5.8	N/A	2.00	Timber
KIT/LIV/DIN	CSOG-100: Concrete Slab on Ground (100mm)	46.1	N/A	2.00	Timber
LAUNDRY	TIMB-001: Suspended Timber Floor	2.6	N/A	2.00	Timber
LAUNDRY	CSOG-100: Concrete Slab on Ground (100mm)	0.2	N/A	2.00	Timber
REAR ENTRY	CSOG-100: Concrete Slab on Ground (100mm)	7.3	N/A	2.00	Timber
STAIR	TIMB-001: Suspended Timber Floor	9.2	N/A	2.00	Timber

Floor *type*

Location	Construction	Area (m^2)	Sub-floor ventilation	Added insulation (R-value)	Covering
STAIR	CSOG-100: Concrete Slab on Ground (100mm)	0.8	N/A	2.00	Timber
WC	CSOG-100: Concrete Slab on Ground (100mm)	1.8	N/A	2.00	Timber
WIR	TIMB-001: Suspended Timber Floor	3.4	N/A	2.00	Timber
WIR	TIMB-002: Suspended Timber Floor - Lined Below	1.4	N/A	3.50	Timber

Ceiling *type*

Location	Construction	Bulk insulation (R-value)	Reflective wrap*
BATHROOM	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	Yes
BED 01	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	Yes
BED 02	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	Yes
BED 03	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	Yes
ENSUITE	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	Yes
FRONT ENTRY	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	Yes
KIT/LIV/DIN	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	Yes
LAUNDRY	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	Yes
REAR ENTRY	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	Yes
STAIR	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	Yes
WC	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	Yes
WIR	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	Yes

Ceiling *penetrations**

Location	Quantity	Type	Diameter (mm)	Sealed /unsealed
None				

Ceiling *fans*

Location	Quantity	Diameter (mm)
BED 01	1	1200
BED 02	1	1200
BED 03	1	1200

KIT/LIV/DIN	1	1200

Roof *type*

Construction	Added insulation (R-value)	Solar absorptance	Roof Colour
FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	0.00	0.50	Medium

Explanatory Notes

About this report

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U-value	the rate of heat transfer through a window. The lower the U-value, the better the insulating ability.
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Nationwide House Energy Rating Scheme NatHERS Certificate No.

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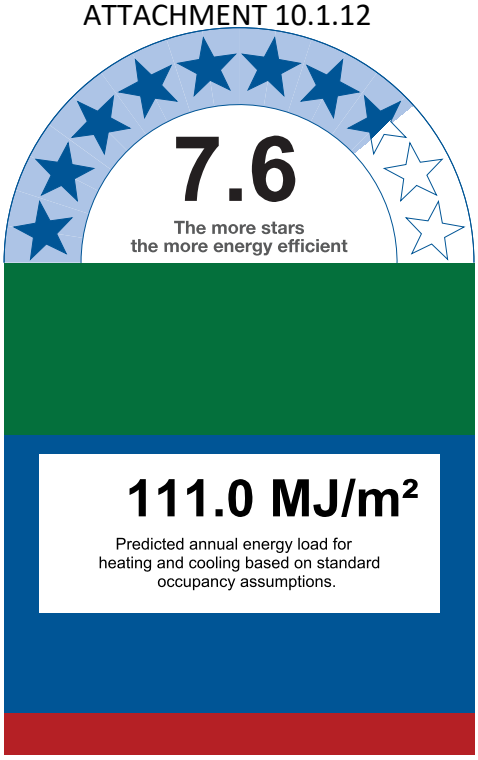

Property

Address	01, 17 Smith Street, DAYLESFORD, VIC, 3460
Lot/DP	
NCC Class*	1a
Type	New

Plans

Main Plan	ESD 220627
Prepared by	Breathe Architecture

Construction and environment

Assessed floor area (m²)*		**Exposure Type**
Conditioned*	112.4	Suburban
Unconditioned*	7.2	**NatHERS climate zone**
Total	143.2	66 - Ballarat Aerodrome
Garage	23.5	

Accredited assessor

Name	Alex Slater
Business name	Shared Space Architecture
Email	alex@sharedspacearchitecture.com.au
Phone	+61 406376341
Accreditation No.	DMN/21/2003
Assessor Accrediting Organisation	DMN
Declaration of interest	No Conflict of Interest

Thermal Performance

Heating	Cooling
99.7	**11.3**
MJ/m²	MJ/m²

About the rating

NatHERS software models the expected thermal energy loads using information about the design and construction, climate and common patterns of household use. The software does not take into account appliances, apart from the airflow impacts from ceiling fans.

Verification

DRAFT PREVIEW ISSUE - NOT TO BE USED FOR CERTIFICATION

National Construction Code (NCC) requirements

The NCC's requirements for NatHERS-rated houses are detailed in 3.12.0(a)(i) and 3.12.5 of the NCC Volume Two. For apartments the requirements are detailed in J0.2 and J5 to J8 of the NCC Volume One.

In NCC 2019, these requirements include minimum star ratings and separate heating and cooling load limits that need to be met by buildings and apartments through the NatHERS assessment. Requirements additional to the NatHERS assessment that must also be satisfied include, but are not limited to: insulation installation methods, thermal breaks, building sealing, water heating and pumping, and artificial lighting requirements. The NCC and NatHERS Heating and Cooling Load Limits (Australian Building Codes Board Standard) are available at www.abcb.gov.au.

State and territory variations and additions to the NCC may also apply.

Certificate Check

Ensure the dwelling is designed and then built as per the NatHERS Certificate. While you need to check the accuracy of the whole Certificate, the following spot check covers some important items impacting the dwelling's rating.

Genuine certificate

Does this Certificate match the one available at the web address or QR code in the verification box on the front page? Does the set of NatHERS-stamped plans for the dwelling have a Certificate number on the stamp that matches this Certificate?

Ceiling penetrations*

Does the 'number' and 'type' of ceiling penetrations (e.g. downlights, exhaust fans, etc) shown on the stamped plans or installed, match what is shown in this Certificate?

Windows

Does the installed window meet the substitution tolerances (SHGC and U-value) and window type, of the window shown on this Certificate?

Apartment entrance doors

Does the 'External Door Schedule' show apartment entrance doors? Please note that an "external door" between the modelled dwelling and a shared space, such as an enclosed corridor or foyer, should not be included in the assessment (because it overstates the possible ventilation) and would invalidate the Certificate.

Exposure*

Has the appropriate exposure level (terrain) been applied? For example, it is unlikely that a ground-floor apartment is "exposed" or a top floor high-rise apartment is "protected".

Provisional* values

Have provisional values been used in the assessment and, if so, noted in "additional notes" below?

Window and glazed door *type and performance*

Default* windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
None					

Custom* windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
CAP-116-21 B	Capral Futureline 54W Awning Window DG 5LBrdg-12Ar-5	2.73	0.37	0.35	0.39
REY-029-06 A	Slim Patio 68 Sliding Door Embed Frm DG 6Clr-12Ar-6LightBridge	1.84	0.51	0.48	0.54

Window and glazed door *schedule*

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orient-ation	Shading device*
BATHROOM	CAP-116-21 B	W12	1800	920	Awning	90	S	None
BED 1	CAP-116-21 B	W05	1800	999	Awning	90	N	None

Window and glazed door *schedule*

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orient-ation	Shading device*
BED 2	CAP-116-21 B	W06	1800	1000	Awning	90	N	None
BED 3	CAP-116-21 B	W07	1800	745	Awning	90	N	None
BED 3	CAP-116-21 B	W08	1800	995	Awning	90	E	None
ENSUITE	CAP-116-21 B	W09	1800	920	Awning	90	S	None
ENTRY	CAP-116-21 B	W13	2400	680	Fixed	0	N	None
HALL	CAP-116-21 B	W11	1800	999	Awning	90	S	None
KIT/LIV/DIN	REY-029-06 A	W04	2400	4960	Sliding	45	N	None
KIT/LIV/DIN	CAP-116-21 B	W01	1800	1000	Awning	90	E	None
KIT/LIV/DIN	CAP-116-21 B	W02	1800	1000	Awning	90	E	None
STAIR FIRST	CAP-116-21 B	W10	1800	920	Awning	90	S	None
STAIR GROUND	REY-029-06 A	W03	2400	2185	Sliding	45	S	None

Roof window *type and performance value*

Default* roof windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
None					

Custom* roof windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
None					

Roof window *schedule*

Location	Window ID	Window no.	Opening %	Height (mm)	Width (mm)	Orient-ation	Outdoor shade	Indoor shade
None								

Skylight *type and performance*

Skylight ID	Skylight description
None	

Skylight *schedule*

Location	Skylight ID	Skylight No.	Skylight shaft length (mm)	Area (m^2)	Orient-ation	Outdoor shade	Diffuser	Shaft Reflectance
None								

External door *schedule*

Location	Height (mm)	Width (mm)	Opening %	Orientation
ENTRY	2040	1020	90	N
GARAGE	2040	1000	90	E
GARAGE	2040	2370	90	S

External wall *type*

Wall ID	Wall Type	Solar absorptance	Wall Colour	Bulk insulation (R-value)	Reflective wall wrap*
BV-NONREFL-CAV	Brick Veneer Stud Wall with Non-Reflective Sarking	0.50	Medium	2.50	No
MC-NONREFL-CAV	Metal Clad Battened (Non-Refl Cavity) Stud Wall	0.50	Medium	2.50	No

External wall *schedule*

Location	Wall ID	Height (mm)	Width (mm)	Orient-ation	Horizontal shading feature* projection (mm)	Vertical shading feature
BATHROOM	MC-NONREFL-CAV	2800	2049	S		Yes
BED 1	MC-NONREFL-CAV	2800	1952	N		No
BED 1	MC-NONREFL-CAV	2800	690	E		Yes
BED 1	MC-NONREFL-CAV	2800	1171	N	708	Yes
BED 2	MC-NONREFL-CAV	2800	1218	N	708	Yes
BED 2	MC-NONREFL-CAV	2800	690	W		Yes
BED 2	MC-NONREFL-CAV	2800	1891	N		No
BED 2	MC-NONREFL-CAV	2800	690	E		Yes
BED 3	MC-NONREFL-CAV	2800	1067	N	656	Yes
BED 3	MC-NONREFL-CAV	2800	3459	E		Yes
ENSUITE	MC-NONREFL-CAV	2800	2023	E		Yes
ENSUITE	MC-NONREFL-CAV	2800	2896	S		Yes
ENTRY	BV-NONREFL-CAV	2800	2405	N	1197	No

External wall *schedule*

Location	Wall ID	Height (mm)	Width (mm)	Orient-ation	Horizontal shading feature* projection (mm)	Vertical shading feature
ENTRY	BV-NONREFL-CAV	2800	1690	E		Yes
ENTRY	BV-NONREFL-CAV	2800	1690	W		No
GARAGE	BV-NONREFL-CAV	2800	6356	E		No
GARAGE	BV-NONREFL-CAV	2800	3514	S		No
HALL	MC-NONREFL-CAV	2800	999	S		No
KIT/LIV/DIN	BV-NONREFL-CAV	2800	6959	N	1736	Yes
KIT/LIV/DIN	BV-NONREFL-CAV	2800	4583	E		No
STAIR FIRST	MC-NONREFL-CAV	2800	3109	S		Yes
STAIR GROUND	BV-NONREFL-CAV	2800	1190	E		No
STAIR GROUND	BV-NONREFL-CAV	2800	5962	S	893	No
WIR	MC-NONREFL-CAV	2800	1724	N		No
WIR	MC-NONREFL-CAV	2800	2000	E		Yes
WIR	MC-NONREFL-CAV	2800	690	W		Yes

Internal wall *type*

Wall ID	Wall Type	Area (m^2)	Bulk insulation
INT-PARTY	Internal PARTY Plasterboard Stud Wall	55.8	5.00
INT-PB	Internal Plasterboard Stud Wall	66.7	0.00
INT-PB	Internal Plasterboard Stud Wall	35.4	2.50

Floor *type*

Location	Construction	Area (m^2)	Sub-floor ventilation	Added insulation (R-value)	Covering
BATHROOM	TIMB-001: Suspended Timber Floor	6.8	N/A	2.00	Tile
BATHROOM	TIMB-002: Suspended Timber Floor - Lined Below	0.5	N/A	3.50	Tile
BED 1	TIMB-001: Suspended Timber Floor	7.0	N/A	2.00	Timber
BED 1	TIMB-002: Suspended Timber Floor - Lined Below	4.9	N/A	3.50	Timber
BED 2	TIMB-001: Suspended Timber Floor	7.0	N/A	2.00	Timber

Floor *type*

Location	Construction	Area (m^2)	Sub-floor ventilation	Added insulation (R-value)	Covering
BED 2	TIMB-002: Suspended Timber Floor - Lined Below	4.9	N/A	3.50	Timber
BED 3	TIMB-001: Suspended Timber Floor	11.0	N/A	2.00	Timber
BED 3	TIMB-002: Suspended Timber Floor - Lined Below	0.6	N/A	3.50	Timber
ENSUITE	TIMB-001: Suspended Timber Floor	5.5	N/A	2.00	Tile
ENSUITE	TIMB-002: Suspended Timber Floor - Lined Below	0.3	N/A	3.50	Tile
ENTRY	CSOG-100: Concrete Slab on Ground (100mm)	4.1	N/A	2.00	Timber
GARAGE	CSOG-100: Concrete Slab on Ground (100mm)	23.5	N/A	2.00	Exposed
HALL	TIMB-001: Suspended Timber Floor	3.3	N/A	2.00	Timber
HALL	TIMB-002: Suspended Timber Floor - Lined Below	0.2	N/A	3.50	Timber
KIT/LIV/DIN	CSOG-100: Concrete Slab on Ground (100mm)	45.6	N/A	2.00	Timber
LAUNDRY/STORAGE	TIMB-001: Suspended Timber Floor	6.9	N/A	2.00	Timber
STAIR FIRST	TIMB-001: Suspended Timber Floor	3.7	N/A	2.00	Timber
STAIR GROUND	CSOG-100: Concrete Slab on Ground (100mm)	7.3	N/A	2.00	Timber
WIR	TIMB-001: Suspended Timber Floor	3.2	N/A	2.00	Timber
WIR	TIMB-002: Suspended Timber Floor - Lined Below	0.2	N/A	3.50	Timber

Ceiling *type*

Location	Construction	Bulk insulation (R-value)	Reflective wrap*
BATHROOM	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	Yes
BED 1	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	Yes
BED 2	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	Yes
BED 3	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	Yes
ENSUITE	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	Yes
ENTRY	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	Yes
GARAGE	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	Yes
HALL	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	Yes
KIT/LIV/DIN	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	Yes

LAUNDRY/STORAGE	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	Yes
STAIR FIRST	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	Yes
STAIR GROUND	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	Yes
WIR	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	Yes

Ceiling *penetrations**

Location	Quantity	Type	Diameter (mm)	Sealed /unsealed
BATHROOM	1	Exhaust Fan	350	Sealed
KIT/LIV/DIN	1	Exhaust Fan	350	Sealed

Ceiling *fans*

Location	Quantity	Diameter (mm)
BED 1	1	1200
BED 2	1	1200
BED 3	1	1200
KIT/LIV/DIN	1	1200

Roof *type*

Construction	Added insulation (R-value)	Solar absorptance	Roof Colour
FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	0.00	0.50	Medium

Explanatory Notes

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Nationwide House Energy Rating Scheme NatHERS Certificate No.

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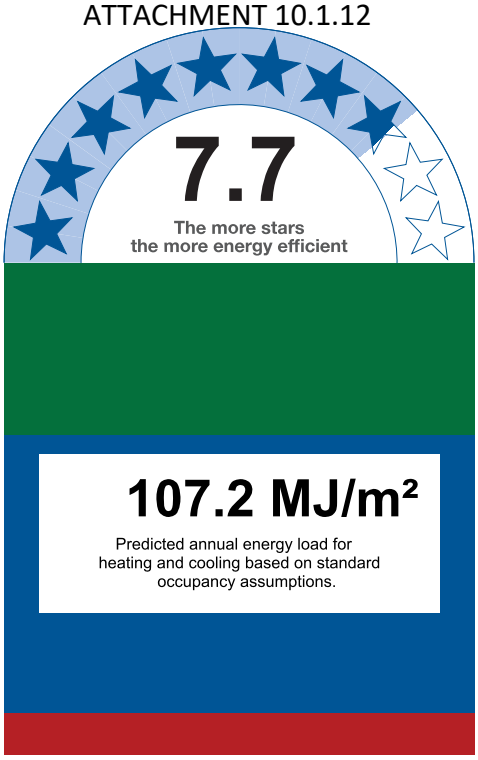

Property

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Prepared by	Breathe Architecture

Construction and environment

Assessed floor area (m²)*		**Exposure Type**
Conditioned*	124.8	Suburban
Unconditioned*	9.3	**NatHERS climate zone**
Total	158.8	66 - Ballarat Aerodrome
Garage	24.6	

Thermal Performance

Heating	Cooling
92.3	**14.9**
MJ/m²	MJ/m²

About the rating

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Accredited assessor

Name	Alex Slater
Business name	Shared Space Architecture
Email	alex@sharedspacearchitecture.com.au
Phone	+61 406376341
Accreditation No.	DMN/21/2003
Assessor Accrediting Organisation	DMN
Declaration of interest	No Conflict of Interest

Verification

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National Construction Code (NCC) requirements

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In NCC 2019, these requirements include minimum star ratings and separate heating and cooling load limits that need to be met by buildings and apartments through the NatHERS assessment. Requirements additional to the NatHERS assessment that must also be satisfied include, but are not limited to: insulation installation methods, thermal breaks, building sealing, water heating and pumping, and artificial lighting requirements. The NCC and NatHERS Heating and Cooling Load Limits (Australian Building Codes Board Standard) are available at www.abcb.gov.au.

State and territory variations and additions to the NCC may also apply.

Certificate Check

Ensure the dwelling is designed and then built as per the NatHERS Certificate. While you need to check the accuracy of the whole Certificate, the following spot check covers some important items impacting the dwelling's rating.

Genuine certificate

Does this Certificate match the one available at the web address or QR code in the verification box on the front page? Does the set of NatHERS-stamped plans for the dwelling have a Certificate number on the stamp that matches this Certificate?

Ceiling penetrations*

Does the 'number' and 'type' of ceiling penetrations (e.g. downlights, exhaust fans, etc) shown on the stamped plans or installed, match what is shown in this Certificate?

Windows

Does the installed window meet the substitution tolerances (SHGC and U-value) and window type, of the window shown on this Certificate?

Apartment entrance doors

Does the 'External Door Schedule' show apartment entrance doors? Please note that an "external door" between the modelled dwelling and a shared space, such as an enclosed corridor or foyer, should not be included in the assessment (because it overstates the possible ventilation) and would invalidate the Certificate.

Exposure*

Has the appropriate exposure level (terrain) been applied? For example, it is unlikely that a ground-floor apartment is "exposed" or a top floor high-rise apartment is "protected".

Provisional* values

Have provisional values been used in the assessment and, if so, noted in "additional notes" below?

Window and glazed door *type and performance*

Default* windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
None					

Custom* windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
CAP-116-21 B	Capral Futureline 54W Awning Window DG 5LBrdg-12Ar-5	2.73	0.37	0.35	0.39
REY-029-06 A	Slim Patio 68 Sliding Door Embed Frm DG 6Clr-12Ar-6LightBridge	1.84	0.51	0.48	0.54

Window and glazed door *schedule*

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orient-ation	Shading device*
AIRLOCK SOUTH	CAP-116-21 B	W04	1800	900	Awning	90	E	None
AIRLOCK SOUTH	CAP-116-21 B	W05	1800	970	Awning	90	S	None

Window and glazed door *schedule*

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orient-ation	Shading device*
BATHROOM	CAP-116-21 B	W03	1800	905	Awning	90	E	None
BED 01	REY-029-06 A	W12	1800	2560	Sliding	45	N	None
BED 02	REY-029-06 A	W01	2400	2545	Sliding	45	N	None
BED 03	REY-029-06 A	W02	2400	2590	Sliding	45	N	None
ENSUITE	CAP-116-21 B	W13	1800	950	Awning	90	N	None
KIT/LIV/DIN	CAP-116-21 B	W09	1800	915	Awning	90	E	None
KIT/LIV/DIN	CAP-116-21 B	W10	1800	895	Awning	90	E	None
KIT/LIV/DIN	CAP-116-21 B	W07	1800	835	Awning	90	S	None
KIT/LIV/DIN	REY-029-06 A	W08	2400	4355	Sliding	45	S	None
WC	CAP-116-21 B	W06	1800	910	Awning	90	E	None
WIR	CAP-116-21 B	W11	1800	880	Awning	90	E	None

Roof window *type and performance value*

Default* roof windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
None					

Custom* roof windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
None					

Roof window *schedule*

Location	Window ID	Window no.	Opening %	Height (mm)	Width (mm)	Orient-ation	Outdoor shade	Indoor shade
None								

Skylight *type and performance*

Skylight ID	Skylight description
None	

Skylight *schedule*

Location	Skylight ID	Skylight No.	Skylight shaft length (mm)	Area (m^2)	Orient-ation	Outdoor shade	Diffuser	Shaft Reflectance
None								

External door *schedule*

Location	Height (mm)	Width (mm)	Opening %	Orientation
AIRLOCK NORTH	2040	920	90	N
AIRLOCK SOUTH	2040	975	90	S
GARAGE	2040	2405	90	S

External wall *type*

Wall ID	Wall Type	Solar absorptance	Wall Colour	Bulk insulation (R-value)	Reflective wall wrap*
BV-NONREFL-CAV	Brick Veneer Stud Wall with Non-Reflective Sarking	0.50	Medium	2.50	No
MC-NONREFL-CAV	Metal Clad Battened (Non-Refl Cavity) Stud Wall	0.50	Medium	2.50	No

External wall *schedule*

Location	Wall ID	Height (mm)	Width (mm)	Orient-ation	Horizontal shading feature* projection (mm)	Vertical shading feature
AIRLOCK NORTH	BV-NONREFL-CAV	2800	1175	N	1113	Yes
AIRLOCK SOUTH	BV-NONREFL-CAV	2800	2113	E		No
AIRLOCK SOUTH	BV-NONREFL-CAV	2800	1508	S	1931	Yes
AIRLOCK SOUTH	BV-NONREFL-CAV	2800	1293	S	1931	Yes
BATHROOM	BV-NONREFL-CAV	2800	3951	E		No
BED 01	MC-NONREFL-CAV	2800	4093	N	1249	Yes
BED 02	BV-NONREFL-CAV	2800	2813	N	1126	Yes
BED 03	BV-NONREFL-CAV	2800	2801	N	1113	Yes
BED 03	BV-NONREFL-CAV	2800	3813	E		Yes
ENSUITE	MC-NONREFL-CAV	2800	2801	N	1249	Yes
ENSUITE	MC-NONREFL-CAV	2800	1812	E		No
GARAGE	BV-NONREFL-CAV	2800	4093	S	1931	Yes
KIT/LIV/DIN	MC-NONREFL-CAV	2800	7133	E		No

External wall *schedule*

Location	Wall ID	Height (mm)	Width (mm)	Orient-ation	Horizontal shading feature* projection (mm)	Vertical shading feature
KIT/LIV/DIN	MC-NONREFL-CAV	2800	7012	S	2067	No
LAUNDRY	BV-NONREFL-CAV	2800	1940	E		No
WC	MC-NONREFL-CAV	2800	1000	E		No
WIR	MC-NONREFL-CAV	2800	1883	E		No

Internal wall *type*

Wall ID	Wall Type	Area (m^2)	Bulk insulation
INT-PARTY	Internal PARTY Plasterboard Stud Wall	66.3	5.00
INT-PB	Internal Plasterboard Stud Wall	79.9	2.50
INT-PB	Internal Plasterboard Stud Wall	69.9	0.00

Floor *type*

Location	Construction	Area (m^2)	Sub-floor ventilation	Added insulation (R-value)	Covering
AIRLOCK NORTH	CSOG-100: Concrete Slab on Ground (100mm)	1.3	N/A	2.00	Timber
AIRLOCK SOUTH	CSOG-100: Concrete Slab on Ground (100mm)	5.2	N/A	2.00	Timber
BATHROOM	CSOG-100: Concrete Slab on Ground (100mm)	6.3	N/A	2.00	Timber
BED 01	TIMB-001: Suspended Timber Floor	15.1	N/A	2.00	Timber
BED 01	TIMB-002: Suspended Timber Floor - Lined Below	0.5	N/A	2.00	Timber
BED 02	CSOG-100: Concrete Slab on Ground (100mm)	10.7	N/A	2.00	Timber
BED 03	CSOG-100: Concrete Slab on Ground (100mm)	10.7	N/A	2.00	Timber
CORRIDOR	CSOG-100: Concrete Slab on Ground (100mm)	13.8	N/A	2.00	Timber
ENSUITE	TIMB-001: Suspended Timber Floor	5.1	N/A	2.00	Timber
GARAGE	CSOG-100: Concrete Slab on Ground (100mm)	24.6	N/A	2.00	Timber
KIT/LIV/DIN	TIMB-001: Suspended Timber Floor	43.6	N/A	2.00	Timber
KIT/LIV/DIN	TIMB-002: Suspended Timber Floor - Lined Below	2.1	N/A	2.00	Timber
LAUNDRY	CSOG-100: Concrete Slab on Ground (100mm)	3.1	N/A	2.00	Timber
PANTRY	TIMB-001: Suspended Timber Floor	2.7	N/A	2.00	Timber

Floor *type*

Location	Construction	Area (m^2)	Sub-floor ventilation	Added insulation (R-value)	Covering
STAIR	CSOG-100: Concrete Slab on Ground (100mm)	5.2	N/A	2.00	Timber
STAIRS	TIMB-001: Suspended Timber Floor	5.1	N/A	2.00	Timber
STAIRS	TIMB-002: Suspended Timber Floor - Lined Below	0.1	N/A	2.00	Timber
WC	TIMB-001: Suspended Timber Floor	2.7	N/A	2.00	Timber
WC	TIMB-002: Suspended Timber Floor - Lined Below	0.1	N/A	2.00	Timber
WIR	TIMB-001: Suspended Timber Floor	5.3	N/A	2.00	Timber

Ceiling *type*

Location	Construction	Bulk insulation (R-value)	Reflective wrap*
BATHROOM	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	Yes
BED 01	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	Yes
BED 03	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	Yes
CORRIDOR	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	Yes
ENSUITE	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	Yes
GARAGE	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	Yes
KIT/LIV/DIN	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	Yes
PANTRY	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	Yes
STAIR	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	Yes
STAIRS	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	Yes
WC	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	Yes
WIR	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	6.00	Yes

Ceiling *penetrations**

Location	Quantity	Type	Diameter (mm)	Sealed /unsealed
BATHROOM	1	Exhaust Fan	350	Sealed
ENSUITE	1	Exhaust Fan	350	Sealed
KIT/LIV/DIN	1	Exhaust Fan	350	Sealed

Ceiling *penetrations**

Location	Quantity	Type	Diameter (mm)	Sealed /unsealed
WC	1	Exhaust Fan	350	Sealed

Ceiling *fans*

Location	Quantity	Diameter (mm)
BED 01	1	1200
BED 02	1	1200
BED 03	1	1200
KIT/LIV/DIN	1	1200

Roof *type*

Construction	Added insulation (R-value)	Solar absorptance	Roof Colour
FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	0.00	0.50	Medium

Explanatory Notes

About this report

A NatHERS rating is a comprehensive, dynamic computer modelling evaluation of a home, using the floorplans, elevations and specifications to estimate an energy load. It addresses the building layout, orientation and fabric (i.e. walls, windows, floors, roofs and ceilings), but does not cover the water or energy use of appliances or energy production of solar panels.

Ratings are based on a unique climate zone where the home is located and are generated using standard assumptions, including occupancy patterns and thermostat settings. The actual energy consumption of a home may vary significantly from the predicted energy load, as the assumptions used in the rating will not match actual usage patterns. For example, the number of occupants and personal heating or cooling preferences will vary.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparing different dwelling designs and to demonstrate that the design meets the energy efficiency requirements in the National Construction Code. Homes that are energy efficient use less energy, are warmer on cool days, cooler on hot days and cost less to run. The higher the star rating the more thermally efficient the dwelling is.

Accredited assessors

To ensure the NatHERS Certificate is of a high quality, always use an accredited or licenced assessor. NatHERS accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

Australian Capital Territory (ACT) licensed assessors may only produce assessments for regulatory purposes using software for which they have a licence endorsement. Licence endorsements can be confirmed on the ACT licensing register

AAOs have specific quality assurance processes in place, and continuing professional development requirements, to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any ongoing training requirements.

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Disclaimer

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The predicted annual energy load in this NatHERS Certificate is an estimate based on an assessment of the building by the assessor. It is not a prediction of actual energy use, but may be used to compare how other buildings are likely to perform when used in a similar way.

Information presented in this report relies on a range of standard assumptions (both embedded in NatHERS accredited software and made by the assessor who prepared this report), including assumptions about occupancy, indoor air temperature and local climate.

Not all assumptions that may have been made by the assessor while using the NatHERS accredited software tool are presented in this report and further details or data files may be available from the assessor.

Glossary

Annual energy load	the predicted amount of energy required for heating and cooling, based on standard occupancy assumptions.
Assessed floor area	the floor area modelled in the software for the purpose of the NatHERS assessment. Note, this may not be consistent with the floor area in the design documents.
Ceiling penetrations	features that require a penetration to the ceiling, including downlights, vents, exhaust fans, rangehoods, chimneys and flues. Excludes fixtures attached to the ceiling with small holes through the ceiling for wiring, e.g. ceiling fans; pendant lights, and heating and cooling ducts.
Conditioned	a zone within a dwelling that is expected to require heating and cooling based on standard occupancy assumptions. In some circumstances it will include garages.
Custom windows	windows listed in NatHERS software that are available on the market in Australia and have a WERS (Window Energy Rating Scheme) rating.
Default windows	windows that are representative of a specific type of window product and whose properties have been derived by statistical methods.
Entrance door	these signify ventilation benefits in the modelling software and must not be modelled as a door when opening to a minimally ventilated corridor in a Class 2 building.
Exposure category - exposed	terrain with no obstructions e.g. flat grazing land, ocean-frontage, desert, exposed high-rise unit (usually above 10 floors).
Exposure category - open	terrain with few obstructions at a similar height e.g. grasslands with few well scattered obstructions below 10m, farmland with scattered sheds, lightly vegetated bush blocks, elevated units (e.g. above 3 floors).
Exposure category - suburban	terrain with numerous, closely spaced obstructions below 10m e.g. suburban housing, heavily vegetated bushland areas.
Exposure category - protected	terrain with numerous, closely spaced obstructions over 10 m e.g. city and industrial areas.
Horizontal shading feature	provides shading to the building in the horizontal plane, e.g. eaves, verandahs, pergolas, carports, or overhangs or balconies from upper levels.
National Construction Code (NCC) Class	the NCC groups buildings by their function and use, and assigns a classification code. NatHERS software models NCC Class 1, 2 or 4 buildings and attached Class 10a buildings. Definitions can be found at www.abcb.gov.au.
Opening percentage	the openability percentage or operable (moveable) area of doors or windows that is used in ventilation calculations.
Provisional value	an assumed value that does not represent an actual value. For example, if the wall colour is unspecified in the documentation, a provisional value of 'medium' must be modelled. Acceptable provisional values are outlined in the NatHERS Technical Note and can be found at www.nathers.gov.au
Reflective wrap (also known as foil)	can be applied to walls, roofs and ceilings. When combined with an appropriate airgap and emissivity value, it provides insulative properties.
Roof window	for NatHERS this is typically an operable window (i.e. can be opened), will have a plaster or similar light well if there is an attic space, and generally does not have a diffuser.
Shading device	a device fixed to windows that provides shading e.g. window awnings or screens but excludes eaves.
Shading features	includes neighbouring buildings, fences, and wing walls, but excludes eaves.
Solar heat gain coefficient (SHGC)	the fraction of incident solar radiation admitted through a window, both directly transmitted as well as absorbed and subsequently released inward. SHGC is expressed as a number between 0 and 1. The lower a window's SHGC, the less solar heat it transmits.
Skylight (also known as roof lights)	for NatHERS this is typically a moulded unit with flexible reflective tubing (light well) and a diffuser at ceiling level.
U-value	the rate of heat transfer through a window. The lower the U-value, the better the insulating ability.
Unconditioned	a zone within a dwelling that is assumed to not require heating and cooling based on standard occupancy assumptions
Vertical shading features	provides shading to the building in the vertical plane and can be parallel or perpendicular to the subject wall/window. Includes privacy screens, other walls in the building (wing walls), fences, other buildings, vegetation (protected or listed heritage trees).

Nationwide House Energy Rating Scheme — Class 1 Summary
NatHERS Certificate No.

Generated on 29 July 2022 using Hero 3.0

Property

Address 17 Smith Street, DAYLESFORD, VIC, 3460

Lot/DP

NatHERS climate zone 66 - Ballarat Aerodrome

Accredited assessor

Alex Slater
Shared Space Architecture
alex@sharedspacearchitecture.com.au
+61 406376341

Accreditation No. DMN/21/2003

Assessor Accrediting Organisation DMN

Verification

DRAFT PREVIEW ISSUE - NOT TO BE USED FOR CERTIFICATION

Summary of all dwellings

Certificate number and link	Unit Number	Heating load (MJ/m²)	Cooling load (MJ/m²)	Total load (MJ/m²)	Star rating
	Unit 01	98.7	6.4	105.1	7.7
	Unit 02	82.6	12.3	94.9	7.9
	Unit 03	77.5	5.1	82.6	8.2
	Unit 04	72.9	4.3	77.2	8.3

National Construction Code (NCC) requirements

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State and territory variations and additions to the NCC may also apply

Summary of all dwellings

Certificate number and link	Unit Number	Heating load (MJ/m²)	Cooling load (MJ/m²)	Total load (MJ/m²)	Star rating
	Unit 05	124.5	4.9	129.4	7.3
	Unit 06	111.6	8.0	119.5	7.4
	Unit 07	63.8	6.2	70.0	8.4
	Unit 08	96.3	11.9	108.2	7.7
	Unit 09	101.8	6.3	108.0	7.7
Maximum Loads and Minimum Rating		124.5	12.3	129.4	7.3
Average	9x (Total)	92.2	7.3	99.4	7.8

Explanatory Notes

About this report

This summary rating is the ratings of all NCC Class 1 dwellings in a development. The individual dwellings' ratings are a comprehensive, dynamic computer modelling evaluation of a home, using the floorplans, elevations and specifications to estimate the energy load. It addresses the building layout, orientation and fabric (i.e. walls, windows, floors, roofs and ceilings), but does not cover the water or energy use of appliances, or energy production of solar panels. For more details about an individual dwelling's assessment, refer to the individual dwelling's NatHERS Certificate (accessible via link).

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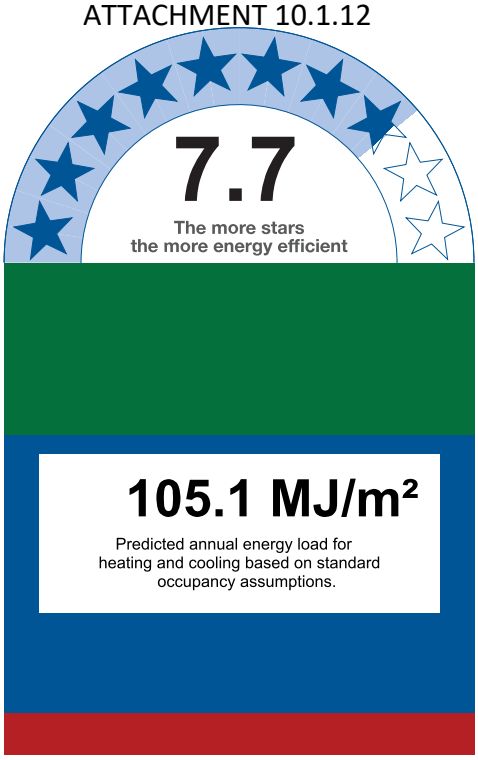
Nationwide House Energy Rating Scheme NatHERS Certificate No.

Generated on 29 July 2022 using Hero 3.0



Property

Address	Unit 01, 17 Smith Street, DAYLESFORD, VIC, 3460
Lot/DP	
NCC Class*	1a
Type	New

Plans

Main Plan	18/05/2022
Prepared by	Breathe Architecture

Construction and environment

Assessed floor area (m²)*		**Exposure Type**
Conditioned*	136.6	Suburban
Unconditioned*	2.8	**NatHERS climate zone**
Total	166.0	66 - Ballarat Aerodrome
Garage	26.6	

Thermal Performance

Heating	Cooling
98.7	**6.4**
MJ/m²	MJ/m²

Accredited assessor

Name	Alex Slater
Business name	Shared Space Architecture
Email	alex@sharedspacearchitecture.com.au
Phone	+61 406376341
Accreditation No.	DMN/21/2003
Assessor Accrediting Organisation	DMN
Declaration of interest	No Conflict of Interest

About the rating

NatHERS software models the expected thermal energy loads using information about the design and construction, climate and common patterns of household use. The software does not take into account appliances, apart from the airflow impacts from ceiling fans.

Verification

DRAFT PREVIEW ISSUE - NOT TO BE USED FOR CERTIFICATION

National Construction Code (NCC) requirements

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Ensure the dwelling is designed and then built as per the NatHERS Certificate. While you need to check the accuracy of the whole Certificate, the following spot check covers some important items impacting the dwelling's rating.

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Does the 'number' and 'type' of ceiling penetrations (e.g. downlights, exhaust fans, etc) shown on the stamped plans or installed, match what is shown in this Certificate?

Windows

Does the installed window meet the substitution tolerances (SHGC and U-value) and window type, of the window shown on this Certificate?

Apartment entrance doors

Does the 'External Door Schedule' show apartment entrance doors? Please note that an "external door" between the modelled dwelling and a shared space, such as an enclosed corridor or foyer, should not be included in the assessment (because it overstates the possible ventilation) and would invalidate the Certificate.

Exposure*

Has the appropriate exposure level (terrain) been applied? For example, it is unlikely that a ground-floor apartment is "exposed" or a top floor high-rise apartment is "protected".

Provisional* values

Have provisional values been used in the assessment and, if so, noted in "additional notes" below?

Window and glazed door *type and performance*

Default* windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
None					

Custom* windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
CAP-116-21 B	Capral Futureline 54W Awning Window DG 5LBrdg-12Ar-5	2.73	0.37	0.35	0.39
REY-029-06 A	Slim Patio 68 Sliding Door Embed Frm DG 6Clr-12Ar-6LightBridge	1.84	0.51	0.48	0.54

Window and glazed door *schedule*

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orient-ation	Shading device*
Bedroom 16	CAP-116-21 B	W07	900	2555	Awning	45	N	None
Bedroom 2	CAP-116-21 B	W01	900	1455	Awning	45	N	None

Window and glazed door *schedule*

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orient-ation	Shading device*
Bedroom 3	CAP-116-21 B	W02	900	1255	Awning	45	N	None
Day Time 3	CAP-116-21 B	W03	900	980	Awning	90	S	None
Kitchen/Living 24	CAP-116-21 B	W05	900	880	Awning	90	S	None
Kitchen/Living 24	REY-029-06 A	W04	900	4335	Sliding	30	S	None
Night Time 8	CAP-116-21 B	W06	900	1005	Awning	90	N	None

Roof window *type and performance value*

Default* roof windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
None					

Custom* roof windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
None					

Roof window *schedule*

Location	Window ID	Window no.	Opening %	Height (mm)	Width (mm)	Orient-ation	Outdoor shade	Indoor shade
None								

Skylight *type and performance*

Skylight ID	Skylight description
None	

Skylight *schedule*

Location	Skylight ID	Skylight No.	Skylight shaft length (mm)	Area (m^2)	Orient-ation	Outdoor shade	Diffuser	Shaft Reflectance
None								

External door *schedule*

Location	Height (mm)	Width (mm)	Opening %	Orientation
Garage 3	2040	2375	90	S

External wall *type*

Wall ID	Wall Type	Solar absorptance	Wall Colour	Bulk insulation (R-value)	Reflective wall wrap*
BV-NONREFL-CAV	Brick Veneer Stud Wall with Non-Reflective Sarking	0.50	Medium	2.50	No
BV-REFL-CAV	Brick Veneer Stud Wall with Reflective Sarking	0.50	Medium	2.50	Yes
MC-NONREFL-CAV	Metal Clad Battened (Non-Refl Cavity) Stud Wall	0.50	Medium	2.50	No

External wall *schedule*

Location	Wall ID	Height (mm)	Width (mm)	Orient-ation	Horizontal shading feature* projection (mm)	Vertical shading feature
Bedroom 16	MC-NONREFL-CAV	2400	4115	N	893	Yes
Bedroom 16	MC-NONREFL-CAV	2400	3800	W		No
Bedroom 2	BV-REFL-CAV	2400	2823	N		Yes
Bedroom 2	BV-REFL-CAV	2400	1290	E		Yes
Bedroom 2	BV-REFL-CAV	2400	3914	W		Yes
Bedroom 3	BV-REFL-CAV	2400	2810	N		Yes
Bedroom 3	BV-REFL-CAV	2400	624	E		Yes
Bedroom 3	BV-REFL-CAV	2400	1185	W		Yes
Day Time 1	BV-REFL-CAV	2400	1948	W		Yes
Day Time 17	BV-REFL-CAV	2400	4289	W		Yes
Day Time 3	BV-REFL-CAV	2400	2200	W		Yes
Day Time 3	BV-REFL-CAV	2400	1187	N		Yes
Day Time 3	BV-REFL-CAV	2400	2916	S		Yes
Day Time 42	MC-NONREFL-CAV	2400	1148	W		No
Day Time 43	MC-NONREFL-CAV	2400	2145	W		No
Garage 3	BV-REFL-CAV	2400	4173	S		Yes
Kitchen/Living 24	MC-NONREFL-CAV	2400	5008	W		No
Kitchen/Living 24	BV-NONREFL-CAV	2400	1716	S		Yes
Kitchen/Living 24	BV-NONREFL-CAV	2400	67	W		Yes
Kitchen/Living 24	BV-NONREFL-CAV	2400	5262	S		Yes

External wall *schedule*

Location	Wall ID	Height (mm)	Width (mm)	Orient-ation	Horizontal shading feature* projection (mm)	Vertical shading feature
Night Time 8	MC-NONREFL-CAV	2400	2780	N	893	Yes
Night Time 8	MC-NONREFL-CAV	2400	622	E		Yes

Internal wall *type*

Wall ID	Wall Type	Area (m^2)	Bulk insulation
INT-PARTY	Internal PARTY Plasterboard Stud Wall	56.2	5.00
INT-PB	Internal Plasterboard Stud Wall	58.7	2.50
INT-PB	Internal Plasterboard Stud Wall	55.5	0.00

Floor *type*

Location	Construction	Area (m^2)	Sub-floor ventilation	Added insulation (R-value)	Covering
Bedroom 16	TIMB-001: Suspended Timber Floor	13.7	N/A	2.00	Timber
Bedroom 16	CSOG-100: Concrete Slab on Ground (100mm)	1.9	N/A	2.00	Timber
Bedroom 2	CSOG-100: Concrete Slab on Ground (100mm)	11.0	N/A	2.00	Timber
Bedroom 3	CSOG-100: Concrete Slab on Ground (100mm)	10.7	N/A	2.00	Timber
Day Time 1	CSOG-100: Concrete Slab on Ground (100mm)	3.3	N/A	2.00	Timber
Day Time 17	CSOG-100: Concrete Slab on Ground (100mm)	7.2	N/A	2.00	Timber
Day Time 3	CSOG-100: Concrete Slab on Ground (100mm)	25.6	N/A	2.00	Timber
Day Time 42	TIMB-001: Suspended Timber Floor	2.4	N/A	2.00	Timber
Day Time 42	CSOG-100: Concrete Slab on Ground (100mm)	0.1	N/A	2.00	Timber
Day Time 43	TIMB-001: Suspended Timber Floor	4.4	N/A	2.00	Timber
Day Time 43	CSOG-100: Concrete Slab on Ground (100mm)	0.4	N/A	2.00	Timber
Garage 3	CSOG-100: Concrete Slab on Ground (100mm)	26.6	N/A	2.00	Timber
Kitchen/Living 24	TIMB-001: Suspended Timber Floor	46.6	N/A	2.00	Timber
Kitchen/Living 24	CSOG-100: Concrete Slab on Ground (100mm)	1.8	N/A	2.00	Timber
Night Time 7	TIMB-001: Suspended Timber Floor	5.3	N/A	2.00	Timber
Night Time 8	TIMB-001: Suspended Timber Floor	4.9	N/A	2.00	Timber

Floor *type*

Location	Construction	Area (m^2)	Sub-floor ventilation	Added insulation (R-value)	Covering
Night Time 8	CSOG-100: Concrete Slab on Ground (100mm)	0.2	N/A	2.00	Timber
Unconditioned 8	TIMB-001: Suspended Timber Floor	2.7	N/A	2.00	Timber
Unconditioned 8	CSOG-100: Concrete Slab on Ground (100mm)	0.2	N/A	2.00	Timber

Ceiling *type*

Location	Construction	Bulk insulation (R-value)	Reflective wrap*
Bedroom 16	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Bedroom 2	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Bedroom 3	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Day Time 1	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Day Time 17	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Day Time 3	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Day Time 42	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Day Time 43	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Garage 3	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Kitchen/Living 24	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Night Time 7	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Night Time 8	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Unconditioned 8	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes

Ceiling *penetrations**

Location	Quantity	Type	Diameter (mm)	Sealed /unsealed
Kitchen/Living 24	1	Exhaust Fan	250	Sealed

Ceiling *fans*

Location	Quantity	Diameter (mm)
None		

Roof *type*

Construction	Added insulation (R-value)	Solar absorptance	Roof Colour
ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	0.00	0.50	Medium

Explanatory Notes

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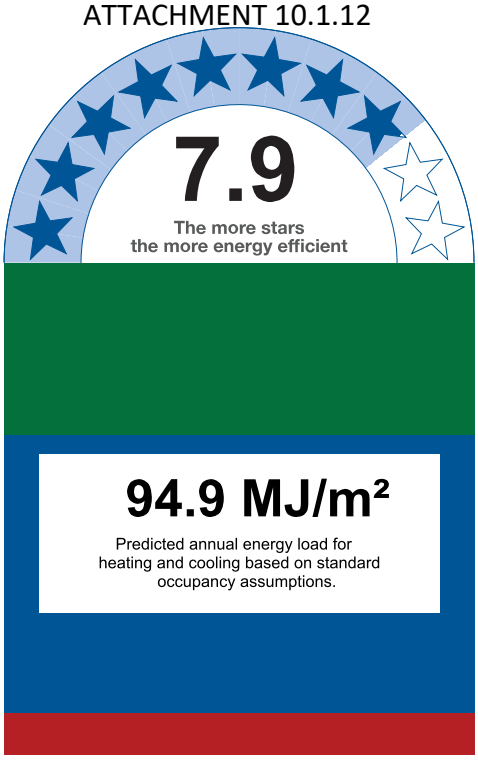
National Construction Code (NCC) Class	the NCC groups buildings by their function and use, and assigns a classification code. NatHERS software models NCC Class 1, 2 or 4 buildings and attached Class 10a buildings. Definitions can be found at www.abcb.gov.au.
Opening percentage	the openability percentage or operable (moveable) area of doors or windows that is used in ventilation calculations.
Provisional value	an assumed value that does not represent an actual value. For example, if the wall colour is unspecified in the documentation, a provisional value of 'medium' must be modelled. Acceptable provisional values are outlined in the NatHERS Technical Note and can be found at www.nathers.gov.au
Reflective wrap (also known as foil)	can be applied to walls, roofs and ceilings. When combined with an appropriate airgap and emissivity value, it provides insulative properties.
Roof window	for NatHERS this is typically an operable window (i.e. can be opened), will have a plaster or similar light well if there is an attic space, and generally does not have a diffuser.
Shading device	a device fixed to windows that provides shading e.g. window awnings or screens but excludes eaves.
Shading features	includes neighbouring buildings, fences, and wing walls, but excludes eaves.
Solar heat gain coefficient (SHGC)	the fraction of incident solar radiation admitted through a window, both directly transmitted as well as absorbed and subsequently released inward. SHGC is expressed as a number between 0 and 1. The lower a window's SHGC, the less solar heat it transmits.
Skylight (also known as roof lights)	for NatHERS this is typically a moulded unit with flexible reflective tubing (light well) and a diffuser at ceiling level.
U-value	the rate of heat transfer through a window. The lower the U-value, the better the insulating ability.
Unconditioned	a zone within a dwelling that is assumed to not require heating and cooling based on standard occupancy assumptions
Vertical shading features	provides shading to the building in the vertical plane and can be parallel or perpendicular to the subject wall/window. Includes privacy screens, other walls in the building (wing walls), fences, other buildings, vegetation (protected or listed heritage trees).

Nationwide House Energy Rating Scheme NatHERS Certificate No.

Generated on 29 July 2022 using Hero 3.0



Property

Address	Unit 02, 17 Smith Street, DAYLESFORD, VIC, 3460
Lot/DP	
NCC Class*	1a
Type	New

Plans

Main Plan	18/05/2022
Prepared by	Breathe Architecture

Construction and environment

Assessed floor area (m²)*		**Exposure Type**
Conditioned*	50.3	Suburban
Unconditioned*	2.3	**NatHERS climate zone**
Total	52.5	66 - Ballarat Aerodrome
Garage	0.0	

Thermal Performance

Heating	Cooling
82.6	**12.3**
MJ/m²	MJ/m²

About the rating

NatHERS software models the expected thermal energy loads using information about the design and construction, climate and common patterns of household use. The software does not take into account appliances, apart from the airflow impacts from ceiling fans.

Accredited assessor

Name	Alex Slater
Business name	Shared Space Architecture
Email	alex@sharedspacearchitecture.com.au
Phone	+61 406376341
Accreditation No.	DMN/21/2003
Assessor Accrediting Organisation	DMN
Declaration of interest	No Conflict of Interest

Verification

DRAFT PREVIEW ISSUE - NOT TO BE USED FOR CERTIFICATION

National Construction Code (NCC) requirements

The NCC's requirements for NatHERS-rated houses are detailed in 3.12.0(a)(i) and 3.12.5 of the NCC Volume Two. For apartments the requirements are detailed in J0.2 and J5 to J8 of the NCC Volume One.

In NCC 2019, these requirements include minimum star ratings and separate heating and cooling load limits that need to be met by buildings and apartments through the NatHERS assessment. Requirements additional to the NatHERS assessment that must also be satisfied include, but are not limited to: insulation installation methods, thermal breaks, building sealing, water heating and pumping, and artificial lighting requirements. The NCC and NatHERS Heating and Cooling Load Limits (Australian Building Codes Board Standard) are available at www.abcb.gov.au.

State and territory variations and additions to the NCC may also apply.

Certificate Check

Ensure the dwelling is designed and then built as per the NatHERS Certificate. While you need to check the accuracy of the whole Certificate, the following spot check covers some important items impacting the dwelling's rating.

Genuine certificate

Does this Certificate match the one available at the web address or QR code in the verification box on the front page? Does the set of NatHERS-stamped plans for the dwelling have a Certificate number on the stamp that matches this Certificate?

Ceiling penetrations*

Does the 'number' and 'type' of ceiling penetrations (e.g. downlights, exhaust fans, etc) shown on the stamped plans or installed, match what is shown in this Certificate?

Windows

Does the installed window meet the substitution tolerances (SHGC and U-value) and window type, of the window shown on this Certificate?

Apartment entrance doors

Does the 'External Door Schedule' show apartment entrance doors? Please note that an "external door" between the modelled dwelling and a shared space, such as an enclosed corridor or foyer, should not be included in the assessment (because it overstates the possible ventilation) and would invalidate the Certificate.

Exposure*

Has the appropriate exposure level (terrain) been applied? For example, it is unlikely that a ground-floor apartment is "exposed" or a top floor high-rise apartment is "protected".

Provisional* values

Have provisional values been used in the assessment and, if so, noted in "additional notes" below?

Window and glazed door *type and performance*

Default* windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
None					

Custom* windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
CAP-116-21 B	Capral Futureline 54W Awning Window DG 5LBrdg-12Ar-5	2.73	0.37	0.35	0.39
REY-029-06 A	Slim Patio 68 Sliding Door Embed Frm DG 6Clr-12Ar-6LightBridge	1.84	0.51	0.48	0.54

Window and glazed door *schedule*

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orient-ation	Shading device*
Bedroom 8	CAP-116-21 B	W05	900	1013	Awning	90	W	None
Day Time 27	CAP-116-21 B	W04	900	860	Awning	90	N	None

Window and glazed door *schedule*

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orient-ation	Shading device*
Day Time 27	CAP-116-21 B	W06	900	2930	Awning	30	S	None
Kitchen/Living 12	REY-029-06 A	W01	900	3335	Sliding	30	N	None
Kitchen/Living 12	REY-029-06 A	W02	900	2830	Sliding	30	S	None
Night Time 3	CAP-116-21 B	W03	900	900	Awning	90	N	None

Roof window *type and performance value*

Default* roof windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
None					

Custom* roof windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
None					

Roof window *schedule*

Location	Window ID	Window no.	Opening %	Height (mm)	Width (mm)	Orient-ation	Outdoor shade	Indoor shade
None								

Skylight *type and performance*

Skylight ID	Skylight description
None	

Skylight *schedule*

Location	Skylight ID	Skylight No.	Skylight shaft length (mm)	Area (m^2)	Orient-ation	Outdoor shade	Diffuser	Shaft Reflectance
None								

External door *schedule*

Location	Height (mm)	Width (mm)	Opening %	Orientation
None				

External wall *type*

Wall ID	Wall Type	Solar absorptance	Wall Colour	Bulk insulation (R-value)	Reflective wall wrap*
BV-REFL-CAV	Brick Veneer Stud Wall with Reflective Sarking	0.50	Medium	2.50	Yes
MC-NONREFL-CAV	Metal Clad Battened (Non-Refl Cavity) Stud Wall	0.50	Medium	2.50	No

External wall *schedule*

Location	Wall ID	Height (mm)	Width (mm)	Orient-ation	Horizontal shading feature* projection (mm)	Vertical shading feature
Bedroom 8	MC-NONREFL-CAV	2400	3615	W		No
Bedroom 8	MC-NONREFL-CAV	2400	870	N	1120	Yes
Day Time 27	MC-NONREFL-CAV	2400	1114	W		No
Day Time 27	MC-NONREFL-CAV	2400	1111	N	1120	Yes
Day Time 27	MC-NONREFL-CAV	2400	4690	S		Yes
Kitchen/Living 12	BV-REFL-CAV	2400	6598	W		Yes
Kitchen/Living 12	BV-REFL-CAV	2400	3565	N		Yes
Kitchen/Living 12	BV-REFL-CAV	2400	4713	S		Yes
Night Time 3	MC-NONREFL-CAV	2400	2498	N	1120	Yes
Night Time 3	MC-NONREFL-CAV	2400	1633	W		No
Unconditioned 4	BV-REFL-CAV	2400	1042	N		Yes
Unconditioned 4	BV-REFL-CAV	2400	159	W		Yes

Internal wall *type*

Wall ID	Wall Type	Area (m^2)	Bulk insulation
INT-PARTY	Internal PARTY Plasterboard Stud Wall	31.7	5.00
INT-PB	Internal Plasterboard Stud Wall	5.6	2.50
INT-PB	Internal Plasterboard Stud Wall	20.8	0.00

Floor *type*

Location	Construction	Area (m^2)	Sub-floor ventilation	Added insulation (R-value)	Covering
Bedroom 8	TIMB-001: Suspended Timber Floor	14.1	N/A	2.00	Timber

Floor *type*

Location	Construction	Area (m^2)	Sub-floor ventilation	Added insulation (R-value)	Covering
Day Time 27	TIMB-001: Suspended Timber Floor	10.4	N/A	2.00	Timber
Day Time 27	CSOG-100: Concrete Slab on Ground (100mm)	0.6	N/A	2.00	Timber
Kitchen/Living 12	CSOG-100: Concrete Slab on Ground (100mm)	28.7	N/A	2.00	Timber
Night Time 3	TIMB-001: Suspended Timber Floor	4.1	N/A	2.00	Timber
Unconditioned 4	CSOG-100: Concrete Slab on Ground (100mm)	2.3	N/A	2.00	Timber

Ceiling *type*

Location	Construction	Bulk insulation (R-value)	Reflective wrap*
Bedroom 8	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Day Time 27	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Kitchen/Living 12	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Night Time 3	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Unconditioned 4	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes

Ceiling *penetrations**

Location	Quantity	Type	Diameter (mm)	Sealed /unsealed
Kitchen/Living 12	1	Exhaust Fan	250	Sealed

Ceiling *fans*

Location	Quantity	Diameter (mm)
None		

Roof *type*

Construction	Added insulation (R-value)	Solar absorptance	Roof Colour
ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	0.00	0.50	Medium

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Provisional value	an assumed value that does not represent an actual value. For example, if the wall colour is unspecified in the documentation, a provisional value of 'medium' must be modelled. Acceptable provisional values are outlined in the NatHERS Technical Note and can be found at www.nathers.gov.au
Reflective wrap (also known as foil)	can be applied to walls, roofs and ceilings. When combined with an appropriate airgap and emissivity value, it provides insulative properties.
Roof window	for NatHERS this is typically an operable window (i.e. can be opened), will have a plaster or similar light well if there is an attic space, and generally does not have a diffuser.
Shading device	a device fixed to windows that provides shading e.g. window awnings or screens but excludes eaves.
Shading features	includes neighbouring buildings, fences, and wing walls, but excludes eaves.
Solar heat gain coefficient (SHGC)	the fraction of incident solar radiation admitted through a window, both directly transmitted as well as absorbed and subsequently released inward. SHGC is expressed as a number between 0 and 1. The lower a window's SHGC, the less solar heat it transmits.
Skylight (also known as roof lights)	for NatHERS this is typically a moulded unit with flexible reflective tubing (light well) and a diffuser at ceiling level.
U-value	the rate of heat transfer through a window. The lower the U-value, the better the insulating ability.
Unconditioned	a zone within a dwelling that is assumed to not require heating and cooling based on standard occupancy assumptions
Vertical shading features	provides shading to the building in the vertical plane and can be parallel or perpendicular to the subject wall/window. Includes privacy screens, other walls in the building (wing walls), fences, other buildings, vegetation (protected or listed heritage trees).

Nationwide House Energy Rating Scheme NatHERS Certificate No.

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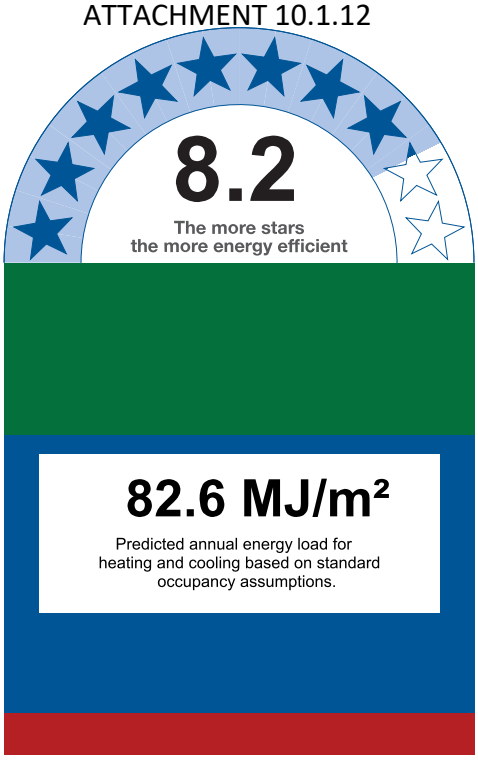

Property

Address	Unit 03, 17 Smith Street, DAYLESFORD, VIC, 3460
Lot/DP	
NCC Class*	1a
Type	New

Plans

Main Plan	18/05/2022
Prepared by	Breathe Architecture

Construction and environment

Assessed floor area (m²)*		**Exposure Type**
Conditioned*	113.5	Suburban
Unconditioned*	7.3	**NatHERS climate zone**
Total	142.7	66 - Ballarat Aerodrome
Garage	21.9	

Thermal Performance

Heating	Cooling
77.5	**5.1**
MJ/m²	MJ/m²

About the rating

NatHERS software models the expected thermal energy loads using information about the design and construction, climate and common patterns of household use. The software does not take into account appliances, apart from the airflow impacts from ceiling fans.

Accredited assessor

Name	Alex Slater
Business name	Shared Space Architecture
Email	alex@sharedspacearchitecture.com.au
Phone	+61 406376341
Accreditation No.	DMN/21/2003
Assessor Accrediting Organisation	DMN
Declaration of interest	No Conflict of Interest

Verification

DRAFT PREVIEW ISSUE - NOT TO BE USED FOR CERTIFICATION

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Ceiling penetrations*

Does the 'number' and 'type' of ceiling penetrations (e.g. downlights, exhaust fans, etc) shown on the stamped plans or installed, match what is shown in this Certificate?

Windows

Does the installed window meet the substitution tolerances (SHGC and U-value) and window type, of the window shown on this Certificate?

Apartment entrance doors

Does the 'External Door Schedule' show apartment entrance doors? Please note that an "external door" between the modelled dwelling and a shared space, such as an enclosed corridor or foyer, should not be included in the assessment (because it overstates the possible ventilation) and would invalidate the Certificate.

Exposure*

Has the appropriate exposure level (terrain) been applied? For example, it is unlikely that a ground-floor apartment is "exposed" or a top floor high-rise apartment is "protected".

Provisional* values

Have provisional values been used in the assessment and, if so, noted in "additional notes" below?

Window and glazed door *type and performance*

Default* windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
None					

Custom* windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
CAP-116-21 B	Capral Futureline 54W Awning Window DG 5LBrdg-12Ar-5	2.73	0.37	0.35	0.39
REY-029-06 A	Slim Patio 68 Sliding Door Embed Frm DG 6Clr-12Ar-6LightBridge	1.84	0.51	0.48	0.54

Window and glazed door *schedule*

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orient-ation	Shading device*
Bedroom 5	CAP-116-21 B	W05	900	945	Awning	90	N	None
Bedroom 6	CAP-116-21 B	W06	900	1000	Awning	90	N	None

Window and glazed door *schedule*

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orient-ation	Shading device*
Bedroom 7	CAP-116-21 B	W07	900	870	Awning	90	N	None
Day Time 10	REY-029-06 A	W12	900	2685	Sliding	45	S	None
Day Time 26	CAP-116-21 B	W09	900	1000	Awning	90	S	None
Day Time 26	CAP-116-21 B	W10	900	990	Awning	90	S	None
Kitchen/Living 10	CAP-116-21 B	W03	900	995	Awning	90	W	None
Kitchen/Living 10	CAP-116-21 B	W04	900	995	Awning	90	W	None
Kitchen/Living 10	REY-029-06 A	W01	900	3270	Sliding	30	N	None
Kitchen/Living 10	CAP-116-21 B	W02	900	1690	Fixed	0	N	None
Night Time 1	CAP-116-21 B	W11	900	1000	Awning	90	S	None
Unconditioned 2	CAP-116-21 B	W08	900	960	Awning	90	S	None

Roof window *type and performance value*

Default* roof windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
None					

Custom* roof windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
None					

Roof window *schedule*

Location	Window ID	Window no.	Opening %	Height (mm)	Width (mm)	Orient-ation	Outdoor shade	Indoor shade
None								

Skylight *type and performance*

Skylight ID	Skylight description
None	

Skylight *schedule*

Location	Skylight ID	Skylight No.	Skylight shaft length (mm)	Area (m^2)	Orient-ation	Outdoor shade	Diffuser	Shaft Reflectance
None								

External door *schedule*

Location	Height (mm)	Width (mm)	Opening %	Orientation
Garage 1	2040	3175	90	S

External wall *type*

Wall ID	Wall Type	Solar absorptance	Wall Colour	Bulk insulation (R-value)	Reflective wall wrap*
BV-REFL-CAV	Brick Veneer Stud Wall with Reflective Sarking	0.50	Medium	2.50	Yes
MC-NONREFL-CAV	Metal Clad Battened (Non-Refl Cavity) Stud Wall	0.50	Medium	2.50	No

External wall *schedule*

Location	Wall ID	Height (mm)	Width (mm)	Orient-ation	Horizontal shading feature* projection (mm)	Vertical shading feature
Bedroom 5	MC-NONREFL-CAV	2400	4088	W		Yes
Bedroom 5	MC-NONREFL-CAV	2400	1930	N		Yes
Bedroom 5	MC-NONREFL-CAV	2400	687	E		Yes
Bedroom 5	MC-NONREFL-CAV	2400	1195	N	673	Yes
Bedroom 6	MC-NONREFL-CAV	2400	1186	N	673	Yes
Bedroom 6	MC-NONREFL-CAV	2400	687	W		Yes
Bedroom 6	MC-NONREFL-CAV	2400	1928	N		Yes
Bedroom 6	MC-NONREFL-CAV	2400	687	E		Yes
Bedroom 7	MC-NONREFL-CAV	2400	1155	N	673	Yes
Bedroom 7	MC-NONREFL-CAV	2400	687	W		Yes
Bedroom 7	MC-NONREFL-CAV	2400	1715	N		Yes
Bedroom 7	MC-NONREFL-CAV	2400	1797	E		Yes
Day Time 10	BV-REFL-CAV	2400	6129	S		Yes
Day Time 10	BV-REFL-CAV	2400	1215	W		Yes
Day Time 11	BV-REFL-CAV	2400	2394	N		Yes

External wall *schedule*

Location	Wall ID	Height (mm)	Width (mm)	Orient-ation	Horizontal shading feature* projection (mm)	Vertical shading feature
Day Time 11	BV-REFL-CAV	2400	1707	E		Yes
Day Time 11	BV-REFL-CAV	2400	1707	W		Yes
Day Time 26	MC-NONREFL-CAV	2400	4085	S		Yes
Garage 1	BV-REFL-CAV	2400	3250	S		Yes
Garage 1	BV-REFL-CAV	2400	6493	W		Yes
Kitchen/Living 10	BV-REFL-CAV	2400	4515	W		Yes
Kitchen/Living 10	BV-REFL-CAV	2400	7175	N		Yes
Night Time 1	MC-NONREFL-CAV	2400	2870	S		Yes
Unconditioned 2	MC-NONREFL-CAV	2400	2035	S		Yes
Unconditioned 2	MC-NONREFL-CAV	2400	3574	W		Yes
Unconditioned 2	MC-NONREFL-CAV	2400	101	E		Yes

Internal wall *type*

Wall ID	Wall Type	Area (m^2)	Bulk insulation
INT-PARTY	Internal PARTY Plasterboard Stud Wall	42.9	5.00
INT-PB	Internal Plasterboard Stud Wall	51.4	0.00
INT-PB	Internal Plasterboard Stud Wall	28.1	2.50

Floor *type*

Location	Construction	Area (m^2)	Sub-floor ventilation	Added insulation (R-value)	Covering
Bedroom 5	TIMB-001: Suspended Timber Floor	10.6	N/A	2.00	Timber
Bedroom 5	CSOG-100: Concrete Slab on Ground (100mm)	1.4	N/A	2.00	Timber
Bedroom 6	TIMB-001: Suspended Timber Floor	7.0	N/A	2.00	Timber
Bedroom 6	CSOG-100: Concrete Slab on Ground (100mm)	5.0	N/A	2.00	Timber
Bedroom 7	TIMB-001: Suspended Timber Floor	11.0	N/A	2.00	Timber
Bedroom 7	CSOG-100: Concrete Slab on Ground (100mm)	4.5	N/A	2.00	Timber
Day Time 10	CSOG-100: Concrete Slab on Ground (100mm)	7.4	N/A	2.00	Timber

Floor *type*

Location	Construction	Area (m^2)	Sub-floor ventilation	Added insulation (R-value)	Covering
Day Time 11	CSOG-100: Concrete Slab on Ground (100mm)	4.1	N/A	2.00	Timber
Day Time 24	TIMB-001: Suspended Timber Floor	7.0	N/A	2.00	Timber
Day Time 26	TIMB-001: Suspended Timber Floor	6.6	N/A	2.00	Timber
Day Time 26	CSOG-100: Concrete Slab on Ground (100mm)	0.3	N/A	2.00	Timber
Garage 1	CSOG-100: Concrete Slab on Ground (100mm)	21.9	N/A	2.00	Timber
Kitchen/Living 10	CSOG-100: Concrete Slab on Ground (100mm)	46.5	N/A	2.00	Timber
Night Time 1	TIMB-001: Suspended Timber Floor	4.6	N/A	2.00	Timber
Night Time 1	CSOG-100: Concrete Slab on Ground (100mm)	0.5	N/A	2.00	Timber
Unconditioned 2	TIMB-001: Suspended Timber Floor	7.0	N/A	2.00	Timber
Unconditioned 2	CSOG-100: Concrete Slab on Ground (100mm)	0.3	N/A	2.00	Timber

Ceiling *type*

Location	Construction	Bulk insulation (R-value)	Reflective wrap*
Bedroom 5	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Bedroom 6	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Bedroom 7	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Day Time 10	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Day Time 11	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Day Time 24	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Day Time 26	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Garage 1	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Kitchen/Living 10	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Night Time 1	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Unconditioned 2	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes

Ceiling *penetrations**

Location	Quantity	Type	Diameter (mm)	Sealed /unsealed
Kitchen/Living 10	1	Exhaust Fan	250	Sealed

Ceiling *fans*

Location	Quantity	Diameter (mm)
None		

Roof *type*

Construction	Added insulation (R-value)	Solar absorptance	Roof Colour
ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	0.00	0.50	Medium

Explanatory Notes

About this report

A NatHERS rating is a comprehensive, dynamic computer modelling evaluation of a home, using the floorplans, elevations and specifications to estimate an energy load. It addresses the building layout, orientation and fabric (i.e. walls, windows, floors, roofs and ceilings), but does not cover the water or energy use of appliances or energy production of solar panels.

Ratings are based on a unique climate zone where the home is located and are generated using standard assumptions, including occupancy patterns and thermostat settings. The actual energy consumption of a home may vary significantly from the predicted energy load, as the assumptions used in the rating will not match actual usage patterns. For example, the number of occupants and personal heating or cooling preferences will vary.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparing different dwelling designs and to demonstrate that the design meets the energy efficiency requirements in the National Construction Code. Homes that are energy efficient use less energy, are warmer on cool days, cooler on hot days and cost less to run. The higher the star rating the more thermally efficient the dwelling is.

Accredited assessors

To ensure the NatHERS Certificate is of a high quality, always use an accredited or licenced assessor. NatHERS accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

Australian Capital Territory (ACT) licensed assessors may only produce assessments for regulatory purposes using software for which they have a licence endorsement. Licence endorsements can be confirmed on the ACT licensing register

AAOs have specific quality assurance processes in place, and continuing professional development requirements, to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any ongoing training requirements.

Any questions or concerns about this report should be directed to the assessor in the first instance. If the assessor is unable to address these questions or concerns, the AAO specified on the front of this certificate should be contacted.

Disclaimer

The format of the NatHERS Certificate was developed by the NatHERS Administrator. However the content of each individual certificate is entered and created by the assessor to create a NatHERS Certificate. It is the responsibility of the assessor who prepared this certificate to use NatHERS accredited software correctly and follow the NatHERS Technical Notes to produce a NatHERS Certificate.

The predicted annual energy load in this NatHERS Certificate is an estimate based on an assessment of the building by the assessor. It is not a prediction of actual energy use, but may be used to compare how other buildings are likely to perform when used in a similar way.

Information presented in this report relies on a range of standard assumptions (both embedded in NatHERS accredited software and made by the assessor who prepared this report), including assumptions about occupancy, indoor air temperature and local climate.

Not all assumptions that may have been made by the assessor while using the NatHERS accredited software tool are presented in this report and further details or data files may be available from the assessor.

Glossary

Annual energy load	the predicted amount of energy required for heating and cooling, based on standard occupancy assumptions.
Assessed floor area	the floor area modelled in the software for the purpose of the NatHERS assessment. Note, this may not be consistent with the floor area in the design documents.
Ceiling penetrations	features that require a penetration to the ceiling, including downlights, vents, exhaust fans, rangehoods, chimneys and flues. Excludes fixtures attached to the ceiling with small holes through the ceiling for wiring, e.g. ceiling fans; pendant lights, and heating and cooling ducts.
Conditioned	a zone within a dwelling that is expected to require heating and cooling based on standard occupancy assumptions. In some circumstances it will include garages.
Custom windows	windows listed in NatHERS software that are available on the market in Australia and have a WERS (Window Energy Rating Scheme) rating.
Default windows	windows that are representative of a specific type of window product and whose properties have been derived by statistical methods.
Entrance door	these signify ventilation benefits in the modelling software and must not be modelled as a door when opening to a minimally ventilated corridor in a Class 2 building.
Exposure category - exposed	terrain with no obstructions e.g. flat grazing land, ocean-frontage, desert, exposed high-rise unit (usually above 10 floors).
Exposure category - open	terrain with few obstructions at a similar height e.g. grasslands with few well scattered obstructions below 10m, farmland with scattered sheds, lightly vegetated bush blocks, elevated units (e.g. above 3 floors).
Exposure category - suburban	terrain with numerous, closely spaced obstructions below 10m e.g. suburban housing, heavily vegetated bushland areas.
Exposure category - protected	terrain with numerous, closely spaced obstructions over 10 m e.g. city and industrial areas.
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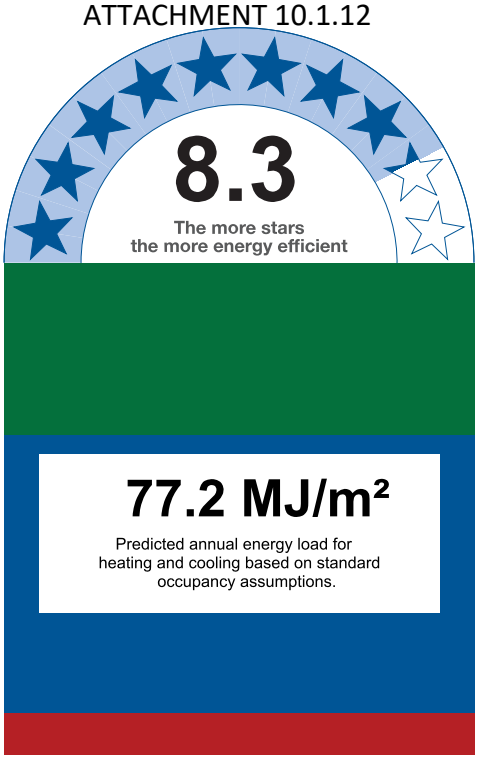

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Total	142.5	66 - Ballarat Aerodrome
Garage	22.4	

Thermal Performance

Heating	Cooling
72.9	**4.3**
MJ/m²	MJ/m²

About the rating

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Accredited assessor

Name	Alex Slater
Business name	Shared Space Architecture
Email	alex@sharedspacearchitecture.com.au
Phone	+61 406376341
Accreditation No.	DMN/21/2003
Assessor Accrediting Organisation	DMN
Declaration of interest	No Conflict of Interest

Verification

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Provisional* values

Have provisional values been used in the assessment and, if so, noted in "additional notes" below?

Window and glazed door *type and performance*

Default* windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
None					

Custom* windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
CAP-116-21 B	Capral Futureline 54W Awning Window DG 5LBrdg-12Ar-5	2.73	0.37	0.35	0.39
REY-029-06 A	Slim Patio 68 Sliding Door Embed Frm DG 6Clr-12Ar-6LightBridge	1.84	0.51	0.48	0.54

Window and glazed door *schedule*

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orient-ation	Shading device*
Bedroom 13	CAP-116-21 B	W03	900	915	Awning	90	N	None
Bedroom 14	CAP-116-21 B	W04	900	975	Awning	90	N	None

Window and glazed door *schedule*

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orient-ation	Shading device*
Bedroom 15	CAP-116-21 B	W05	900	990	Awning	90	N	None
Day Time 13	REY-029-06 A	W10	900	2600	Sliding	45	S	None
Day Time 40	CAP-116-21 B	W07	900	970	Awning	90	S	None
Day Time 40	CAP-116-21 B	W08	900	1000	Awning	90	S	None
Kitchen/Living 11	CAP-116-21 B	W01	900	1525	Fixed	0	N	None
Kitchen/Living 11	REY-029-06 A	W02	900	2995	Sliding	30	N	None
Night Time 6	CAP-116-21 B	W06	900	965	Awning	90	S	None
Unconditioned 3	CAP-116-21 B	W09	900	1035	Awning	90	S	None

Roof window *type and performance value*

Default* roof windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
None					

Custom* roof windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
None					

Roof window *schedule*

Location	Window ID	Window no.	Opening %	Height (mm)	Width (mm)	Orient-ation	Outdoor shade	Indoor shade
None								

Skylight *type and performance*

Skylight ID	Skylight description
None	

Skylight *schedule*

Location	Skylight ID	Skylight No.	Skylight shaft length (mm)	Area (m^2)	Orient-ation	Outdoor shade	Diffuser	Shaft Reflectance
None								

External door *schedule*

Location	Height (mm)	Width (mm)	Opening %	Orientation
Garage 2	2040	2660	90	S

External wall *type*

Wall ID	Wall Type	Solar absorptance	Wall Colour	Bulk insulation (R-value)	Reflective wall wrap*
BV-REFL-CAV	Brick Veneer Stud Wall with Reflective Sarking	0.50	Medium	2.50	Yes
MC-NONREFL-CAV	Metal Clad Battened (Non-Refl Cavity) Stud Wall	0.50	Medium	2.50	No

External wall *schedule*

Location	Wall ID	Height (mm)	Width (mm)	Orient-ation	Horizontal shading feature* projection (mm)	Vertical shading feature
Bedroom 13	MC-NONREFL-CAV	2400	1939	N		Yes
Bedroom 13	MC-NONREFL-CAV	2400	742	E		Yes
Bedroom 13	MC-NONREFL-CAV	2400	1200	N	730	Yes
Bedroom 13	MC-NONREFL-CAV	2400	1907	W		Yes
Bedroom 14	MC-NONREFL-CAV	2400	1202	N	730	Yes
Bedroom 14	MC-NONREFL-CAV	2400	742	W		Yes
Bedroom 14	MC-NONREFL-CAV	2400	1891	N		Yes
Bedroom 14	MC-NONREFL-CAV	2400	742	E		Yes
Bedroom 15	MC-NONREFL-CAV	2400	1118	N	730	Yes
Bedroom 15	MC-NONREFL-CAV	2400	742	W		Yes
Bedroom 15	MC-NONREFL-CAV	2400	1775	N		Yes
Bedroom 15	MC-NONREFL-CAV	2400	5718	E		Yes
Day Time 12	BV-REFL-CAV	2400	2471	N		Yes
Day Time 12	BV-REFL-CAV	2400	1707	W		Yes
Day Time 13	BV-REFL-CAV	2400	6319	S		Yes
Day Time 40	MC-NONREFL-CAV	2400	4214	S		Yes
Garage 2	BV-REFL-CAV	2400	327	N		Yes
Garage 2	BV-REFL-CAV	2400	3331	S		Yes
Garage 2	BV-REFL-CAV	2400	6570	E		Yes

Kitchen/Living 11	BV-REFL-CAV	2400	7044	N		Yes
Night Time 6	MC-NONREFL-CAV	2400	1822	E		Yes
Night Time 6	MC-NONREFL-CAV	2400	2893	S		Yes
Unconditioned 3	MC-NONREFL-CAV	2400	2019	S		Yes

Internal wall *type*

Wall ID	Wall Type	Area (m^2)	Bulk insulation
INT-PARTY	Internal PARTY Plasterboard Stud Wall	60.9	5.00
INT-PB	Internal Plasterboard Stud Wall	46.8	0.00
INT-PB	Internal Plasterboard Stud Wall	29.9	2.50

Floor *type*

Location	Construction	Area (m^2)	Sub-floor ventilation	Added insulation (R-value)	Covering
Bedroom 13	TIMB-001: Suspended Timber Floor	7.0	N/A	2.00	Timber
Bedroom 13	CSOG-100: Concrete Slab on Ground (100mm)	5.1	N/A	2.00	Timber
Bedroom 14	TIMB-001: Suspended Timber Floor	6.9	N/A	2.00	Timber
Bedroom 14	CSOG-100: Concrete Slab on Ground (100mm)	5.0	N/A	2.00	Timber
Bedroom 15	TIMB-001: Suspended Timber Floor	14.7	N/A	2.00	Timber
Bedroom 15	CSOG-100: Concrete Slab on Ground (100mm)	1.0	N/A	2.00	Timber
Day Time 12	CSOG-100: Concrete Slab on Ground (100mm)	4.2	N/A	2.00	Timber
Day Time 13	CSOG-100: Concrete Slab on Ground (100mm)	7.0	N/A	2.00	Timber
Day Time 39	TIMB-001: Suspended Timber Floor	6.9	N/A	2.00	Timber
Day Time 40	TIMB-001: Suspended Timber Floor	6.7	N/A	2.00	Timber
Day Time 40	CSOG-100: Concrete Slab on Ground (100mm)	0.2	N/A	2.00	Timber
Garage 2	CSOG-100: Concrete Slab on Ground (100mm)	22.4	N/A	2.00	Timber
Kitchen/Living 11	CSOG-100: Concrete Slab on Ground (100mm)	46.1	N/A	2.00	Timber
Night Time 6	TIMB-001: Suspended Timber Floor	5.0	N/A	2.00	Timber
Night Time 6	CSOG-100: Concrete Slab on Ground (100mm)	0.3	N/A	2.00	Timber

Unconditioned 3	TIMB-001: Suspended Timber Floor	6.7	N/A	2.00	Timber
Unconditioned 3	CSOG-100: Concrete Slab on Ground (100mm)	0.4	N/A	2.00	Timber

Ceiling *type*

Location	Construction	Bulk insulation (R-value)	Reflective wrap*
Bedroom 13	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Bedroom 14	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Bedroom 15	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Day Time 12	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Day Time 13	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Day Time 39	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Day Time 40	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Garage 2	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Kitchen/Living 11	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Night Time 6	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Unconditioned 3	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes

Ceiling *penetrations**

Location	Quantity	Type	Diameter (mm)	Sealed /unsealed
Kitchen/Living 11	1	Exhaust Fan	250	Sealed

Ceiling *fans*

Location	Quantity	Diameter (mm)
None		

Roof *type*

Construction	Added insulation (R-value)	Solar absorptance	Roof Colour
ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	0.00	0.50	Medium

Explanatory Notes

About this report

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Ratings are based on a unique climate zone where the home is located and are generated using standard assumptions, including occupancy patterns and thermostat settings. The actual energy consumption of a home may vary significantly from the predicted energy load, as the assumptions used in the rating will not match actual usage patterns. For example, the number of occupants and personal heating or cooling preferences will vary.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparing different dwelling designs and to demonstrate that the design meets the energy efficiency requirements in the National Construction Code. Homes that are energy efficient use less energy, are warmer on cool days, cooler on hot days and cost less to run. The higher the star rating the more thermally efficient the dwelling is.

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Disclaimer

The format of the NatHERS Certificate was developed by the NatHERS Administrator. However the content of each individual certificate is entered and created by the assessor to create a NatHERS Certificate. It is the responsibility of the assessor who prepared this certificate to use NatHERS accredited software correctly and follow the NatHERS Technical Notes to produce a NatHERS Certificate.

The predicted annual energy load in this NatHERS Certificate is an estimate based on an assessment of the building by the assessor. It is not a prediction of actual energy use, but may be used to compare how other buildings are likely to perform when used in a similar way.

Information presented in this report relies on a range of standard assumptions (both embedded in NatHERS accredited software and made by the assessor who prepared this report), including assumptions about occupancy, indoor air temperature and local climate.

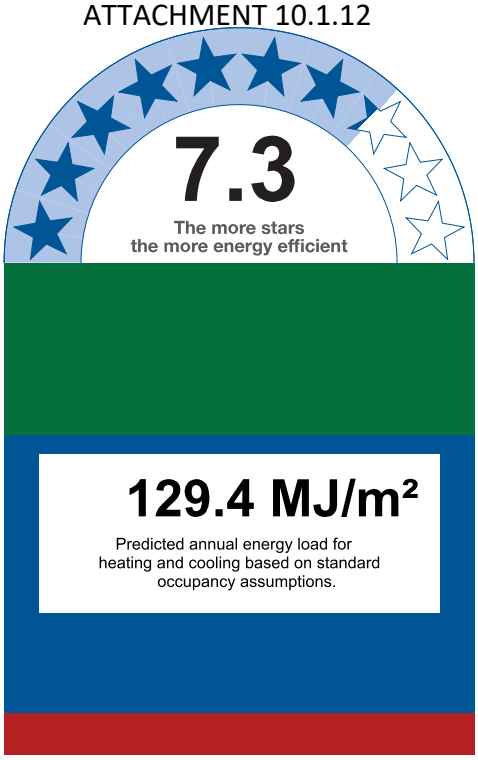
Not all assumptions that may have been made by the assessor while using the NatHERS accredited software tool are presented in this report and further details or data files may be available from the assessor.

Glossary

Annual energy load	the predicted amount of energy required for heating and cooling, based on standard occupancy assumptions.
Assessed floor area	the floor area modelled in the software for the purpose of the NatHERS assessment. Note, this may not be consistent with the floor area in the design documents.
Ceiling penetrations	features that require a penetration to the ceiling, including downlights, vents, exhaust fans, rangehoods, chimneys and flues. Excludes fixtures attached to the ceiling with small holes through the ceiling for wiring, e.g. ceiling fans; pendant lights, and heating and cooling ducts.
Conditioned	a zone within a dwelling that is expected to require heating and cooling based on standard occupancy assumptions. In some circumstances it will include garages.
Custom windows	windows listed in NatHERS software that are available on the market in Australia and have a WERS (Window Energy Rating Scheme) rating.
Default windows	windows that are representative of a specific type of window product and whose properties have been derived by statistical methods.
Entrance door	these signify ventilation benefits in the modelling software and must not be modelled as a door when opening to a minimally ventilated corridor in a Class 2 building.
Exposure category - exposed	terrain with no obstructions e.g. flat grazing land, ocean-frontage, desert, exposed high-rise unit (usually above 10 floors).
Exposure category - open	terrain with few obstructions at a similar height e.g. grasslands with few well scattered obstructions below 10m, farmland with scattered sheds, lightly vegetated bush blocks, elevated units (e.g. above 3 floors).
Exposure category - suburban	terrain with numerous, closely spaced obstructions below 10m e.g. suburban housing, heavily vegetated bushland areas.
Exposure category - protected	terrain with numerous, closely spaced obstructions over 10 m e.g. city and industrial areas.
Horizontal shading feature	provides shading to the building in the horizontal plane, e.g. eaves, verandahs, pergolas, carports, or overhangs or balconies from upper levels.
National Construction Code (NCC) Class	the NCC groups buildings by their function and use, and assigns a classification code. NatHERS software models NCC Class 1, 2 or 4 buildings and attached Class 10a buildings. Definitions can be found at www.abcb.gov.au.
Opening percentage	the openability percentage or operable (moveable) area of doors or windows that is used in ventilation calculations.
Provisional value	an assumed value that does not represent an actual value. For example, if the wall colour is unspecified in the documentation, a provisional value of 'medium' must be modelled. Acceptable provisional values are outlined in the NatHERS Technical Note and can be found at www.nathers.gov.au
Reflective wrap (also known as foil)	can be applied to walls, roofs and ceilings. When combined with an appropriate airgap and emissivity value, it provides insulative properties.
Roof window	for NatHERS this is typically an operable window (i.e. can be opened), will have a plaster or similar light well if there is an attic space, and generally does not have a diffuser.
Shading device	a device fixed to windows that provides shading e.g. window awnings or screens but excludes eaves.
Shading features	includes neighbouring buildings, fences, and wing walls, but excludes eaves.
Solar heat gain coefficient (SHGC)	the fraction of incident solar radiation admitted through a window, both directly transmitted as well as absorbed and subsequently released inward. SHGC is expressed as a number between 0 and 1. The lower a window's SHGC, the less solar heat it transmits.
Skylight (also known as roof lights)	for NatHERS this is typically a moulded unit with flexible reflective tubing (light well) and a diffuser at ceiling level.
U-value	the rate of heat transfer through a window. The lower the U-value, the better the insulating ability.
Unconditioned	a zone within a dwelling that is assumed to not require heating and cooling based on standard occupancy assumptions
Vertical shading features	provides shading to the building in the vertical plane and can be parallel or perpendicular to the subject wall/window. Includes privacy screens, other walls in the building (wing walls), fences, other buildings, vegetation (protected or listed heritage trees).

Nationwide House Energy Rating Scheme NatHERS Certificate No.

Generated on 29 July 2022 using Hero 3.0



Property

Address	Unit 05, 17 Smith Street, DAYLESFORD, VIC, 3460
Lot/DP	
NCC Class*	1a
Type	New

Plans

Main Plan	18/05/2022
Prepared by	Breathe Architecture

Construction and environment

Assessed floor area (m²)*		**Exposure Type**
Conditioned*	140.2	Suburban
Unconditioned*	5.4	**NatHERS climate zone**
Total	184.8	66 - Ballarat Aerodrome
Garage	39.2	

Thermal Performance

Heating	**Cooling**
124.5	**4.9**
MJ/m²	MJ/m²

About the rating

NatHERS software models the expected thermal energy loads using information about the design and construction, climate and common patterns of household use. The software does not take into account appliances, apart from the airflow impacts from ceiling fans.

Accredited assessor

Name	Alex Slater
Business name	Shared Space Architecture
Email	alex@sharedspacearchitecture.com.au
Phone	+61 406376341
Accreditation No.	DMN/21/2003
Assessor Accrediting Organisation	DMN
Declaration of interest	No Conflict of Interest

Verification

DRAFT PREVIEW ISSUE - NOT TO BE USED FOR CERTIFICATION

National Construction Code (NCC) requirements

The NCC's requirements for NatHERS-rated houses are detailed in 3.12.0(a)(i) and 3.12.5 of the NCC Volume Two. For apartments the requirements are detailed in J0.2 and J5 to J8 of the NCC Volume One.

In NCC 2019, these requirements include minimum star ratings and separate heating and cooling load limits that need to be met by buildings and apartments through the NatHERS assessment. Requirements additional to the NatHERS assessment that must also be satisfied include, but are not limited to: insulation installation methods, thermal breaks, building sealing, water heating and pumping, and artificial lighting requirements. The NCC and NatHERS Heating and Cooling Load Limits (Australian Building Codes Board Standard) are available at www.abcb.gov.au.

State and territory variations and additions to the NCC may also apply.

Certificate Check

Ensure the dwelling is designed and then built as per the NatHERS Certificate. While you need to check the accuracy of the whole Certificate, the following spot check covers some important items impacting the dwelling's rating.

Genuine certificate

Does this Certificate match the one available at the web address or QR code in the verification box on the front page? Does the set of NatHERS-stamped plans for the dwelling have a Certificate number on the stamp that matches this Certificate?

Ceiling penetrations*

Does the 'number' and 'type' of ceiling penetrations (e.g. downlights, exhaust fans, etc) shown on the stamped plans or installed, match what is shown in this Certificate?

Windows

Does the installed window meet the substitution tolerances (SHGC and U-value) and window type, of the window shown on this Certificate?

Apartment entrance doors

Does the 'External Door Schedule' show apartment entrance doors? Please note that an "external door" between the modelled dwelling and a shared space, such as an enclosed corridor or foyer, should not be included in the assessment (because it overstates the possible ventilation) and would invalidate the Certificate.

Exposure*

Has the appropriate exposure level (terrain) been applied? For example, it is unlikely that a ground-floor apartment is "exposed" or a top floor high-rise apartment is "protected".

Provisional* values

Have provisional values been used in the assessment and, if so, noted in "additional notes" below?

Window and glazed door *type and performance*

Default* windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
None					

Custom* windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
CAP-116-21 B	Capral Futureline 54W Awning Window DG 5LBrdg-12Ar-5	2.73	0.37	0.35	0.39

Window and glazed door *schedule*

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orient-ation	Shading device*
Bedroom 21	CAP-116-21 B	W03	900	2340	Awning	45	W	None
Bedroom 22	CAP-116-21 B	W02	900	815	Awning	90	W	None
Bedroom 23	CAP-116-21 B	W06	900	850	Awning	90	E	None

Window and glazed door *schedule*

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orient-ation	Shading device*
Day Time 21	CAP-116-21 B	W01	900	750	Awning	90	E	None
Kitchen/Living 23	CAP-116-21 B	W04	900	4674	Awning	30	E	None
Kitchen/Living 23	CAP-116-21 B	W05	900	4970	Awning	30	S	None

Roof window *type and performance value*

Default* roof windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
None					

Custom* roof windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
None					

Roof window *schedule*

Location	Window ID	Window no.	Opening %	Height (mm)	Width (mm)	Orient-ation	Outdoor shade	Indoor shade
None								

Skylight *type and performance*

Skylight ID	Skylight description
None	

Skylight *schedule*

Location	Skylight ID	Skylight No.	Skylight shaft length (mm)	Area (m^2)	Orient-ation	Outdoor shade	Diffuser	Shaft Reflectance
None								

External door *schedule*

Location	Height (mm)	Width (mm)	Opening %	Orientation
Garage 7	2040	4775	90	E

External wall *type*

Wall ID	Wall Type	Solar absorptance	Wall Colour	Bulk insulation (R-value)	Reflective wall wrap*
BV-REFL-CAV	Brick Veneer Stud Wall with Reflective Sarking	0.50	Medium	2.50	Yes
CONCBLOCK-190-FCF-PB	Concrete Block 190mm Fully Core-Filled - Plasterboard Internally	0.50	Medium	2.50	No
MC-NONREFL-CAV	Metal Clad Battened (Non-Refl Cavity) Stud Wall	0.50	Medium	2.50	No

External wall *schedule*

Location	Wall ID	Height (mm)	Width (mm)	Orient-ation	Horizontal shading feature* projection (mm)	Vertical shading feature
Bedroom 21	MC-NONREFL-CAV	2400	2903	W		Yes
Bedroom 21	MC-NONREFL-CAV	2400	2796	N		Yes
Bedroom 22	MC-NONREFL-CAV	2400	3789	S		Yes
Bedroom 22	MC-NONREFL-CAV	2400	2949	W		Yes
Bedroom 23	MC-NONREFL-CAV	2400	2885	E		Yes
Bedroom 23	MC-NONREFL-CAV	2400	3657	S		Yes
Day Time 20	CONCBLOCK-190-FCF-PB	2400	2015	N		No
Day Time 20	CONCBLOCK-190-FCF-PB	2400	2015	S		No
Day Time 20	CONCBLOCK-190-FCF-PB	2400	4640	W		No
Day Time 21	BV-REFL-CAV	2400	2278	E		Yes
Day Time 21	BV-REFL-CAV	2400	5682	S		Yes
Day Time 21	BV-REFL-CAV	2400	2278	W		No
Day Time 72	MC-NONREFL-CAV	2400	2173	E		Yes
Day Time 72	MC-NONREFL-CAV	2400	4099	S		Yes
Day Time 72	MC-NONREFL-CAV	2400	2173	W		Yes
Day Time 74	MC-NONREFL-CAV	2400	1641	W		Yes
Garage 7	BV-REFL-CAV	2400	1532	N		No
Garage 7	BV-REFL-CAV	2400	5506	E		Yes
Garage 7	BV-REFL-CAV	2400	1446	S		Yes
Garage 7	BV-REFL-CAV	2400	866	W		No

External wall *schedule*

Location	Wall ID	Height (mm)	Width (mm)	Orient-ation	Horizontal shading feature* projection (mm)	Vertical shading feature
Kitchen/Living 23	MC-NONREFL-CAV	2400	5374	E	3238	Yes
Kitchen/Living 23	MC-NONREFL-CAV	2400	700	W		Yes
Kitchen/Living 23	MC-NONREFL-CAV	2400	6211	S	1018	Yes
Unconditioned 11	MC-NONREFL-CAV	2400	1835	S		Yes

Internal wall *type*

Wall ID	Wall Type	Area (m^2)	Bulk insulation
INT-PARTY	Internal PARTY Plasterboard Stud Wall	53.8	5.00
INT-PB	Internal Plasterboard Stud Wall	50.0	2.50
INT-PB	Internal Plasterboard Stud Wall	61.4	0.00

Floor *type*

Location	Construction	Area (m^2)	Sub-floor ventilation	Added insulation (R-value)	Covering
Bedroom 21	CSOG-100: Concrete Slab on Ground (100mm)	11.6	N/A	2.00	Timber
Bedroom 22	CSOG-100: Concrete Slab on Ground (100mm)	11.2	N/A	2.00	Timber
Bedroom 23	CSOG-100: Concrete Slab on Ground (100mm)	10.6	N/A	2.00	Timber
Day Time 20	CSOG-100: Concrete Slab on Ground (100mm)	9.3	N/A	2.00	Timber
Day Time 21	CSOG-100: Concrete Slab on Ground (100mm)	12.9	N/A	2.00	Timber
Day Time 70	CSOG-100: Concrete Slab on Ground (100mm)	2.8	N/A	2.00	Timber
Day Time 71	CSOG-100: Concrete Slab on Ground (100mm)	3.2	N/A	2.00	Timber
Day Time 72	TIMB-001: Suspended Timber Floor	8.8	N/A	2.00	Timber
Day Time 72	CSOG-100: Concrete Slab on Ground (100mm)	0.1	N/A	2.00	Timber
Day Time 74	CSOG-100: Concrete Slab on Ground (100mm)	13.2	N/A	2.00	Timber
Garage 7	CSOG-100: Concrete Slab on Ground (100mm)	39.2	N/A	2.00	Timber
Kitchen/Living 23	TIMB-001: Suspended Timber Floor	30.9	N/A	2.00	Timber
Kitchen/Living 23	CSOG-100: Concrete Slab on Ground (100mm)	20.2	N/A	2.00	Timber
Night Time 13	CSOG-100: Concrete Slab on Ground (100mm)	4.1	N/A	2.00	Timber

Floor *type*

Location	Construction	Area (m^2)	Sub-floor ventilation	Added insulation (R-value)	Covering
Night Time 14	CSOG-100: Concrete Slab on Ground (100mm)	6.8	N/A	2.00	Timber
Unconditioned 11	CSOG-100: Concrete Slab on Ground (100mm)	5.4	N/A	2.00	Timber

Ceiling *type*

Location	Construction	Bulk insulation (R-value)	Reflective wrap*
Bedroom 21	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Bedroom 22	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Bedroom 23	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Day Time 20	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Day Time 21	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Day Time 70	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Day Time 71	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Day Time 72	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Day Time 74	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Garage 7	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Kitchen/Living 23	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Night Time 13	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Night Time 14	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Unconditioned 11	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes

Ceiling *penetrations**

Location	Quantity	Type	Diameter (mm)	Sealed /unsealed
Kitchen/Living 23	1	Exhaust Fan	250	Sealed

Ceiling *fans*

Location	Quantity	Diameter (mm)
None		

Roof *type*

Construction	Added insulation (R-value)	Solar absorptance	Roof Colour
ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	0.00	0.50	Medium

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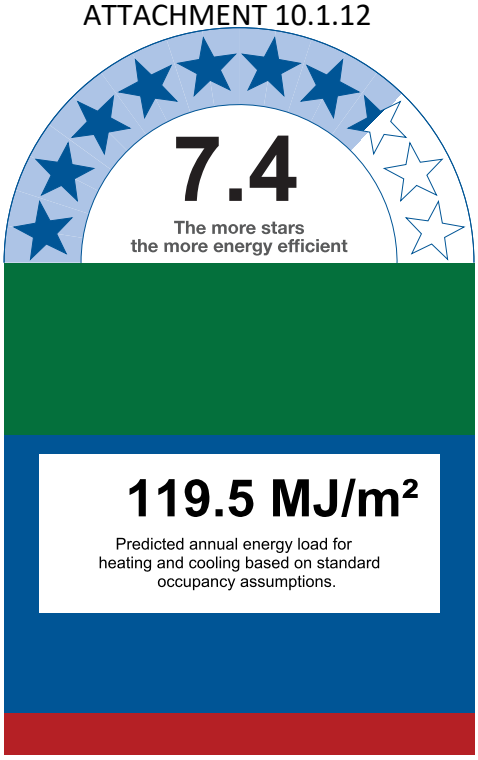
Nationwide House Energy Rating Scheme NatHERS Certificate No.

Generated on 29 July 2022 using Hero 3.0



Property

Address	Unit 06, 17 Smith Street, DAYLESFORD, VIC, 3460
Lot/DP	
NCC Class*	1a
Type	New

Plans

Main Plan	18/05/2022
Prepared by	Breathe Architecture

Construction and environment

Assessed floor area (m²)*		**Exposure Type**
Conditioned*	140.7	Suburban
Unconditioned*	5.2	**NatHERS climate zone**
Total	184.9	66 - Ballarat Aerodrome
Garage	39.0	

Thermal Performance

Heating	Cooling
111.6	**8.0**
MJ/m²	MJ/m²

About the rating

NatHERS software models the expected thermal energy loads using information about the design and construction, climate and common patterns of household use. The software does not take into account appliances, apart from the airflow impacts from ceiling fans.

Accredited assessor

Name	Alex Slater
Business name	Shared Space Architecture
Email	alex@sharedspacearchitecture.com.au
Phone	+61 406376341
Accreditation No.	DMN/21/2003
Assessor Accrediting Organisation	DMN
Declaration of interest	No Conflict of Interest

Verification

DRAFT PREVIEW ISSUE - NOT TO BE USED FOR CERTIFICATION

National Construction Code (NCC) requirements

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Ceiling penetrations*

Does the 'number' and 'type' of ceiling penetrations (e.g. downlights, exhaust fans, etc) shown on the stamped plans or installed, match what is shown in this Certificate?

Windows

Does the installed window meet the substitution tolerances (SHGC and U-value) and window type, of the window shown on this Certificate?

Apartment entrance doors

Does the 'External Door Schedule' show apartment entrance doors? Please note that an "external door" between the modelled dwelling and a shared space, such as an enclosed corridor or foyer, should not be included in the assessment (because it overstates the possible ventilation) and would invalidate the Certificate.

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Has the appropriate exposure level (terrain) been applied? For example, it is unlikely that a ground-floor apartment is "exposed" or a top floor high-rise apartment is "protected".

Provisional* values

Have provisional values been used in the assessment and, if so, noted in "additional notes" below?

Window and glazed door *type and performance*

Default* windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
None					

Custom* windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
CAP-116-21 B	Capral Futureline 54W Awning Window DG 5LBrdg-12Ar-5	2.73	0.37	0.35	0.39

Window and glazed door *schedule*

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orient-ation	Shading device*
Bedroom 18	CAP-116-21 B	W02	900	880	Awning	90	W	None
Bedroom 19	CAP-116-21 B	W03	900	750	Awning	90	E	None
Bedroom 20	CAP-116-21 B	W08	900	2300	Awning	45	W	None

Window and glazed door *schedule*

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orient-ation	Shading device*
Day Time 19	CAP-116-21 B	W01	900	885	Awning	90	E	None
Day Time 66	CAP-116-21 B	W09	900	655	Awning	90	W	None
Day Time 67	CAP-116-21 B	W06	900	810	Awning	90	E	None
Day Time 67	CAP-116-21 B	W05	900	915	Awning	90	W	None
Kitchen/Living 21	CAP-116-21 B	W04	900	4870	Fixed	0	N	None
Kitchen/Living 21	CAP-116-21 B	W07	900	4675	Awning	30	E	None

Roof window *type and performance value*

Default* roof windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
None					

Custom* roof windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
None					

Roof window *schedule*

Location	Window ID	Window no.	Opening %	Height (mm)	Width (mm)	Orient-ation	Outdoor shade	Indoor shade
None								

Skylight *type and performance*

Skylight ID	Skylight description
None	

Skylight *schedule*

Location	Skylight ID	Skylight No.	Skylight shaft length (mm)	Area (m^2)	Orient-ation	Outdoor shade	Diffuser	Shaft Reflectance
None								

External door *schedule*

Location	Height (mm)	Width (mm)	Opening %	Orientation
Garage 6	2040	4780	90	E

External wall *type*

Wall ID	Wall Type	Solar absorptance	Wall Colour	Bulk insulation (R-value)	Reflective wall wrap*
BV-REFL-CAV	Brick Veneer Stud Wall with Reflective Sarking	0.50	Medium	2.50	Yes
CONCBLOCK-190-FCF-PB	Concrete Block 190mm Fully Core-Filled - Plasterboard Internally	0.50	Medium	2.50	No
MC-NONREFL-CAV	Metal Clad Battened (Non-Refl Cavity) Stud Wall	0.50	Medium	2.50	No

External wall *schedule*

Location	Wall ID	Height (mm)	Width (mm)	Orient-ation	Horizontal shading feature* projection (mm)	Vertical shading feature
Bedroom 18	MC-NONREFL-CAV	2400	3781	N		No
Bedroom 18	MC-NONREFL-CAV	2400	2942	W		Yes
Bedroom 19	MC-NONREFL-CAV	2400	3634	N		No
Bedroom 19	MC-NONREFL-CAV	2400	2887	E		Yes
Bedroom 20	MC-NONREFL-CAV	2400	2912	W		Yes
Day Time 18	CONCBLOCK-190-FCF-PB	2400	2005	N		No
Day Time 18	BV-REFL-CAV	2400	2005	S		Yes
Day Time 18	BV-REFL-CAV	2400	4638	W		No
Day Time 19	BV-REFL-CAV	2400	5628	N		No
Day Time 19	BV-REFL-CAV	2400	2233	E		Yes
Day Time 19	BV-REFL-CAV	2400	2233	W		No
Day Time 66	MC-NONREFL-CAV	2400	1608	W		Yes
Day Time 66	MC-NONREFL-CAV	2400	75	W		Yes
Day Time 67	MC-NONREFL-CAV	2400	4089	N		No
Day Time 67	MC-NONREFL-CAV	2400	2099	E		Yes
Day Time 67	MC-NONREFL-CAV	2400	2099	W		Yes
Garage 6	BV-REFL-CAV	2400	5500	E		No
Garage 6	BV-REFL-CAV	2400	1552	S		Yes
Garage 6	BV-REFL-CAV	2400	1552	N		Yes
Garage 6	CONCBLOCK-190-FCF-PB	2400	924	W		No

External wall *schedule*

Location	Wall ID	Height (mm)	Width (mm)	Orient-ation	Horizontal shading feature* projection (mm)	Vertical shading feature
Kitchen/Living 21	MC-NONREFL-CAV	2400	6235	N	1037	Yes
Kitchen/Living 21	MC-NONREFL-CAV	2400	772	W		Yes
Kitchen/Living 21	MC-NONREFL-CAV	2400	5499	E	3072	Yes
Unconditioned 10	MC-NONREFL-CAV	2400	1806	N		No

Internal wall *type*

Wall ID	Wall Type	Area (m^2)	Bulk insulation
INT-PARTY	Internal PARTY Plasterboard Stud Wall	59.8	5.00
INT-PB	Internal Plasterboard Stud Wall	37.2	2.50
INT-PB	Internal Plasterboard Stud Wall	75.4	0.00

Floor *type*

Location	Construction	Area (m^2)	Sub-floor ventilation	Added insulation (R-value)	Covering
Bedroom 18	CSOG-100: Concrete Slab on Ground (100mm)	11.1	N/A	2.00	Timber
Bedroom 19	CSOG-100: Concrete Slab on Ground (100mm)	10.5	N/A	2.00	Timber
Bedroom 20	CSOG-100: Concrete Slab on Ground (100mm)	11.7	N/A	2.00	Timber
Day Time 18	CSOG-100: Concrete Slab on Ground (100mm)	9.3	N/A	2.00	Timber
Day Time 19	CSOG-100: Concrete Slab on Ground (100mm)	12.6	N/A	2.00	Timber
Day Time 62	CSOG-100: Concrete Slab on Ground (100mm)	2.8	N/A	2.00	Timber
Day Time 63	CSOG-100: Concrete Slab on Ground (100mm)	3.2	N/A	2.00	Timber
Day Time 66	CSOG-100: Concrete Slab on Ground (100mm)	13.5	N/A	2.00	Timber
Day Time 67	TIMB-001: Suspended Timber Floor	8.2	N/A	2.00	Timber
Day Time 67	CSOG-100: Concrete Slab on Ground (100mm)	0.4	N/A	2.00	Timber
Garage 6	CSOG-100: Concrete Slab on Ground (100mm)	39.0	N/A	2.00	Timber
Kitchen/Living 21	TIMB-001: Suspended Timber Floor	31.0	N/A	2.00	Timber
Kitchen/Living 21	CSOG-100: Concrete Slab on Ground (100mm)	20.9	N/A	2.00	Timber
Night Time 11	CSOG-100: Concrete Slab on Ground (100mm)	4.1	N/A	2.00	Timber

Floor *type*

Location	Construction	Area (m^2)	Sub-floor ventilation	Added insulation (R-value)	Covering
Night Time 12	CSOG-100: Concrete Slab on Ground (100mm)	6.5	N/A	2.00	Timber
Unconditioned 10	CSOG-100: Concrete Slab on Ground (100mm)	5.2	N/A	2.00	Timber

Ceiling *type*

Location	Construction	Bulk insulation (R-value)	Reflective wrap*
Bedroom 18	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Bedroom 19	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Bedroom 20	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Day Time 19	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Day Time 62	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Day Time 63	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Day Time 66	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Day Time 67	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Garage 6	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Kitchen/Living 21	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Night Time 11	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Night Time 12	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Unconditioned 10	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes

Ceiling *penetrations**

Location	Quantity	Type	Diameter (mm)	Sealed /unsealed
Kitchen/Living 21	1	Exhaust Fan	250	Sealed

Ceiling *fans*

Location	Quantity	Diameter (mm)
None		

Roof *type*

Construction	Added insulation (R-value)	Solar absorptance	Roof Colour
ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	0.00	0.50	Medium

Explanatory Notes

About this report

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Ratings are based on a unique climate zone where the home is located and are generated using standard assumptions, including occupancy patterns and thermostat settings. The actual energy consumption of a home may vary significantly from the predicted energy load, as the assumptions used in the rating will not match actual usage patterns. For example, the number of occupants and personal heating or cooling preferences will vary.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparing different dwelling designs and to demonstrate that the design meets the energy efficiency requirements in the National Construction Code. Homes that are energy efficient use less energy, are warmer on cool days, cooler on hot days and cost less to run. The higher the star rating the more thermally efficient the dwelling is.

Accredited assessors

To ensure the NatHERS Certificate is of a high quality, always use an accredited or licenced assessor. NatHERS accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

Australian Capital Territory (ACT) licensed assessors may only produce assessments for regulatory purposes using software for which they have a licence endorsement. Licence endorsements can be confirmed on the ACT licensing register

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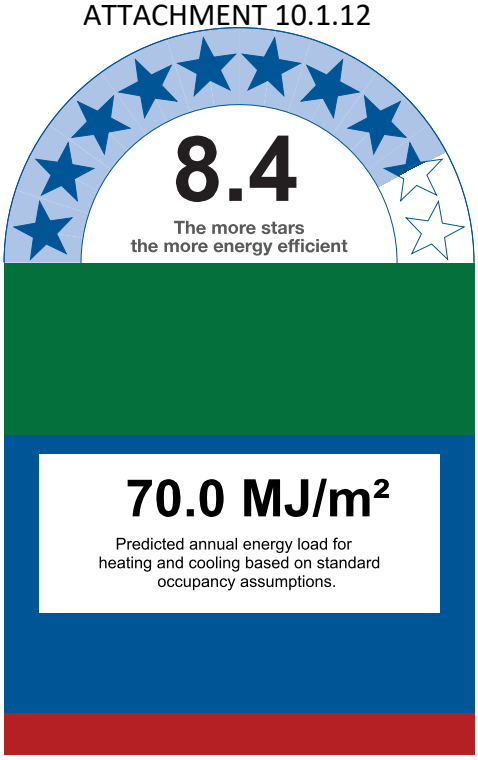

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MJ/m²	MJ/m²

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Business name	Shared Space Architecture
Email	alex@sharedspacearchitecture.com.au
Phone	+61 406376341
Accreditation No.	DMN/21/2003
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				lower limit	upper limit
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Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
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REY-029-06 A	Slim Patio 68 Sliding Door Embed Frm DG 6Clr-12Ar-6LightBridge	1.84	0.51	0.48	0.54

Window and glazed door *schedule*

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orient-ation	Shading device*
Bedroom 10	CAP-116-21 B	W07	900	895	Awning	90	W	None
Bedroom 10	REY-029-06 A	W05	900	3000	Sliding	30	N	None

Window and glazed door *schedule*

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orient-ation	Shading device*
Bedroom 11	CAP-116-21 B	W10	900	850	Awning	90	S	None
Bedroom 11	CAP-116-21 B	W09	900	875	Awning	90	W	None
Bedroom 12	CAP-116-21 B	W08	900	900	Awning	90	W	None
Kitchen/Living 13	CAP-116-21 B	W03	900	900	Awning	90	W	None
Kitchen/Living 13	CAP-116-21 B	W02	900	900	Awning	90	W	None
Kitchen/Living 13	REY-029-06 A	W01	900	3110	Sliding	30	N	None
Kitchen/Living 13	REY-029-06 A	W04	900	3145	Sliding	30	S	None
Night Time 5	CAP-116-21 B	W06	900	875	Awning	90	N	None
Unconditioned 5	CAP-116-21 B	W11	900	865	Awning	90	S	None

Roof window *type and performance value*

Default* roof windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
None					

Custom* roof windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
None					

Roof window *schedule*

Location	Window ID	Window no.	Opening %	Height (mm)	Width (mm)	Orient-ation	Outdoor shade	Indoor shade
None								

Skylight *type and performance*

Skylight ID	Skylight description
None	

Skylight *schedule*

Location	Skylight ID	Skylight No.	Skylight shaft length (mm)	Area (m^2)	Orient-ation	Outdoor shade	Diffuser	Shaft Reflectance
None								

External door *schedule*

Location	Height (mm)	Width (mm)	Opening %	Orientation
None				

External wall *type*

Wall ID	Wall Type	Solar absorptance	Wall Colour	Bulk insulation (R-value)	Reflective wall wrap*
BV-REFL-CAV	Brick Veneer Stud Wall with Reflective Sarking	0.50	Medium	2.50	Yes
MC-NONREFL-CAV	Metal Clad Battened (Non-Refl Cavity) Stud Wall	0.50	Medium	2.50	No

External wall *schedule*

Location	Wall ID	Height (mm)	Width (mm)	Orient-ation	Horizontal shading feature* projection (mm)	Vertical shading feature
Bedroom 10	MC-NONREFL-CAV	2400	3027	W		Yes
Bedroom 10	MC-NONREFL-CAV	2400	3568	N		Yes
Bedroom 11	MC-NONREFL-CAV	2400	3568	S		Yes
Bedroom 11	MC-NONREFL-CAV	2400	3006	W		Yes
Bedroom 12	MC-NONREFL-CAV	2400	3012	W		Yes
Day Time 14	BV-REFL-CAV	2400	1700	N		Yes
Day Time 14	BV-REFL-CAV	2400	108	E		Yes
Day Time 15	BV-REFL-CAV	2400	96	W		Yes
Day Time 15	BV-REFL-CAV	2400	1727	S		Yes
Day Time 15	BV-REFL-CAV	2400	95	E		Yes
Kitchen/Living 13	BV-REFL-CAV	2400	3005	W		Yes
Kitchen/Living 13	BV-REFL-CAV	2400	753	N		Yes
Kitchen/Living 13	BV-REFL-CAV	2400	5042	W		Yes
Kitchen/Living 13	BV-REFL-CAV	2400	753	S		Yes
Kitchen/Living 13	BV-REFL-CAV	2400	3321	W		Yes
Kitchen/Living 13	BV-REFL-CAV	2400	3964	N		Yes
Kitchen/Living 13	BV-REFL-CAV	2400	3863	S		Yes
Night Time 4	MC-NONREFL-CAV	2400	2014	W		Yes
Night Time 5	MC-NONREFL-CAV	2400	2106	N		Yes

External wall *schedule*

Location	Wall ID	Height (mm)	Width (mm)	Orient-ation	Horizontal shading feature* projection (mm)	Vertical shading feature
Unconditioned 5	MC-NONREFL-CAV	2400	2088	S		Yes

Internal wall *type*

Wall ID	Wall Type	Area (m^2)	Bulk insulation
INT-PARTY	Internal PARTY Plasterboard Stud Wall	53.1	5.00
INT-PB	Internal Plasterboard Stud Wall	56.8	0.00
INT-PB	Internal Plasterboard Stud Wall	31.3	2.50

Floor *type*

Location	Construction	Area (m^2)	Sub-floor ventilation	Added insulation (R-value)	Covering
Bedroom 10	TIMB-001: Suspended Timber Floor	13.2	N/A	2.00	Timber
Bedroom 11	TIMB-001: Suspended Timber Floor	10.7	N/A	2.00	Timber
Bedroom 12	TIMB-001: Suspended Timber Floor	8.6	N/A	2.00	Timber
Bedroom 12	CSOG-100: Concrete Slab on Ground (100mm)	2.2	N/A	2.00	Timber
Day Time 14	CSOG-100: Concrete Slab on Ground (100mm)	8.8	N/A	2.00	Timber
Day Time 15	CSOG-100: Concrete Slab on Ground (100mm)	5.5	N/A	2.00	Timber
Day Time 33	TIMB-001: Suspended Timber Floor	2.3	N/A	2.00	Timber
Day Time 33	CSOG-100: Concrete Slab on Ground (100mm)	0.3	N/A	2.00	Timber
Day Time 35	TIMB-001: Suspended Timber Floor	9.2	N/A	2.00	Timber
Day Time 35	CSOG-100: Concrete Slab on Ground (100mm)	0.9	N/A	2.00	Timber
Kitchen/Living 13	CSOG-100: Concrete Slab on Ground (100mm)	46.0	N/A	2.00	Timber
Night Time 4	TIMB-001: Suspended Timber Floor	3.4	N/A	2.00	Timber
Night Time 4	CSOG-100: Concrete Slab on Ground (100mm)	1.3	N/A	2.00	Timber
Night Time 5	TIMB-001: Suspended Timber Floor	4.7	N/A	2.00	Timber
Night Time 5	CSOG-100: Concrete Slab on Ground (100mm)	0.5	N/A	2.00	Timber
Unconditioned 5	TIMB-001: Suspended Timber Floor	4.3	N/A	2.00	Timber
Unconditioned 5	CSOG-100: Concrete Slab on Ground (100mm)	0.7	N/A	2.00	Timber

Ceiling *type*

Location	Construction	Bulk insulation (R-value)	Reflective wrap*
Bedroom 10	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Bedroom 11	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Bedroom 12	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Day Time 14	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Day Time 15	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Day Time 33	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Day Time 35	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Kitchen/Living 13	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Night Time 4	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Night Time 5	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Unconditioned 5	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes

Ceiling *penetrations**

Location	Quantity	Type	Diameter (mm)	Sealed /unsealed
Kitchen/Living 13	1	Exhaust Fan	250	Sealed

Ceiling *fans*

Location	Quantity	Diameter (mm)
None		

Roof *type*

Construction	Added insulation (R-value)	Solar absorptance	Roof Colour
ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	0.00	0.50	Medium

Explanatory Notes

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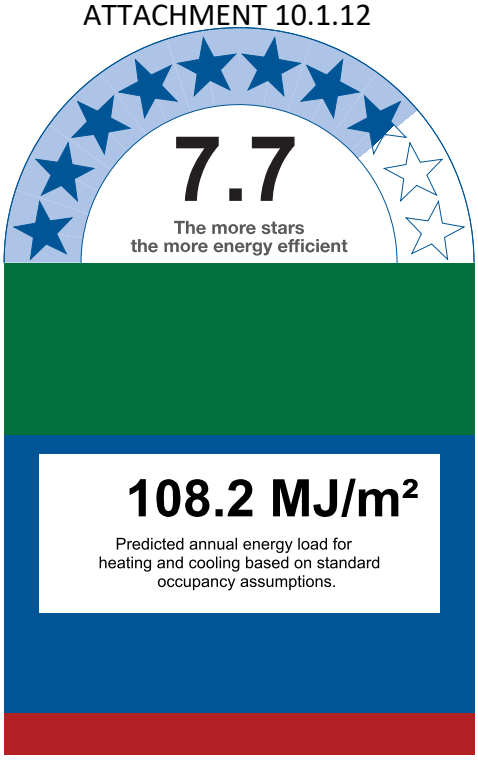
Glossary

Annual energy load	the predicted amount of energy required for heating and cooling, based on standard occupancy assumptions.
Assessed floor area	the floor area modelled in the software for the purpose of the NatHERS assessment. Note, this may not be consistent with the floor area in the design documents.
Ceiling penetrations	features that require a penetration to the ceiling, including downlights, vents, exhaust fans, rangehoods, chimneys and flues. Excludes fixtures attached to the ceiling with small holes through the ceiling for wiring, e.g. ceiling fans; pendant lights, and heating and cooling ducts.
Conditioned	a zone within a dwelling that is expected to require heating and cooling based on standard occupancy assumptions. In some circumstances it will include garages.
Custom windows	windows listed in NatHERS software that are available on the market in Australia and have a WERS (Window Energy Rating Scheme) rating.
Default windows	windows that are representative of a specific type of window product and whose properties have been derived by statistical methods.
Entrance door	these signify ventilation benefits in the modelling software and must not be modelled as a door when opening to a minimally ventilated corridor in a Class 2 building.
Exposure category - exposed	terrain with no obstructions e.g. flat grazing land, ocean-frontage, desert, exposed high-rise unit (usually above 10 floors).
Exposure category - open	terrain with few obstructions at a similar height e.g. grasslands with few well scattered obstructions below 10m, farmland with scattered sheds, lightly vegetated bush blocks, elevated units (e.g. above 3 floors).
Exposure category - suburban	terrain with numerous, closely spaced obstructions below 10m e.g. suburban housing, heavily vegetated bushland areas.
Exposure category - protected	terrain with numerous, closely spaced obstructions over 10 m e.g. city and industrial areas.
Horizontal shading feature	provides shading to the building in the horizontal plane, e.g. eaves, verandahs, pergolas, carports, or overhangs or balconies from upper levels.
National Construction Code (NCC) Class	the NCC groups buildings by their function and use, and assigns a classification code. NatHERS software models NCC Class 1, 2 or 4 buildings and attached Class 10a buildings. Definitions can be found at www.abcb.gov.au.
Opening percentage	the openability percentage or operable (moveable) area of doors or windows that is used in ventilation calculations.
Provisional value	an assumed value that does not represent an actual value. For example, if the wall colour is unspecified in the documentation, a provisional value of 'medium' must be modelled. Acceptable provisional values are outlined in the NatHERS Technical Note and can be found at www.nathers.gov.au
Reflective wrap (also known as foil)	can be applied to walls, roofs and ceilings. When combined with an appropriate airgap and emissivity value, it provides insulative properties.
Roof window	for NatHERS this is typically an operable window (i.e. can be opened), will have a plaster or similar light well if there is an attic space, and generally does not have a diffuser.
Shading device	a device fixed to windows that provides shading e.g. window awnings or screens but excludes eaves.
Shading features	includes neighbouring buildings, fences, and wing walls, but excludes eaves.
Solar heat gain coefficient (SHGC)	the fraction of incident solar radiation admitted through a window, both directly transmitted as well as absorbed and subsequently released inward. SHGC is expressed as a number between 0 and 1. The lower a window's SHGC, the less solar heat it transmits.
Skylight (also known as roof lights)	for NatHERS this is typically a moulded unit with flexible reflective tubing (light well) and a diffuser at ceiling level.
U-value	the rate of heat transfer through a window. The lower the U-value, the better the insulating ability.
Unconditioned	a zone within a dwelling that is assumed to not require heating and cooling based on standard occupancy assumptions
Vertical shading features	provides shading to the building in the vertical plane and can be parallel or perpendicular to the subject wall/window. Includes privacy screens, other walls in the building (wing walls), fences, other buildings, vegetation (protected or listed heritage trees).

Nationwide House Energy Rating Scheme NatHERS Certificate No.

Generated on 29 July 2022 using Hero 3.0



Property

Address	Unit 08, 17 Smith Street, DAYLESFORD, VIC, 3460
Lot/DP	
NCC Class*	1a
Type	New

Plans

Main Plan	18/05/2022
Prepared by	Breathe Architecture

Construction and environment

Assessed floor area (m²)*		**Exposure Type**
Conditioned*	52.1	Suburban
Unconditioned*	1.7	**NatHERS climate zone**
Total	53.8	66 - Ballarat Aerodrome
Garage	0.0	

Thermal Performance

Heating	Cooling
96.3	**11.9**
MJ/m²	MJ/m²

About the rating

NatHERS software models the expected thermal energy loads using information about the design and construction, climate and common patterns of household use. The software does not take into account appliances, apart from the airflow impacts from ceiling fans.

Accredited assessor

Name	Alex Slater
Business name	Shared Space Architecture
Email	alex@sharedspacearchitecture.com.au
Phone	+61 406376341
Accreditation No.	DMN/21/2003
Assessor Accrediting Organisation	DMN
Declaration of interest	No Conflict of Interest

Verification

DRAFT PREVIEW ISSUE - NOT TO BE USED FOR CERTIFICATION

National Construction Code (NCC) requirements

The NCC's requirements for NatHERS-rated houses are detailed in 3.12.0(a)(i) and 3.12.5 of the NCC Volume Two. For apartments the requirements are detailed in J0.2 and J5 to J8 of the NCC Volume One.

In NCC 2019, these requirements include minimum star ratings and separate heating and cooling load limits that need to be met by buildings and apartments through the NatHERS assessment. Requirements additional to the NatHERS assessment that must also be satisfied include, but are not limited to: insulation installation methods, thermal breaks, building sealing, water heating and pumping, and artificial lighting requirements. The NCC and NatHERS Heating and Cooling Load Limits (Australian Building Codes Board Standard) are available at www.abcb.gov.au.

State and territory variations and additions to the NCC may also apply.

Certificate Check

Ensure the dwelling is designed and then built as per the NatHERS Certificate. While you need to check the accuracy of the whole Certificate, the following spot check covers some important items impacting the dwelling's rating.

Genuine certificate

Does this Certificate match the one available at the web address or QR code in the verification box on the front page? Does the set of NatHERS-stamped plans for the dwelling have a Certificate number on the stamp that matches this Certificate?

Ceiling penetrations*

Does the 'number' and 'type' of ceiling penetrations (e.g. downlights, exhaust fans, etc) shown on the stamped plans or installed, match what is shown in this Certificate?

Windows

Does the installed window meet the substitution tolerances (SHGC and U-value) and window type, of the window shown on this Certificate?

Apartment entrance doors

Does the 'External Door Schedule' show apartment entrance doors? Please note that an "external door" between the modelled dwelling and a shared space, such as an enclosed corridor or foyer, should not be included in the assessment (because it overstates the possible ventilation) and would invalidate the Certificate.

Exposure*

Has the appropriate exposure level (terrain) been applied? For example, it is unlikely that a ground-floor apartment is "exposed" or a top floor high-rise apartment is "protected".

Provisional* values

Have provisional values been used in the assessment and, if so, noted in "additional notes" below?

Window and glazed door *type and performance*

Default* windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
None					

Custom* windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
CAP-116-21 B	Capral Futureline 54W Awning Window DG 5LBrdg-12Ar-5	2.73	0.37	0.35	0.39
REY-029-06 A	Slim Patio 68 Sliding Door Embed Frm DG 6Clr-12Ar-6LightBridge	1.84	0.51	0.48	0.54

Window and glazed door *schedule*

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orient-ation	Shading device*
Day Time 29	CAP-116-21 B	W05	900	805	Awning	90	N	None
Day Time 29	CAP-116-21 B	W04	900	1020	Awning	90	E	None

Window and glazed door *schedule*

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orient-ation	Shading device*
Day Time 29	CAP-116-21 B	W03	900	2755	Awning	30	S	None
Kitchen/Living 14	REY-029-06 A	W01	900	3270	Sliding	30	N	None
Kitchen/Living 14	CAP-116-21 B	W02	900	2115	Awning	45	E	None
Night Time 2	CAP-116-21 B	W06	900	900	Awning	90	N	None

Roof window *type and performance value*

Default* roof windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
None					

Custom* roof windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
None					

Roof window *schedule*

Location	Window ID	Window no.	Opening %	Height (mm)	Width (mm)	Orient-ation	Outdoor shade	Indoor shade
None								

Skylight *type and performance*

Skylight ID	Skylight description
None	

Skylight *schedule*

Location	Skylight ID	Skylight No.	Skylight shaft length (mm)	Area (m^2)	Orient-ation	Outdoor shade	Diffuser	Shaft Reflectance
None								

External door *schedule*

Location	Height (mm)	Width (mm)	Opening %	Orientation
None				

External wall *type*

Wall ID	Wall Type	Solar absorptance	Wall Colour	Bulk insulation (R-value)	Reflective wall wrap*
BV-REFL-CAV	Brick Veneer Stud Wall with Reflective Sarking	0.50	Medium	2.50	Yes
EMPTY-WALL	Empty Wall	0.50	Medium	0.00	No
MC-NONREFL-CAV	Metal Clad Battened (Non-Refl Cavity) Stud Wall	0.50	Medium	2.50	No

External wall *schedule*

Location	Wall ID	Height (mm)	Width (mm)	Orient-ation	Horizontal shading feature* projection (mm)	Vertical shading feature
Bedroom 9	MC-NONREFL-CAV	2400	3602	W		Yes
Bedroom 9	MC-NONREFL-CAV	2400	875	N	1138	Yes
Day Time 29	MC-NONREFL-CAV	2400	1136	W		Yes
Day Time 29	MC-NONREFL-CAV	2400	1128	N	1138	Yes
Day Time 29	MC-NONREFL-CAV	2400	6630	E		No
Day Time 29	MC-NONREFL-CAV	2400	4700	S		Yes
Kitchen/Living 14	BV-REFL-CAV	2400	115	W		Yes
Kitchen/Living 14	BV-REFL-CAV	2400	3709	W		Yes
Kitchen/Living 14	BV-REFL-CAV	2400	4756	N		Yes
Kitchen/Living 14	BV-REFL-CAV	2400	6673	E		Yes
Kitchen/Living 14	BV-REFL-CAV	2400	3646	S		Yes
Kitchen/Living 14	EMPTY-WALL	2400	969	W		No
Night Time 2	MC-NONREFL-CAV	2400	2497	N	1138	Yes
Night Time 2	MC-NONREFL-CAV	2400	1644	W		Yes
Unconditioned 6	BV-REFL-CAV	2400	937	S		Yes
Unconditioned 6	BV-REFL-CAV	2400	1793	W		Yes

Internal wall *type*

Wall ID	Wall Type	Area (m^2)	Bulk insulation
INT-PB	Internal Plasterboard Stud Wall	13.7	2.50
INT-PB	Internal Plasterboard Stud Wall	13.0	0.00

Floor *type*

Location	Construction	Area (m^2)	Sub-floor ventilation	Added insulation (R-value)	Covering
Bedroom 9	TIMB-001: Suspended Timber Floor	14.3	N/A	2.00	Timber
Bedroom 9	CSOG-100: Concrete Slab on Ground (100mm)	0.2	N/A	2.00	Timber
Day Time 29	TIMB-001: Suspended Timber Floor	10.4	N/A	2.00	Timber
Day Time 29	CSOG-100: Concrete Slab on Ground (100mm)	0.8	N/A	2.00	Timber
Kitchen/Living 14	CSOG-100: Concrete Slab on Ground (100mm)	29.4	N/A	2.00	Timber
Night Time 2	TIMB-001: Suspended Timber Floor	4.1	N/A	2.00	Timber
Unconditioned 6	CSOG-100: Concrete Slab on Ground (100mm)	1.7	N/A	2.00	Timber

Ceiling *type*

Location	Construction	Bulk insulation (R-value)	Reflective wrap*
Bedroom 9	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Day Time 29	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Kitchen/Living 14	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Night Time 2	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Unconditioned 6	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes

Ceiling *penetrations**

Location	Quantity	Type	Diameter (mm)	Sealed /unsealed
Kitchen/Living 14	1	Exhaust Fan	250	Sealed

Ceiling *fans*

Location	Quantity	Diameter (mm)
None		

Roof *type*

Construction	Added insulation (R-value)	Solar absorptance	Roof Colour
ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	0.00	0.50	Medium

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Ceiling penetrations	features that require a penetration to the ceiling, including downlights, vents, exhaust fans, rangehoods, chimneys and flues. Excludes fixtures attached to the ceiling with small holes through the ceiling for wiring, e.g. ceiling fans; pendant lights, and heating and cooling ducts.
Conditioned	a zone within a dwelling that is expected to require heating and cooling based on standard occupancy assumptions. In some circumstances it will include garages.
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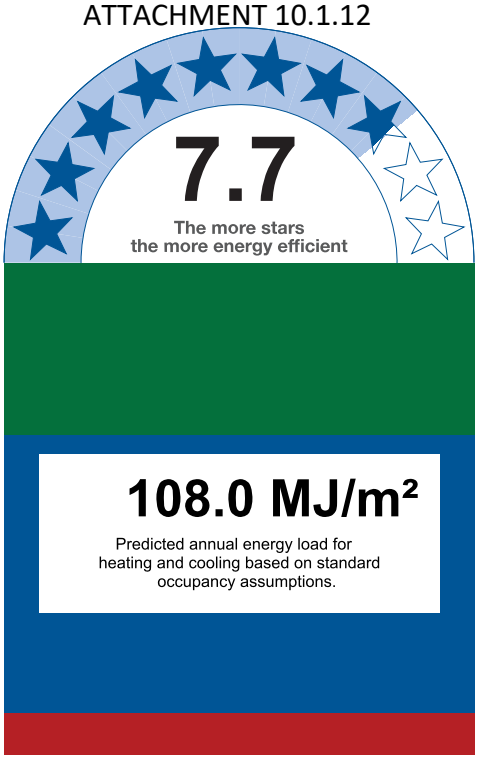
Default windows	windows that are representative of a specific type of window product and whose properties have been derived by statistical methods.
Entrance door	these signify ventilation benefits in the modelling software and must not be modelled as a door when opening to a minimally ventilated corridor in a Class 2 building.
Exposure category - exposed	terrain with no obstructions e.g. flat grazing land, ocean-frontage, desert, exposed high-rise unit (usually above 10 floors).
Exposure category - open	terrain with few obstructions at a similar height e.g. grasslands with few well scattered obstructions below 10m, farmland with scattered sheds, lightly vegetated bush blocks, elevated units (e.g. above 3 floors).
Exposure category - suburban	terrain with numerous, closely spaced obstructions below 10m e.g. suburban housing, heavily vegetated bushland areas.
Exposure category - protected	terrain with numerous, closely spaced obstructions over 10 m e.g. city and industrial areas.
Horizontal shading feature	provides shading to the building in the horizontal plane, e.g. eaves, verandahs, pergolas, carports, or overhangs or balconies from upper levels.
National Construction Code (NCC) Class	the NCC groups buildings by their function and use, and assigns a classification code. NatHERS software models NCC Class 1, 2 or 4 buildings and attached Class 10a buildings. Definitions can be found at www.abcb.gov.au.
Opening percentage	the openability percentage or operable (moveable) area of doors or windows that is used in ventilation calculations.
Provisional value	an assumed value that does not represent an actual value. For example, if the wall colour is unspecified in the documentation, a provisional value of 'medium' must be modelled. Acceptable provisional values are outlined in the NatHERS Technical Note and can be found at www.nathers.gov.au
Reflective wrap (also known as foil)	can be applied to walls, roofs and ceilings. When combined with an appropriate airgap and emissivity value, it provides insulative properties.
Roof window	for NatHERS this is typically an operable window (i.e. can be opened), will have a plaster or similar light well if there is an attic space, and generally does not have a diffuser.
Shading device	a device fixed to windows that provides shading e.g. window awnings or screens but excludes eaves.
Shading features	includes neighbouring buildings, fences, and wing walls, but excludes eaves.
Solar heat gain coefficient (SHGC)	the fraction of incident solar radiation admitted through a window, both directly transmitted as well as absorbed and subsequently released inward. SHGC is expressed as a number between 0 and 1. The lower a window's SHGC, the less solar heat it transmits.
Skylight (also known as roof lights)	for NatHERS this is typically a moulded unit with flexible reflective tubing (light well) and a diffuser at ceiling level.
U-value	the rate of heat transfer through a window. The lower the U-value, the better the insulating ability.
Unconditioned	a zone within a dwelling that is assumed to not require heating and cooling based on standard occupancy assumptions
Vertical shading features	provides shading to the building in the vertical plane and can be parallel or perpendicular to the subject wall/window. Includes privacy screens, other walls in the building (wing walls), fences, other buildings, vegetation (protected or listed heritage trees).

Nationwide House Energy Rating Scheme NatHERS Certificate No.

Generated on 29 July 2022 using Hero 3.0



Property

Address	Unit 09, 17 Smith Street, DAYLESFORD, VIC, 3460
Lot/DP	
NCC Class*	1a
Type	New

Plans

Main Plan	18/05/2022
Prepared by	Breathe Architecture

Construction and environment

Assessed floor area (m²)*		**Exposure Type**
Conditioned*	134.8	Suburban
Unconditioned*	2.8	**NatHERS climate zone**
Total	164.4	66 - Ballarat Aerodrome
Garage	26.8	

Thermal Performance

Heating	**Cooling**
101.8	**6.3**
MJ/m²	MJ/m²

About the rating

NatHERS software models the expected thermal energy loads using information about the design and construction, climate and common patterns of household use. The software does not take into account appliances, apart from the airflow impacts from ceiling fans.

Accredited assessor

Name	Alex Slater
Business name	Shared Space Architecture
Email	alex@sharedspacearchitecture.com.au
Phone	+61 406376341
Accreditation No.	DMN/21/2003
Assessor Accrediting Organisation	DMN
Declaration of interest	No Conflict of Interest

Verification

DRAFT PREVIEW ISSUE - NOT TO BE USED FOR CERTIFICATION

National Construction Code (NCC) requirements

The NCC's requirements for NatHERS-rated houses are detailed in 3.12.0(a)(i) and 3.12.5 of the NCC Volume Two. For apartments the requirements are detailed in J0.2 and J5 to J8 of the NCC Volume One.

In NCC 2019, these requirements include minimum star ratings and separate heating and cooling load limits that need to be met by buildings and apartments through the NatHERS assessment. Requirements additional to the NatHERS assessment that must also be satisfied include, but are not limited to: insulation installation methods, thermal breaks, building sealing, water heating and pumping, and artificial lighting requirements. The NCC and NatHERS Heating and Cooling Load Limits (Australian Building Codes Board Standard) are available at www.abcb.gov.au.

State and territory variations and additions to the NCC may also apply.

Certificate Check

Ensure the dwelling is designed and then built as per the NatHERS Certificate. While you need to check the accuracy of the whole Certificate, the following spot check covers some important items impacting the dwelling's rating.

Genuine certificate

Does this Certificate match the one available at the web address or QR code in the verification box on the front page? Does the set of NatHERS-stamped plans for the dwelling have a Certificate number on the stamp that matches this Certificate?

Ceiling penetrations*

Does the 'number' and 'type' of ceiling penetrations (e.g. downlights, exhaust fans, etc) shown on the stamped plans or installed, match what is shown in this Certificate?

Windows

Does the installed window meet the substitution tolerances (SHGC and U-value) and window type, of the window shown on this Certificate?

Apartment entrance doors

Does the 'External Door Schedule' show apartment entrance doors? Please note that an "external door" between the modelled dwelling and a shared space, such as an enclosed corridor or foyer, should not be included in the assessment (because it overstates the possible ventilation) and would invalidate the Certificate.

Exposure*

Has the appropriate exposure level (terrain) been applied? For example, it is unlikely that a ground-floor apartment is "exposed" or a top floor high-rise apartment is "protected".

Provisional* values

Have provisional values been used in the assessment and, if so, noted in "additional notes" below?

Window and glazed door *type and performance*

Default* windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
None					

Custom* windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
CAP-116-21 B	Capral Futureline 54W Awning Window DG 5LBrdg-12Ar-5	2.73	0.37	0.35	0.39

Window and glazed door *schedule*

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orient-ation	Shading device*
Bedroom 17	CAP-116-21 B	W01	900	2540	Awning	45	N	None
Kitchen/Living 19	CAP-116-21 B	W03	900	4335	Awning	30	S	None
Kitchen/Living 19	CAP-116-21 B	W04	900	815	Awning	90	S	None

Window and glazed door *schedule*

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orient-ation	Shading device*
Night Time 9	CAP-116-21 B	W02	900	970	Awning	90	N	None

Roof window *type and performance value*

Default* roof windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
None					

Custom* roof windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
None					

Roof window *schedule*

Location	Window ID	Window no.	Opening %	Height (mm)	Width (mm)	Orient-ation	Outdoor shade	Indoor shade
None								

Skylight *type and performance*

Skylight ID	Skylight description
None	

Skylight *schedule*

Location	Skylight ID	Skylight No.	Skylight shaft length (mm)	Area (m^2)	Orient-ation	Outdoor shade	Diffuser	Shaft Reflectance
None								

External door *schedule*

Location	Height (mm)	Width (mm)	Opening %	Orientation
Garage 4	2040	2420	90	S

External wall *type*

Wall ID	Wall Type	Solar absorptance	Wall Colour	Bulk insulation (R-value)	Reflective wall wrap*
BV-NONREFL-CAV	Brick Veneer Stud Wall with Non-Reflective Sarking	0.50	Medium	2.50	No
BV-REFL-CAV	Brick Veneer Stud Wall with Reflective Sarking	0.50	Medium	2.50	Yes

External wall *type*

Wall ID	Wall Type	Solar absorptance	Wall Colour	Bulk insulation (R-value)	Reflective wall wrap*
MC-NONREFL-CAV	Metal Clad Battened (Non-Refl Cavity) Stud Wall	0.50	Medium	2.50	No

External wall *schedule*

Location	Wall ID	Height (mm)	Width (mm)	Orient-ation	Horizontal shading feature* projection (mm)	Vertical shading feature
Bedroom 17	MC-NONREFL-CAV	2400	4048	N	1152	Yes
Bedroom 17	MC-NONREFL-CAV	2400	571	W		Yes
Bedroom 24	BV-REFL-CAV	2400	2695	N		Yes
Bedroom 24	BV-REFL-CAV	2400	1095	E		Yes
Bedroom 24	BV-REFL-CAV	2400	626	W		Yes
Bedroom 4	BV-REFL-CAV	2400	2797	N		Yes
Bedroom 4	BV-REFL-CAV	2400	3797	E		Yes
Bedroom 4	BV-REFL-CAV	2400	1095	W		Yes
Day Time 6	BV-REFL-CAV	2400	4237	E		Yes
Day Time 7	BV-REFL-CAV	2400	1947	E		Yes
Day Time 8	BV-REFL-CAV	2400	1180	N		Yes
Day Time 8	BV-REFL-CAV	2400	2098	E		Yes
Day Time 8	BV-REFL-CAV	2400	1204	S		Yes
Day Time 9	BV-REFL-CAV	2400	1498	E		Yes
Day Time 9	BV-REFL-CAV	2400	1521	S		Yes
Day Time 9	BV-REFL-CAV	2400	1498	W		Yes
Garage 4	BV-REFL-CAV	2400	4214	S		Yes
Kitchen/Living 19	MC-NONREFL-CAV	2400	7464	E		Yes
Kitchen/Living 19	BV-NONREFL-CAV	2400	7003	S		Yes
Night Time 10	MC-NONREFL-CAV	2400	1897	E		Yes
Night Time 9	MC-NONREFL-CAV	2400	2795	N	1152	Yes
Night Time 9	MC-NONREFL-CAV	2400	1749	E		Yes
Unconditioned 9	MC-NONREFL-CAV	2400	993	E		Yes

Internal wall *type*

Wall ID	Wall Type	Area (m^2)	Bulk insulation
INT-PARTY	Internal PARTY Plasterboard Stud Wall	55.5	5.00
INT-PB	Internal Plasterboard Stud Wall	57.8	2.50
INT-PB	Internal Plasterboard Stud Wall	57.2	0.00

Floor *type*

Location	Construction	Area (m^2)	Sub-floor ventilation	Added insulation (R-value)	Covering
Bedroom 17	TIMB-001: Suspended Timber Floor	13.4	N/A	2.00	Timber
Bedroom 17	CSOG-100: Concrete Slab on Ground (100mm)	1.9	N/A	2.00	Timber
Bedroom 24	CSOG-100: Concrete Slab on Ground (100mm)	10.2	N/A	2.00	Timber
Bedroom 4	CSOG-100: Concrete Slab on Ground (100mm)	10.6	N/A	2.00	Timber
Day Time 56	TIMB-001: Suspended Timber Floor	4.6	N/A	2.00	Timber
Day Time 57	TIMB-001: Suspended Timber Floor	2.6	N/A	2.00	Timber
Day Time 6	CSOG-100: Concrete Slab on Ground (100mm)	6.4	N/A	2.00	Timber
Day Time 7	CSOG-100: Concrete Slab on Ground (100mm)	3.1	N/A	2.00	Timber
Day Time 8	CSOG-100: Concrete Slab on Ground (100mm)	25.1	N/A	2.00	Timber
Day Time 9	CSOG-100: Concrete Slab on Ground (100mm)	2.3	N/A	2.00	Timber
Garage 4	CSOG-100: Concrete Slab on Ground (100mm)	26.8	N/A	2.00	Timber
Kitchen/Living 19	TIMB-001: Suspended Timber Floor	46.6	N/A	2.00	Timber
Kitchen/Living 19	CSOG-100: Concrete Slab on Ground (100mm)	2.0	N/A	2.00	Timber
Night Time 10	TIMB-001: Suspended Timber Floor	5.3	N/A	2.00	Timber
Night Time 9	TIMB-001: Suspended Timber Floor	4.9	N/A	2.00	Timber
Unconditioned 9	TIMB-001: Suspended Timber Floor	2.6	N/A	2.00	Timber
Unconditioned 9	CSOG-100: Concrete Slab on Ground (100mm)	0.1	N/A	2.00	Timber

Ceiling *type*

Location	Construction	Bulk insulation (R-value)	Reflective wrap*
Bedroom 17	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Bedroom 4	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Day Time 56	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Day Time 57	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Day Time 6	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Day Time 8	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Day Time 9	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Garage 4	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Kitchen/Living 19	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Night Time 10	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Night Time 9	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes
Unconditioned 9	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	5.00	Yes

Ceiling *penetrations**

Location	Quantity	Type	Diameter (mm)	Sealed /unsealed
Kitchen/Living 19	1	Exhaust Fan	250	Sealed

Ceiling *fans*

Location	Quantity	Diameter (mm)
None		

Roof *type*

Construction	Added insulation (R-value)	Solar absorptance	Roof Colour
ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	0.00	0.50	Medium

Explanatory Notes

About this report

A NatHERS rating is a comprehensive, dynamic computer modelling evaluation of a home, using the floorplans, elevations and specifications to estimate an energy load. It addresses the building layout, orientation and fabric (i.e. walls, windows, floors, roofs and ceilings), but does not cover the water or energy use of appliances or energy production of solar panels.

Ratings are based on a unique climate zone where the home is located and are generated using standard assumptions, including occupancy patterns and thermostat settings. The actual energy consumption of a home may vary significantly from the predicted energy load, as the assumptions used in the rating will not match actual usage patterns. For example, the number of occupants and personal heating or cooling preferences will vary.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparing different dwelling designs and to demonstrate that the design meets the energy efficiency requirements in the National Construction Code. Homes that are energy efficient use less energy, are warmer on cool days, cooler on hot days and cost less to run. The higher the star rating the more thermally efficient the dwelling is.

Accredited assessors

To ensure the NatHERS Certificate is of a high quality, always use an accredited or licenced assessor. NatHERS accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

Australian Capital Territory (ACT) licensed assessors may only produce assessments for regulatory purposes using software for which they have a licence endorsement. Licence endorsements can be confirmed on the ACT licensing register

AAOs have specific quality assurance processes in place, and continuing professional development requirements, to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any ongoing training requirements.

Any questions or concerns about this report should be directed to the assessor in the first instance. If the assessor is unable to address these questions or concerns, the AAO specified on the front of this certificate should be contacted.

Disclaimer

The format of the NatHERS Certificate was developed by the NatHERS Administrator. However the content of each individual certificate is entered and created by the assessor to create a NatHERS Certificate. It is the responsibility of the assessor who prepared this certificate to use NatHERS accredited software correctly and follow the NatHERS Technical Notes to produce a NatHERS Certificate.

The predicted annual energy load in this NatHERS Certificate is an estimate based on an assessment of the building by the assessor. It is not a prediction of actual energy use, but may be used to compare how other buildings are likely to perform when used in a similar way.

Information presented in this report relies on a range of standard assumptions (both embedded in NatHERS accredited software and made by the assessor who prepared this report), including assumptions about occupancy, indoor air temperature and local climate.

Not all assumptions that may have been made by the assessor while using the NatHERS accredited software tool are presented in this report and further details or data files may be available from the assessor.

Glossary

Annual energy load	the predicted amount of energy required for heating and cooling, based on standard occupancy assumptions.
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STORM Rating Report

TransactionID: 1416278
Municipality: HEPBURN
Rainfall Station: DAYLESFORD
Address: 17 Smith Street

DAYLESFORD
VIC 3460
Assessor: Alex Slater
Development Type: Residential - Multiunit
Allotment Site (m2): 7,120.00
STORM Rating %: 115

Description	Impervious Area (m2)	Treatment Type	Treatment Area/Volume (m2 or L)	Occupants / Number Of Bedrooms	Treatment %	Tank Water Supply Reliability (%)
North Block Roof	537.24	Rainwater Tank	22,400.00	15	124.20	94.90
Middle West Block Roof	435.65	Rainwater Tank	22,400.00	10	122.60	97.30
Middle East Block Roof	435.65	Rainwater Tank	22,400.00	10	122.60	97.30
South Block Roof	815.60	Rainwater Tank	22,400.00	20	109.30	96.20
East Block Roof	742.65	Rainwater Tank	22,400.00	15	104.40	97.90
Heritage Cottage Roof	94.00	Raingarden 300mm	7.00	0	133.35	0.00

Date Generated: 24-Jul-2022 Program Version: 1.0.0

ATTACHMENT 10.1.13

GMW Ref: PP-22-01113
Doc ID: A4506207

Hepburn Shire Council
Planning Department
shire@hepburn.vic.gov.au

13 October 2022

Dear Sir and/or Madam,

Planning Permit Application - Subdivision (Staged), 31 Townhouses

Application No.	PLN22/0263
Applicant:	Smith Development Partnership Pty Ltd
Location:	17 Smith Street DAYLESFORD V 8894 F 961 Lot 5 Plan 090304

Thank you for your letter and information received 12 September 2022 in accordance with Section 55 of *the Planning and Environment Act 1987.*

Goulburn-Murray Water's (GMW's) areas of interest are surface water and groundwater quality, use and disposal. GMW requires that development proposals do not impact detrimentally on GMW's infrastructure and the flow and quality of surface water and groundwater. Applicants must ensure that any required water supplies are available from an approved source.

Based on the information provided and in accordance with Section 56 (b) of *the Planning and Environment Act 1987*, Goulburn-Murray Water has no objection to this planning permit being granted subject to the following conditions:

1. All works within the subdivision must be done in accordance with EPA Publication 960 "Doing It Right on Subdivisions, Temporary Environmental Protection Measures for Subdivision Construction Sites", September 2004.

2. Each lot must be provided with connection to the reticulated sewerage system in accordance with the requirements of the relevant urban water authority.

3. All stormwater discharged from the site must meet the urban run-off objectives and Standard C25 as specified in Clause 56.07-4 of the Victorian Planning Provisions. All infrastructure and works to manage stormwater must be in accordance with the requirements of the Responsible Authority.

If you require further information please e-mail planning.referrals@gmwater.com.au or contact 1800 013 357.

Yours sincerely

PO Box 165 Tatura Victoria 3616 Australia
reception@gmwater.com.au
1800 013 357
www.gmwater.com.au

ABN. 46 761 336 846

Ranine McKenzie

Ranine McKenzie
STATUTORY PLANNING PARTNER

NCCMA Ref: NCCMA-F-2022-01255
Council Ref: PLN22/0263
Date: 28 September 2022

Julie Lancashire
Statutory Planner
Hepburn Shire Council
PO Box 21,
Daylesford Vic 3460

Dear Julie

Planning Permit Application No:	**PLN22/0263**
Development Description:	**Permit application for staged subdivision and development of 31 townhouses**
Street Address:	**17 Smith Street Daylesford Vic 3460**
Cadastral Location:	**Lot 5 LP90304, Parish of Wombat**
Applicant:	**Smith Development Partnership**

Thank you for your referral under Section 55 of the *Planning and Environment Act, 1987* dated 12 September 2022, and received by North Central Catchment Management Authority (CMA) on 12 September 2022, regarding the above matter.

North Central CMA, pursuant to *Section 56* of the *Planning and Environment Act 1987,* **does not object** to the granting of a permit.

Advice to Applicant / Council

Information available at North Central CMA indicates that the location described above is not subject to flooding from any designated waterway based on a flood level that has a probability of occurrence of 1% in any one year. It would be in your best interest to contact the relevant Local Council regarding the impact of overland flows associated with the local drainage system.

Should you have any queries, please do not hesitate to contact me on **(03) 5440 1896**.
To assist the CMA in handling any enquiries and the supply of further information, please ensure you quote **NCCMA-F-2022-01255** in your correspondence.

Yours sincerely

Owen Hayden
Waterways and Floodplain Officer
Cc: Smith Development Partnership

Information contained in this correspondence is subject to the definitions and disclaimers attached.

ABN 73 937 058 422
628-634 Midland Highway, Huntly
PO Box 18, Huntly Victoria 3551

Telephone 03 5448 7124
Email info@nccma.vic.gov.au
www.nccma.vic.gov.au

www.nccma.vic.gov.au

Attached: Definitions and Disclaimers

Definitions and Disclaimers

1. The area referred to in this letter as the 'proposed development location' is the land parcel(s) that, according to the Authority's assessment, represent(s) the location identified by the applicant. The identification of the 'proposed development location' on the Authority's GIS has been done in good faith and in accordance with the information given to the Authority by the applicant(s) and/or local government authority.
2. While every endeavour has been made by the Authority to identify the proposed development location on its GIS using VicMap Parcel and Address data, the Authority accepts no responsibility for or makes no warranty with regard to the accuracy or naming of this proposed development location according to its official land title description.
3. **AEP** as Annual Exceedance Probability – is the likelihood of occurrence of a flood of given size or larger occurring in any one year. AEP is expressed as a percentage (%) risk and may be expressed as the reciprocal of ARI (Average Recurrence Interval).

   Please note that the 1% probability flood is not the probable maximum flood (PMF). There is always a possibility that a flood larger in height and extent than the 1% probability flood may occur in the future.
4. **ARI** as Average Recurrence Interval - is the likelihood of occurrence, expressed in terms of the long-term average number of years, between flood events as large as or larger than the design flood event. For example, floods with a discharge as large as or larger than the 100-year ARI flood will occur on average once every 100 years.
5. **AHD** as Australian Height Datum - is the adopted national height datum that generally relates to height above mean sea level. Elevation is in metres.
6. No warranty is made as to the accuracy or liability of any studies, estimates, calculations, opinions, conclusions, recommendations (which may change without notice) or other information contained in this letter and, to the maximum extent permitted by law, the Authority disclaims all liability and responsibility for any direct or indirect loss or damage which may be suffered by any recipient or other person through relying on anything contained in or omitted from this letter.
7. This letter has been prepared for the sole use by the party to whom it is addressed and no responsibility is accepted by the Authority with regard to any third party use for the whole or any part of its contents. Neither the whole nor any part of this letter or any reference thereto may be included in any document, circular or statement without the Authority's written approval of the form and context in which it will appear.
8. The flood information provided represents the best estimates based on currently available information. This information is subject to change as new information becomes available and as further studies are carried out.

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628-634 Midland Highway, Huntly
PO Box 18, Huntly Victoria 3551

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Our patron, Her Excellency the Honourable Linda Dessau AC, Governor of Victoria

CFA Fire Prevention and Preparedness
8 Lakeside Drive Burwood East Vic 3151
Email: firesafetyreferrals@cfa.vic.gov.au

CFA Ref: **15000-67705-122716**
Council Ref: **PLN22/0263**

26 September 2022

Town Planner
Hepburn Shire Council
PO Box 21
DAYLESFORD VIC 3460

Dear Town Planner,

CONDITIONAL CONSENT TO GRANT A PERMIT
CERTIFICATION AND COMPLIANCE IS REQUIRED

Application No: PLN22/0263
Applicant: Smith Development Partnership Pty Ltd
Site Name: Multi Lot Subdivision & 31 Townhouses
Address: 17 Smith Street Daylesford

CFA, acting as a Referral Authority pursuant to Section 55 of the Planning and Environment Act does not object to the grant of a permit to Smith Development Partnership Pty Ltd for the subdivision at 17 Smith Street Daylesford subject to the following conditions being attached to any permit which may be issued and a copy of the permit being forwarded to CFA.

– Start of Conditions –

1. **Subdivision plan not to be altered**
   The subdivision as shown on the endorsed plans must not be altered without the consent of CFA.

2. **Hydrants**

   Prior to the issue of a Statement of Compliance under the *Subdivision Act 1988* the following requirements must be met to the satisfaction of the CFA:

   2.1 Above or below ground operable hydrants must be provided. The maximum distance between these hydrants and the rear of all building envelopes (or in the absence of building envelopes, the rear of the lots) must be 120 metres and the hydrants must be no more than 200 metres apart. These distances must be measured around lot boundaries.

   2.2 The hydrants must be identified with marker posts and road reflectors as applicable to the satisfaction of the Country Fire Authority.

Note: CFA's requirements for identification of hydrants are specified in 'Identification of Street Hydrants for Firefighting Purposes' available under publications on the CFA website (www.cfa.vic.gov.au).

3. Roads

Roads must be constructed to a standard so that they are accessible in all weather conditions and capable of accommodating a vehicle of 15 tonnes for the trafficable road width.

3.1 The average grade must be no more than 1 in 7 (14.4%) (8.1 degrees) with a maximum of no more than 1 in 5 (20%) (11.3 degrees) for no more than 50 meters. Dips must have no more than a 1 in 8 (12%) (7.1 degree) entry and exit angle.

3.2 Curves must have a minimum inner radius of 10 metres.

3.3 Have a minimum trafficable width of 3.5 metres and be clear of encroachments for at least 0.5 metres on each side and 4 metres above the access way.

3.4 Roads more than 60m in length from the nearest intersection must have a turning circle with a minimum radius of 8m (including roll-over kerbs if they are provided) T or Y heads of dimensions specified by the CFA may be used as alternatives.

– End of Conditions –

Additional Comments

CFA does not consent to the Certification of the Plan of Subdivision nor Statement of Compliance for Subdivision at this stage.

If you wish to discuss this matter, please do not hesitate to contact Anthony Kacunic, Fire Safety Officer, on 0429 105 701.

Yours sincerely

Mark Holland
Service Delivery Team Leader
COMMUNITY PREPAREDNESS

cc: naomi@nicheplanningstudio.com.au

TOWN PLANNING REFERRALS

ENGINEERING CONDITIONS

Application No	:	PLN22 - 0263
File	:	102200P
Property No	:	102200
Address of Land	:	17 Smith Street, Daylesford
Description	:	Eco Village

1. Stormwater Drainage

- Prior to Statement of Compliance, all underground and surface drainage works that are considered necessary by the Responsible Authority shall be constructed in accordance with professionally prepared plans and computations to be provided by the developer and approved by the Responsible Authority prior to the commencement of construction. The drainage works shall include the provision of an onsite stormwater detention system designed to ensure that the post development runoff does not exceed pre development runoff from the development. The drainage works shall be installed to transport stormwater runoff from the subject land and surrounding land and/or adjoining road(s) to an approved point of discharge. No concentrated stormwater shall drain or discharge from the land to adjoining properties. The drainage system must be constructed and completed prior to the issue of the statement of compliance.

  Return period for a Detention system is to be 20% AEP where there is overland escape path and 1% AEP if the failure of the detention system will cause property damage or inundation of freehold titles.

- All allotments shall be provided with drainage outfall (house connection) connected to the underground drainage system to the satisfaction of the Responsible Authority. House drainage connection shall be constructed in accordance with Infrastructure Design Manual Standard Drawing SD 510 or SD 505 with hot dip galvanised kerb adaptors.

- Stormwater shall be connected to the legal point of discharge to the satisfaction of the Responsible Authority.

- Prior to Statement of Compliance, all drainage easements deemed necessary by the Responsible Authority must be provided by the Permit Holder to protect and facilitate existing and future drainage infrastructure. Easements shall also be provided through properties between the development site and the nominated legal point of discharge. Minimum width of drainage easements shall be 2.0m for stormwater.

- A new stormwater easement and pipe shall be created/constructed along the Eastern boundary for the purpose of draining new lots and overland flow.

- Drainage easements shall be created to allow for gravity stormwater drainage to the satisfaction of Responsible Authority.

- If the proposed stormwater drainage system includes any works to be undertaken during house construction stage, the Owner must enter into a Section 173 Agreement with the responsible Authority under section 173 and 174 of the Planning and Environment Act,

Engineering Services – Hepburn Shire Council PO Box 21, Daylesford VIC 3460
Phone: (03) 5348 1633 Fax: (03) 5348 1304

requiring that such works shall be constructed and completed during house/building construction stage.

- The Owner must pay all of the costs and expenses including Responsible Authority's lawyers checking fees in relation to preparation, execution, registration, enforcement and cancellation of this Agreement including costs for obtaining necessary consents if required by the Land Titles Office before registration of this Agreement.

- It is the responsibility of the developer, to prepare a Stormwater Strategy Plan to identify and record the manner by which the quantity and quality of stormwater shall be managed for the catchment. The stormwater strategy plan must demonstrate how to avoid adverse impact on neighbouring properties and surrounding road network due to the development. Drainage design plans and legal point of discharge will not be considered until the drainage strategy has been established.
- Where stormwater detention is proposed on public land, including road reserve, the detention system shall be designed in such a way as to minimise the ongoing maintenance costs and maximise the public benefit of the area. No area used for stormwater detention shall be considered for the purposes of public open space.
- It is the responsibility of the developer to meet the requirements for stormwater quality as stated in the BPEM (Best Practice Environmental Management) Guidelines
  Note: Additional information for requirements can be found at https://www.epa.vic.gov.au/business-and-industry/guidelines/water-guidance/urban-stormwater-bpemg

2. Access

- Vehicle access/crossing to the land is to be located, constructed and maintained to the satisfaction of the Responsible Authority.

- Prior to statement of compliance the following will be constructed for approval.

  - Vehicle access/crossing to all lots is to be constructed in accordance with Infrastructure Design Manual Standard Drawing SD 240 or to approval of Responsible Authority.

  - Vehicle access/crossing to the land shall be located so that adequate sight distance is achieved to comply with Australian Standard AS2890.1:2004 Section 3.2.4 and as specified in Ausroad's Guide to Road Design Part 4A Section 3.4 - 'Sight Distance at Property Entrance'.

  - Minimum 10.0m and 9.0m clearance shall be maintained from any road intersection and between adjacent crossovers respectively.

  - Any proposed vehicular crossing shall have satisfactory clearance to any side-entry pit, power or Telecommunications pole, manhole cover or marker, or street tree. Any relocation, alteration or replacement required shall be in accordance with the requirements of the relevant Authority and shall be at the applicant's expense.

- The final location and construction of the vehicle crossing is to be approved by the Responsible Authority via a "Consent to Work within the Road Reserve", prior to undertaking of works, unless shown on certified plans and constructed prior to statement of compliance.

- All common property vehicle entry to and egress from the property shall be in a forward motion. Vehicle turn around must be provided within the property.

Prior to construction a plan showing turning circles shall be submitted to the Responsible Authority for approval.

3. All costs incurred in complying with the above conditions shall be borne by the permit holder.

4. Plan Checking & Supervision Fee

- In accordance with the Subdivision Act 1989, Responsible Authority requires the following fees for works undertaken on this Subdivision.
    - Plan checking fee of 0.75% of the value of works
    - Supervision fee of 2.50% of the value of works

Prepared by: Ashley Goad – Engineering Development Officer
Date: 23/12/2022

[redacted]

As a concerned local, I write to object about the following three Planning Permit applications.

1. **PLN220263:** 31 townhouses within the 17 Smith St site.
2. **PA003530:** amendment to 9 Raglan St (from 22 lots to 20)
3. **PLN 22/017:** 4719 Midland Highway

I object because these projects all contribute to urban sprawl over some of the most fertile and valuable soils in Australia and as we can see from gaps appearing in the supermarket shelves, the need for this land to be keep as productive land and open space is becoming more obvious. I object also because it is a water recharge area that has not been properly recognised in the applications. This is a major oversight. Water processing is a cost that Government can avoid by better protection of water recharge areas as valuable and useful places. The area contributes to the Loddon River which is not in good condition. The safest thing for the present and future populations of Hepburn that the Hepburn Council to do is to disallow these projects, instead marking out Daylesford as a leader sustainability by incentivising stable population, local food production, recycling, reverse garbage, regenerative farming and small scale manufacturing of repairable items, for example. The reasons unsustainable trends are supported by councils are well known but these reasons must be overcome if we are to survive as a society.

If Council decides to make decisions that are the easiest in the short term but entail more suffering in the one term, then at the very least, all these projects should have the following:

1. A minimum of 35% garden coverage,

2. No building over drainage lines,

   a. design around them & enable natural above ground flow

   b. revegetate with location appropriate native plants

3. Swales and landscaping to encourage infiltration; avoid pipes that prevent water wetting the ground

4. No kerbs within developments to promote passive irrigation off roads

5. Water-sensitive urban design in flatter areas of site to capture "first flush”

6. Porous ground covers

7. Ban pesticides & herbicides to reduce toxins in runoff water

8. Design lifestyle guidelines that support, not prohibit, rural life: Allow visibility of garden sheds, water tanks, machinery, trailers, caravans.

9. Muted solar lighting (not LED)

10. Developer contribute to new fire truck & station. The increase in population as a result of these developments will not be serviced adequately by existing fire fighting vehicles.

[redacted]

Attn: Planning Department: Rick Traficante

Dear council,

I am writing to express my deep concern and frustration regarding the construction work that is currently taking place over my back fence with regard to the housing development at 17 Smith st. I wish to object to other applications by the same developer on the grounds my right to peaceful enjoyment of my home will be further compromised through increased construction.

As a resident of this town, I have been living here for many years, and I have never experienced such stress and disturbance in my daily life.
The ongoing construction work is causing significant disruption to my daily routine, making it almost impossible to carry out my daily activities peacefully. The loud noises, vibrations, and dust that emanate from the site have become unbearable and are affecting my mental and physical health. I am constantly feeling anxious and stressed due to the never-ending noise and disturbance that the construction work brings to my doorstep.

Moreover, the safety of the residents in the area is at risk due to the heavy machinery, lorries, and construction materials that are being transported on Smith Street. The increased traffic has created a hazardous environment, making it challenging for pedestrians to move around freely, especially the elderly, and children from the two schools on Smith Street. This will only increase as the whole precinct gets developed.

Please consider the impact these permits will have on the people living in the area.
I urge you to deny these permits and put safety measures in place to minimize the noise and disturbance levels currently being experienced from the granting of the 17 Smith Street application.

There are also the issues of water, traffic and lack of infrastructure regarding this new estate development.

Yours Sincerely,

[redacted]

8 March 2023

Dear Council,

Please accept this document as a formal objection to the below:

PLN220263,
PA003530,
PLN 22/017

In relation to

29 Smith St
17 Smith St
9 Raglan St
4719 Midland Highway

WATER PURITY

- My primary objection is the environmental unsuitability of this site for development, due to the zoning & failings of Planning Scheme to provide critical protection to water quality.

- While the western tract of 17 Smith St is arguably more suitable for housing, the eastern portion extending through 9 Raglan & into 4719 Midland are not.

- This high-quality fertile soil is very porous, and an important catchment where the water table is high & has an important recharge function.

- The overland natural drainage lines are origin tributaries to the Loddon River. It needs protection not development. Yet, zoning has been predetermined, any development must have environmental protection standards enacted.

A main issue is the threat to water purity.

- Can Council make determinations on Stormwater Management when it does not employ a hydrologist or water engineer?

In the instance of the 17 Smith St application, the community of objectors were advised by a water engineer who analysed the developer's submitted Stormwater Strategy. He found it inadequate and lacking on many counts, nonetheless council had granted the permit. Experts were ignored.

Many more questions arise from this:

- How will Council enact Stormwater Management to protect the pristine purity of our water & waterways?
- Show the community that you have adjusted the developer's submitted plans to deal with and acknowledge the depth of the water table.
- Can you, as the responsible authority, assess merit of submitted Stormwater Management Report from an Integrated Water Management perspective, without an experienced water engineer?
- How can you ensure best practices of Integrated Water Management (IWM) is incorporated in the subdivision & consequent designs, as the application does not include the required Planning Scheme Landscaping Report?

RECOMMENDATION

1. Hire a water engineer as consultant in the project, who is experienced in IWM matters.
2. Document the high-water table in plans after first identifying it via website "Visualising Victoria's Groundwater " https://www.vvg.org.au
3. Demand the Landscaping plans be submitted as Planning Scheme requires, prior to application being granted, which has community viewing.

These are serious concerns and I am sure we all share the common desire to protect what is precious about Daylesford – I will be outlining my objections at a councillor briefing session.

Many thanks for your consideration.

Kind regards,

[redacted]

Objection to permit applications:
PLN220263
PA003530
PLN 22/017

Dear Council,

I object to these applications as they stand, and recommend ways to bring them into alignment with the values of our rural town.

But firstly, when assessing permits our council must look at a range of factors and ask:

Do we actually need so many new houses, are they relevant to our population & can the town infrastructure & services cope?

- more houses does not guarantee affordability. (Please see report by local economist Karl Fitzgerald. He disproved the myth that housing supply trickles down into affordability.)

https://www.prosper.org.au/wp-content/uploads/2022/07/Staged-Releases-Prosper-Australia-web22.pdf

- with total subdivisions now in play to be serviced by Daylesford, we are looking at a potential population increase of 20%, I can't see how you prepared for the increased pressure on services and infrastructure.

Is Daylesford and are these sites suitable for such over/infill development?

1. the Central Highlands Growth Plan (2014) cites Daylesford is **not a growth area**
2. the town is of **high bush fire risk**
3. has **minimal public transport**
4. is popular due to its **distinctive historic and rural nature**
5. is in an **important water catchment** and recharge zone
6. has **extremely fertile soil** in a diminishing food bowl
7. has a **high ageing population**
8. has a **high low income** earning population
9. has **poor housing affordability**

If council, the developer and their architects mean what they say when they
- acknowledge dja dja Wurrung country,
- claim to want to protect the unique features of Daylesford's rural historic nature,
- talk of 'sustainable' planning and design,

then there are changes they could make to the permit applications to ensure they respect these intentions which add value to the town rather than detract from it.

Recommended changes all permits (general)

1. Consider the natural drainage pattern and preserve all drainage lines
    a. prevent building over them

   b. design around them all & enable natural above ground flow
   c. revegetate with location appropriate native plants
2. Insist upon 5% total area as actual open space, and not cash contribution
3. Require 10-20% homes actually affordable for low income residents.(define affordable)
4. Ensure minimal 35% garden cover
5. Provide wider roads, with footpaths on both sides
6. Use permeable materials for roadways, sidewalks, and driveways that allow water to infiltrate the soil and reduce runoff.
7. Incorporate swales and landscaping to encourage infiltration
8. Avoid concrete kerbs to promote passive irrigation off roads
9. Streetscape Water Sensitive Urban Designs in flatter areas to capture first flush
10. Construct rain gardens and bioswales in open space & areas of the development to capture and filter pollutants, reducing the amount of water that flows downstream.

Recommended changes to developer's "design/lifestyle guidelines"

1. Support rural life in design /lifestyle guidelines eg contrary to current developer guidelines, choose to allow visibility of garden sheds, water tanks, machinery, trailers caravans etc atm their design guidelines are very citicentric
2. Daylesford has cold winters and frequent power blackouts, so unsuitable for sole dependence on electricity.
3. Preserve visual amenity by minimising roof glare & incorporating dimmed solar powered street lighting (rather than blinding LED)
4. Retain acoustic amenity by encouraging quiet slow gardening
5. Encourage and educate environmentally friendly methods of gardening to reduce toxins in runoff water & protect waterways
6. Choose reclaimed wood seating over uncomfortable concrete which is both too hot and too cold.
7. Incorporate Electromagnetic Radiation (EMR) protection in home design

Recommended changes to specific permits:

1.PLN 220263: 31 townhouses in 17 Smith st (ecovillage)

1. Require maximum parking spaces as per Planning Scheme dictates (ie deny waiver request)
2. Provide enough parking in eco villages for visitors, carers & delivery vans, developers cannot assume, as they have, that owners will ride bikes as Daylesford is too hilly, wet & cold & full of elders.
3. Provide onsite parking for smaller social houses
4. Provide for single story homes for the ageing & infirm who find stairs challenging
5. Provide for alternatives to electric for heating due to Daylesford's cold climate and frequent power outages
6. Allow fenced yards for dogs

2. PLN22/017: 4719 Midland Highway

1. Investigate location of historic Defiance Tunnel and avoid building over

2. Design away from flood zones, determine where watertable is
3. Provide another exit road into Midland highway, ½ way between suggested and roundabout as too densely populated posing risk in a fire
4. Create wider verges at Wombat Park border for vegetated buffer between farm land & residential zone. Farmers have the legal right to shoot domestic dogs if they trespass onto farmland. Protection buffers needed between incompatible land uses to prevent tension.
5. To protect cedars, prevent further subdivision of large blocks and ensure build is away from permissible bushfire removal zones.
6. Encourage multiple occupancy for tiny homes, (not air bnns) on larger lots
7. Encourage Community Land Trust ownership of larger lots

3. PA003530: 9 Raglan st

1. Preserve historic house as potential community centre / milk bar
2. Redesign street layout so as to not build on the northern drainage line. (leading into 17&29 Smith st)
3. Redesign layout so as to front homes to landscaped featured drainage line walkway on 4719 midland hwy

Suggested Developer Contributions

1. Consult djarra people on naming of streets
2. Make a contribution for a new fire truck & station as the increase in population resulting from these developments will not be adequately serviced by current fire fighting vehicles
3. Make a contribution to wildlife shelters due to displacement of the resident kangaroo mob.

In addition I request a councillor briefing session
1. for the whole development now referred to as 'Middleton Fields' Master Plan

2. where the format be more interactive with
a) more than 3 minutes to speak,
b) possibility to question planners, councillors and developers

And a general request

3. that prior to land being zoned for non-agricultural purposes, hydrological and soil quality assessments must be conducted to determine suitability of land for development

Thank you for helping keep Daylesford special for this and future generations.

Sincerely

[redacted]

[redacted]

View from Midland Highway : precious fertile red soil being covered in bitumen on17 Smith st.

Sunday March 5th 2023

Dear Hepburn Shire Council,

I am writing to express my strong objection to the proposed planning permits **PLN220263, PA003530, PLN 22/017**.

As a resident of Smith Street, I am deeply concerned about the impact that these developments will have on the peaceful enjoyment of my property and those of my neighbors and wider community.

Furthermore, I have observed that the developers have repeatedly disregarded no standing zones on Smith Street, putting the safety of school children, bus drivers, and parents at risk. The developers have also shown blatant disregard for laws concerning noise and dust pollution, and the council has been unable to police their belligerent behavior. This has had and continues to have a serious impact on my heath and wellbeing and the health and wellbeing of my child and that of my neghbours.

If these proposals are allowed to move forward, our community stands the risk of being taken advantage of by uncaring developers who say all the right things but whose actions speak louder than their words.

In addition to these concerns, the proposed development does not fit with the character of our town and is not compliant with important aspects of our planning scheme. Daylesford is not a designated growth town due to its location in bushfire-prone forest, and the scale proposed for this development is not suited to the town. Further, there is no substantial public transport network to support such growth.

Thank you for your attention to this matter

Sincerely

[redacted]

10.2 PLN 22/0176 - STAGED MULTI LOT SUBDIVISION AND ASSOCIATED WORKS, CREATION OF ACCESS TO A ROAD IN A TRANSPORT ZONE 2 AND REMOVAL OF VEGETATION - 4719 MIDLAND HIGHWAY DAYLESFORD
ACTING DIRECTOR COMMUNITY AND DEVELOPMENT

In providing this advice to Council as the Statutory Planner, I Julie Lancashire have no interests to disclose in this report.

ATTACHMENTS

1. PLN 22/0176 - Plans - Concept Plan - 4719 Midland Highway, Daylesford [**10.2.1** - 1 page]
2. PLN 22/0176 - Plans - Feature Survey - 4719 Midland Highway, Daylesford [**10.2.2** - 2 pages]
3. PLN 22/0176 - Plans - Overall Master Plan - 4719 Midland Highway, Daylesford [**10.2.3** - 1 page]
4. PLN 22/0176 - Plans - Public Openspace Plan - 4719 Midland Highway, Daylesford [**10.2.4** - 1 page]
5. PLN 22/0176 - Reports - Traffic Management Report - 4719 Midland Highway, Daylesford [**10.2.5** - 31 pages]
6. PLN 22/0176 - Reports - Bushfire Management Report - 4719 Midland Highway, Daylesford [**10.2.6** - 35 pages]
7. PLN 22/0176 - Reports - Clause 56 ResCode Assessment - 4719 Midland Highway, Daylesford [**10.2.7** - 31 pages]
8. PLN 22/0176 - Reports - Stormwater Strategy Report - 4719 Midland Highway, Daylesford [**10.2.8** - 12 pages]
9. PLN 22/0176 - Reports - Servicing Report - 4719 Midland Highway, Daylesford [**10.2.9** - 9 pages]
10. PLN 22/0176 - Reports - Ecology Report - 4719 Midland Highway, Daylesford [**10.2.10** - 38 pages]
11. PLN 22/0176 - Reports - Heritage Report - 4719 Midland Highway, Daylesford [**10.2.11** - 14 pages]
12. PLN 22/0176 - Reports - Cultural Heritage - 4719 Midland Highway, Daylesford [**10.2.12** - 2 pages]
13. PLN 22/0176 - Reports - Arborist Report - 4719 Midland Highway, Daylesford [**10.2.13** - 84 pages]
14. PLN 22/0176 - Referral Response - Councils Engineering Department - 4719 Midland Highway, Daylesford [**10.2.14** - 6 pages]
15. PLN 22/0176 - Referral Response - Department of Transport - 4719 Midland Highway, Daylesford [**10.2.15** - 2 pages]
16. PLN 22/0176 - Referral Response - Councils Biodiversity Department - 4719 Midland Highway, Daylesford [**10.2.16** - 1 page]
17. PLN 22/0176 - Referral Response - Goulburn-Murray Water - 4719 Midland Highway, Daylesford [**10.2.17** - 2 pages]
18. PLN 22/0176 - Referral Response - Central Highlands Water - 4719 Midland Highway, Daylesford [**10.2.18** - 1 page]
19. PLN 22/0176 - Referral Response - Country Fire Authority - 4719 Midland Highway, Daylesford [**10.2.19** - 2 pages]

20. PLN 22/0176 - Referral Response - Powercor - 4719 Midland Highway, Daylesford [**10.2.20** - 2 pages]
21. PLN 22/0176 - Referral Response - North Central Catchment Management Authority - 4719 Midland Highway, Daylesford [**10.2.21** - 2 pages]
22. PLN 22/0176 - Referral Response - DTP - 4719 Midland Highway, Daylesford [**10.2.22** - 2 pages]
23. PLN 22/0176 - Objections - Redacted Objections - 4719 Midland Highway, Daylesford [**10.2.23** - 23 pages]

EXECUTIVE SUMMARY

The subject site forms part of the broader Middleton Field Estate where planning permits have already been issued for multi lot subdivision at both 17 Smith Street and 29 Smith Street. A planning permit application for a medium density development and further subdivision of three super lots at 17 Smith Street is also under consideration by Council along with a subdivision of 9 Raglan Street.

Ultimately the subject site forms part of this broader development that will be connected by a road and path network.

Planning permission is sought for an eight-lot staged subdivision, access to a road in Transport Zone and the removal of vegetation. The removal of two cedar trees on the subject site is required to facilitate access to the site. It is not proposed to remove any other vegetation and no impact is expected to the trees in the Avenue of Honour along the Midland Highway. The subdivision comprises seven lots and a balance lot that will be subject to a future application for further subdivision or the development of medium density housing product. The concept plan shows a road along the northern boundary, providing a separation to the farming land to the north and this road will also extend west across the north/south overland flow path to provide connectivity to 9 Raglan Street.

Strategically the site is included within the township boundary and identified for future residential development. Middleton Fields provides for a diverse range of lot and housing product.

It should be noted that the property address details have recently changed and the subject site is now known as 4723 Midland Highway Daylesford (formerly 4719 Midland Highway Daylesford), Lot 2 on TP826164.

OFFICER'S RECOMMENDATION

That Council, having complied with the relevant sections of the Planning and Environment Act 1987, issues a Notice of Decision to Issue a Planning Permit in respect of Application No PLN22/0176 for a staged multi lot subdivision and associated works and roadworks, subdivision of land adjacent to Transport Zone 2, creation of access to a road in a Transport Zone 2 and removal of vegetation in accordance with the endorsed plans at 4719 Midland Highway, Daylesford (Lot 3 TP826164) subject to the following conditions:

1. Before the development starts, amended plans (and documents) to the satisfaction of the Responsible Authority must be submitted to and approved by the Responsible Authority. When approved, the plans will be endorsed and will then form part of the permit. The plans must be drawn to scale with dimensions and three copies must be provided. The plans must be generally in accordance with the plan titled Concept Lot Layout Plan (dated 28 November 2022) but modified to include:

a) The provision of building envelopes on each of the lots having an abuttal to Midland Highway and Raglan Street.
b) The provision of a footpath in the north south drainage corridor.
c) A note stating Condition 3a will be completed prior to the issue of the Statement of Compliance for Stage 3.

2. Before the plan of subdivision is certified for any stage of the subdivision under the Subdivision Act 1988, a detailed landscape plan. for all public open space areas, including streetscapes, parklands, water retention areas, buffer zones, service corridors and environmental reserves must be submitted to and approved by the Responsible Authority. When approved, the plan will be endorsed and will then form part of the permit. The plan must be drawn to scale with dimensions and three copies must be provided. The plan must show, as relevant, all to the satisfaction of the Responsible Authority:

a) The location and proposed materials of a pathway in the overland flow path and other pathway connections to show a connected pedestrian/cycle network.
b) All new plantings including their layout to be provided in any public open space area including streetscapes, parklands, water retention areas, buffer zones, service corridors, and environmental reserves.
c) A detailed planting schedule of all proposed trees, shrubs and groundcovers, including botanical names, common names, pot sizes, sizes at maturity and quantities of each plant. All species selected must be to the satisfaction of the Responsible Authority.
d) Details regarding specific planting techniques to be undertaken, such as planting methodology, root barriers, fertilizer, or any other requirements.
e) The proposed layout, materials and finishes of paths, areas of pavement, playgrounds, play items, structures and street and park furniture.
f) Detailed planting and construction drawings including site contours and any proposed changes to existing levels including any structural elements such as retaining walls, details of drainage infrastructure, utility services, irrigation and water supply infrastructure.

g) Detailed construction drawings of any buildings or structures within any public open space areas including additional supporting information such as certified structural design computations

h) Details for the design, supply and installation of playground equipment.

i) The removal of all existing disused structures, foundations, pipelines or stockpiles and the eradication of weeds from the land.

j) Mechanisms for the exclusion of vehicles from reserve areas.

k) Location and details of public lighting. Any proposed public lighting is to be provided in line with Australian Standards AS/NZS 1158.3.1:2005 – Lighting for roads and public spaces and must not consist of non-standard lighting.

l) Fencing details for all allotment boundary fencing abutting a reserve to be transferred to Council.

m) Details of irrigation infrastructure including metering, backflow prevention devices, pipe diameter and materials, valve details etc;

n) Details of services within landscaped areas, including underground service assets;

o) The location and details of bicycle parking facilities;

p) Detailed construction drawings of any buildings or structures (including paths) within any public open space areas and certified structural design computations where relevant. All buildings and structures are to be anti-graffiti coated unless otherwise agreed by the Responsible Authority and are to comply with the requirements of the relevant disability and discrimination legislation. Paths, bridges and boardwalks must be designed so as to be above the 1:10 year flood level and pedestrian & vehicular bridges across any waterway must be above the 1:100 year flood level.

3. Prior to the approval of detailed engineering plans and certification of a plan of subdivision, a geotechnical assessment must be completed and endorsed to the satisfaction of the Responsible Authority to determine if the shafts associated with the Defiance Tunnel will have any detrimental impacts upon the development including but not limited to the location of services.

4. The development as shown on the endorsed plans must not be altered or modified unless otherwise agreed in writing by the Responsible Authority.

Obligations and Agreements

5. Before the plan of subdivision is certified for any stage of the subdivision under the Subdivision Act 1988, the owner must enter into an agreement with the Responsible Authority made pursuant to Section 173 of the Planning and Environment Act 1987 and the agreement must be registered on title to the land under Section 181 of the Act. The agreement must provide for:

a) *Building envelopes on all lots with an abuttal to Midland Highway to protect the existing trees (Cedar trees) along that alignment.*
b) *Inclusion of the Middleton Field Design Guidelines.*

The owner must pay the reasonable costs for the preparation, execution and registration of the Section 173 Agreement.

6. Before the plan of subdivision is certified for any stage of the subdivision under the Subdivision Act 1988, Housing Design Guidelines must be submitted to and approved by the Responsible Authority. Once approved, the Housing Design Guidelines must be secured through an agreement made under Section 173 of the Planning and Environment Act 1987 that is registered on the title to the land. The Housing Design Guidelines must apply to all lots, and must include the following information to the satisfaction of the Responsible Authority:

a) *Building envelopes for all Standard, Sloping and Corner lots which address building position, cut and fill (retaining wall height) and vegetation protection as required.*
b) *Sustainable Housing Design Guidelines for all conventional lots (eg excluding superlots). The Sustainable Housing Design Guidelines must be generally in accordance with the draft Middleton Field Design Guidelines circulated on 19 February 2021 as part of the Priority Projects Standing Advisory Committee process but modified to address all conventional lots and to include:*
    i) *A Table of Contents*
    ii) *Illustrations and diagrams to demonstrate how the guidelines are to be applied on the Standard, Sloping and Corner lots in accordance with approved building envelopes.*
    iii) *A requirement for the provision of double fronted dwellings adjacent to the north/south overland flow path and adjacent to the Midland Highway.*
    iv) *A requirement for visually permeable fencing adjacent to the north/south overland flow path and Midland Highway.*
    v) *Landscape guidelines/concepts for lots.*
    vi) *Details of how the Design Guidelines will be implemented and manged to Council's satisfaction.*
    vii) *Replace the term Design Approval Panel with the term Design Advisory Panel.*
c) *A restriction on the maximum building height of future developments on the superlots, specifying a maximum building height of 9 metres, and containing no more than two storeys at any point.*

Requirements other than those identified in this condition may be included within the Housing Design Guidelines however any additional requirements

must not prevent or impede the use of sustainable energy technologies such as visible solar energy collectors on roofs or water tanks and must be to the satisfaction of the Responsible Authority.

Engineering Conditions

7. Prior to Statement of Compliance, all underground and surface drainage works that are considered necessary by the Responsible Authority shall be constructed in accordance with professionally prepared plans and computations to be provided by the developer and approved by the Responsible Authority prior to the commencement of construction. The drainage works shall include the provision of an onsite stormwater detention system designed to ensure that the post development runoff does not exceed pre-development runoff from the development. The drainage works shall be installed to transport stormwater runoff from the subject land and surrounding land and/or adjoining road(s) to an approved point of discharge. No concentrated stormwater shall drain or discharge from the land to adjoining properties. The drainage system must be constructed and completed prior to the issue of the statement of compliance.

Return period for a Detention system is to be 20% AEP where there is overland escape path and 1% AEP if the failure of the detention system will cause property damage or inundation of freehold titles.

8. All allotments shall be provided with drainage outfall (house connection) connected to the underground drainage system to the satisfaction of the Responsible Authority. House drainage connection shall be constructed in accordance with Infrastructure Design Manual Standard Drawing SD 510 or SD 505 with hot dip galvanised kerb adaptors.

9. Stormwater shall be connected to the legal point of discharge to the satisfaction of the Responsible Authority.

10. Prior to Statement of Compliance, all drainage easements deemed necessary by the Responsible Authority must be provided by the permit holder to protect and facilitate existing and future drainage infrastructure. Easements shall also be provided through properties between the development site and the nominated legal point of discharge. Minimum width of drainage easements shall be 2.0m for stormwater.

11. A new stormwater easement and pipe shall be created/constructed along the Eastern boundary for the purpose of draining new lots and overland flow.

12. Drainage easements shall be created to allow for gravity stormwater drainage to the satisfaction of Responsible Authority.

13. If the proposed stormwater drainage system includes any works to be undertaken during house construction stage, the Owner must enter into a Section 173 Agreement with the responsible Authority under section 173 and 174 of the Planning and Environment Act, requiring that such works shall be constructed and completed during house/building construction stage.

14. The Owner must pay all the costs and expenses including Responsible Authority's lawyers checking fees in relation to preparation, execution, registration, enforcement and cancellation of this Agreement including costs for obtaining necessary consents if required by the Land Titles Office before registration of this Agreement.

15. It is the responsibility of the developer, to prepare a Stormwater Strategy Plan to identify and record the manner by which the quantity and quality of stormwater shall be managed for the catchment. The stormwater strategy plan must demonstrate how to avoid adverse impact on neighbouring properties and surrounding road network due to the development. Drainage design plans and legal point of discharge will not be considered until the drainage strategy has been established.

16. Where stormwater detention is proposed on public land, including road reserve, the detention system shall be designed in such a way as to minimise the ongoing maintenance costs and maximise the public benefit of the area. No area used for stormwater detention shall be considered for the purposes of public open space.

17. It is the responsibility of the developer to meet the requirements for stormwater quality as stated in the BPEM (Best Practice Environmental Management) Guidelines.

18. All Roads and drainage designs and constructions shall be based on sound engineering practice following the general principles of The Planning Scheme, the Austroads Guidelines, the Co-ordination of Streetworks Code of Practice, Relevant Australian Standards, VicRoads Road Design Guidelines, Infrastructure Design Manual [IDM] and to the satisfaction of Responsible Authority.

19. Professionally prepared plans are to be submitted to the Responsible Authority for approval prior to construction.

20. A Traffic and Pedestrian Impact study shall be conducted for the new intersection to the satisfaction of the Responsible Authority.

21. All recommendations from the Traffic and Pedestrian Impact study, in particular provision for turning lanes, shall be implemented unless agreed to by the Responsible Authority.

22. New roads shall include provisions for traffic calming in accordance with section 12.6 of IDM and to the satisfaction of the responsible authority.

23. All internal roads within the development shall be in accordance with 'Table 2 – Urban Road / Street Characteristics' of IDM.

24. Minimum width of the road reserve shall be in accordance with 'Table 2 – Urban Road / Street Characteristics' of IDM.

25. The road pavement at a minimum, shall include

- *200mm compacted depth class 3, 20mm FCR sub-base and 100mm compacted depth class 2, 20mm FCR base pavement.*
- *2 coat spray seal, 10mm primer seal/7mm rubberised final seal, or 40mm Type H, 10mm asphalt*
- *Kerb and channel*
- *1.5m wide concrete footpaths*
- *Court Bowls must have a minimum radius of 12.5m and asphalt wearing course*

26. All no through traffic roads must terminate with a court bowl.

27. Unless stated otherwise by Regional Roads Victoria, kerb and channel shall extend along the frontage of the development at Raglan Street to prevent unauthorised parking. Plans for works on arterial roads shall be approved by Regional Roads Victoria and Council.

28. The Supervising Consulting Engineer shall provide to Council a report of hold points and inspections for the construction and verification that the roads and drains have been designed and constructed in compliance with the above standards, by providing a list verifying the results of all tests undertaken and corresponding results. The minimum tests required to be provided to the Responsible Authority are:

- *Road Sub-grade (Proof Roll)*
- *Pavement sub-base and base (density test and proof roll)*
- *Pavement prior to sealing or asphalt application*
- *Drainage trench and bedding*
- *Drainage infrastructure prior to backfill*
- *Drainage pit*

29. Vehicle access/crossing to the land is to be located, constructed and maintained to the satisfaction of the Responsible Authority.

30. Prior to statement of compliance the following will be constructed for approval.

a) Vehicle access/crossing to all lots is to be constructed in accordance with Infrastructure Design Manual Standard Drawing SD 240 or to approval of Responsible Authority.
b) Vehicle access/crossing to the land shall be located so that adequate sight distance is achieved to comply with Australian Standard AS2890.1:2004 Section 3.2.4 and as specified in Austroad's Guide to Road Design Part 4A Section 3.4 - 'Sight Distance at Property Entrance'.
c) Minimum 10.0m and 9.0m clearance shall be maintained from any road intersection and between adjacent crossovers respectively.
d) Any proposed vehicular crossing shall have satisfactory clearance to any side-entry pit, power or Telecommunications pole, manhole cover or marker, or street tree. Any relocation, alteration or replacement required shall be in accordance with the requirements of the relevant Authority and shall be at the applicant's expense.

31. The final location and construction of the vehicle crossing is to be approved by the Responsible Authority via a "Consent to Work within the Road Reserve", prior to undertaking of works, unless shown on certified plans and constructed prior to statement of compliance.

32. All footpaths shall be designed and constructed in accordance with the relevant Australian Standards, IDM and to the satisfaction of the Responsible Authority.

33. Minimum width of the footpaths shall be 1.5m and are to be constructed in accordance with IDM Standard Drawings SD 205 – Typical Footpath Detail.

34. Footpaths shall be provided along one side of newly created roads within the development site and connect to the existing Council footpath network to the satisfaction of Responsible Authority.

35. A new footpath connection shall be constructed from the development along the north side of Raglan Street to the existing footpath network at the corner of Smith and Reglan Streets.

36. Prior to construction, the Developer is to prepare and submit a landscaping plan for road reserves and other open spaces to the satisfaction of Responsible Authority for review and approval. These plans are to comply with the Code of

Practice for Management of Infrastructure in Road Reserves and shall provide following information:

a) Plant selection, layout and planting density
b) Landscaping design intent

37. Street tree planting shall be designed to meet approximately 40% canopy coverage of new roads and must be selected and planted by a qualified horticulturist / arborist.

38. The developer shall prepare an arborist report for all street trees within the construction zone

39. The developer shall implement a construction plan showing how existing street trees shall be protected during construction works.

40. Any existing street trees must be bonded for a period of 24 months at a value determined by a registered arborist. All new landscaping shall be bonded for a period of 24 months at minimum value of $400 per tree.

41. Where a lot has significant cross fall, retaining walls and associated cut and fill shall be constructed along the lot boundary line including provisions for boundary fencing.

42. All structural retaining walls shall have an engineering design and approval.

43. Appropriate signage and linemarking shall be provided to the satisfaction of the Responsible Authority

44. Energy efficient LED street lighting shall be provided in accordance with the current issue of Australian standard AS/ANZ 1158 – Lighting for Roads and Public Spaces and to the satisfaction of the Responsible Authority.

45. New lighting must be located outside the clear zones and meet the standards for category P lighting. Lighting requirements on arterial roads shall be included in the Traffic and Pedestrian Impact study.

46. Prior to Statement of Compliance, it is the responsibility of the developer to meet the requirements and standards as set out in the IDM version 5.20.

47. Before any road, drainage and associated with the subdivision start following items must be satisfied.

48. Approval of the constructions plans by the Responsible Authority

49. A pre-construction meeting shall be held with the Responsible Authority, the Contractor and the Developer/Developer's Consultant Engineer to discuss and agree on hold point inspections, roadside management, traffic management and any other construction related matters.

50. Prior to the issue of the Statement of Compliance for the relevant stage of the subdivision under the Subdivision Act 1988, the developer must construct and complete road works, drainage and other civil works in accordance with endorsed plans and specifications approved by the Responsible Authority and in accordance with Infrastructure Design Manual. Road works, drainage and other civil works to be constructed must include:

a) street and drainage in accordance with the approved construction drawings
b) construction of footpaths
c) underground drainage
d) intersection and traffic control/mitigation measures
e) signage and linemarking; and
f) high stability permanent survey marks
g) Lot access

51. Prior to issue of Statement of Compliance, the developer must provide as-constructed plans for all infrastructure created by this development and vested to the ownership and control of the Responsible Authority. Such plans shall be prepared by a registered surveyor and/or qualified Engineer and endorsed by the Developer's Consultant Engineer and the Contractor.

52. As-constructed plans shall include:

a) An asset statement of each street including costs
b) as constructed' information for the entire work in each development stage detailing information as listed in the Infrastructure Design Manual

53. Information to be presented in pdf. and dwg. formats, unless otherwise agreed in writing by the Responsible Authority.

54. Prior to Statement of Compliance, the developer must enter into an agreement with the Responsible Authority regarding responsibilities for maintenance and correction of defects of all infrastructure works. Agreement must include the defects liability period, the amount of bond and the date of practical completion occurs.

55. Prior to issue of Statement of Compliance, the developer must provide the Responsible Authority with a maintenance bond(s) of $5,000 or 5% of the total cost of infrastructure, whichever is greater.

56. The bond(s) shall be an unconditional bank guarantee or cash for the predetermined amount. The Responsible Authority will hold the bond(s) until any and all defects notified to the developer before and/or during the liability period have been made good to the satisfaction of the Responsible Authority. A request must be made to the Responsible Authority for the release of maintenance bond(s) after the defects maintenance period.

57. The Defects Liability Period for civil works shall be 12 months from the date of practical completion.

58. The Defects Liability Period for landscaping shall be 24 months from the date of acceptance at a minimum bond of $400 per tree.

59. All costs incurred in complying with the above conditions shall be borne by the permit holder.

60. In accordance with the Subdivision Act 1989, Responsible Authority requires the following fees for works undertaken on this Subdivision.

a) Plan checking fee of 0.75% of the value of works
b) Supervision fee of 2.50% of the value of works

Biodiversity Conditions

61. Planting designs of the recreation and drainage reserves incorporate indigenous plantings that could constitute corridor or 'stepping stone' habitats.

62. The protection measures identified in the Xylem report to protect the mature Eucalyptus viminalis (Tree 4) on adjacent property must be complied with. Surrounding land use close to the tree must be clear from infrastructure, allow for natural limb fall and regeneration and include planting of associated indigenous plant species to help viability of this remnant tree into the future.

Goulburn Murray Water Conditions

63. All construction and ongoing activities must be in accordance with sediment control principles outlined in 'Construction Techniques for Sediment Pollution Control' (EPA, 1991).

64. Any Plan of Subdivision lodged for certification must be referred to Goulburn-Murray Rural Water Corporation pursuant to Section 8(1)(a) of the Subdivision Act.

65. Each lot must be provided with connection to the reticulated sewerage system in accordance with the requirements of the relevant urban water authority.

66. All stormwater discharged from the site must meet the urban run-off objectives and Standard C25 as specified in Clause 56.07-4 of the Victorian Planning Provisions. All infrastructure and works to manage stormwater must be in accordance with the requirements of the Responsible Authority.

67. The plan of subdivision submitted for Certification must show a drainage reserve in favour of the relevant authority.

Central Highlands Water Conditions (66-70)

68. Any plan lodged for certification will be referred to the Central Highlands Region Water Corporation pursuant to Section 8(1)(a) of the Subdivision Act.

69. Reticulated sewerage facilities must be provided to each lot by the owner of the land (or applicant, in anticipation of becoming the owner) to the satisfaction of the Central Highlands Region Water Corporation. This will include the construction of works and the payment of major works contributions by the applicant.

70. A reticulated water supply must be provided to each lot by the owner of the land (or applicant, in anticipation of becoming the owner) to the satisfaction of the Central Highlands Region Water Corporation. This will include the construction of works and the payment of major works contributions by the applicant.

71. The owner will provide easements to the satisfaction of the Central Highlands Region Water Corporation, which will include easements for pipelines or ancillary purposes in favour of the Central Highlands Region Water Corporation, over all existing and proposed sewerage facilities within the proposal.

72. If the land is developed in stages, the above conditions will apply to any subsequent stage of the subdivision.

Country Fire Authority Conditions

73. Prior to the issue of a Statement of Compliance under the Subdivision Act 1988 the following requirements must be met to the satisfaction of the CFA:

a) Above or below ground operable hydrants must be provided. The maximum distance between these hydrants and the rear of all building envelopes (or in the absence of building envelopes, the rear of the lots) must be 120 metres and the hydrants must be no more than 200 metres apart. These distances must be measured around lot boundaries.

b) *The hydrants must be identified with marker posts and road reflectors as applicable to the satisfaction of the Country Fire Authority. Note – CFA's requirements for identification of hydrants are specified in 'Identification of Street Hydrants for Firefighting Purposes' available under publications on the CFA web site (www.cfa.vic.gov.au)*

74. Roads must be constructed to a standard so that they are accessible in all weather conditions and capable of accommodating a vehicle of 15 tonnes for the trafficable road width.

a) *The average grade must be no more than 1 in 7 (14.4%) (8.1 degrees) with a maximum of no more than 1 in 5 (20%) (11.3 degrees) for no more than 50 meters. Dips must have no more than a 1 in 8 (12%) (7.1 degree) entry and exit angle.*
b) *Curves must have a minimum inner radius of 10 metres.*
c) *Have a minimum trafficable width of 3.5 metres and be clear of encroachments for at least 0.5 metres on each side and 4 metres above the access way.*
d) *Roads more than 60m in length from the nearest intersection must have a turning circle with a minimum radius of 8m (including roll-over kerbs if they are provided) T or Y heads of dimensions specified by the CFA may be used as alternatives*

Powercor Conditions

75. The plan of subdivision submitted for certification under the Subdivision Act 1988 shall be referred to the Distributor in accordance with Section 8 of that Act.

76. The applicant shall provide an electricity supply to all lots in the subdivision in accordance with the Distributor's requirements and standards. Notes: Extension, augmentation or rearrangement of the Distributor's electrical assets may be required to make such supplies available, with the cost of such works generally borne by the applicant.

77. The applicant shall ensure that existing and proposed buildings and electrical installations on the subject land are compliant with the Victorian Service and Installation Rules (VSIR).
Notes: Where electrical works are required to achieve VSIR compliance, a registered electrical contractor must be engaged to undertake such works.

78. The applicant shall, when required by the Distributor, set aside areas with the subdivision for the purposes of establishing a substation or substations.
Notes: Areas set aside for substations will be formalised to the Distributor's requirements under one of the following arrangements:

- *Reserves established by the applicant in favour of the Distributor.,*
- *Substation Lease at nominal rental for a period of 30 years with rights to extend the lease for a further 30 years. The Distributor will register such leases on title by way of a caveat prior to the registration of the plan of subdivision.*

79. The applicant shall establish easements on the subdivision, for all existing Distributor electric lines where easements have not been otherwise provided on the land and for any new powerlines to service the lots or adjust the positioning existing easements.

Notes:

- *Existing easements may need to be amended to meet the Distributor's requirements.*
- *Easements required by the Distributor shall be specified on the subdivision and show the Purpose, Origin and the In Favour of party as follows:*

Easement Reference	Purpose	Width (Metres)	Origin	Land Benefited / In Favour Of
	Power Line		Section 88 - Electricity Industry Act 2000	Powercor Australia Ltd

Department of Transport and Planning

80. Prior to the issue of Statement of Compliance the following roadworks on Midland Highway must be completed to the satisfaction of and at no cost to the Head, Transport for Victoria:

a) Intersection of local road generally in accordance with provided plan from One Mile Grid titled Proposed Intersection (Midland Highway) Concept Layout Plan drawing number CLP101 including line marking

81. Prior to the issue of Statement of Compliance footpath must be constructed the entire southern boundary (Raglan Street frontage) to the roundabout intersection including pram ramp to connect to southern side of Raglan Street to the satisfaction of the Responsible Authority and at no cost to the Head, Transport for Victoria.

82. All waste collection must be via the local road

83. During the construction of the internal local road and dwellings the developer must ensure the Midland Highway remains debris free and maintained in a fit and proper state so as to not compromise the ability of vehicles using the Midland Highway.

Landscaping works to be maintained

84. All landscaping works as shown on the endorsed plans must be maintained, including that any dead, diseased or damaged plants are to be replaced, to the satisfaction of the Responsible Authority.

Construction Management Plan

85. Before the development starts, a Construction Management Plan must be submitted to, and be to the satisfaction of the Responsible Authority. The Construction Management Plan will then be endorsed and form part of the planning permit. The Construction Management Plan must include details of:

a) traffic management,
b) environmental issues,
c) dust control,
d) soil erosion,
e) mud on roads,
f) warning signs,
g) construction plant movement areas, and
h) storage areas.

Servicing Requirements

86. The owner of the land must enter into an agreement with:

a) telecommunications network or service provider for the provision of telecommunication services to each lot shown on the endorsed plan in accordance with the provider's requirements and relevant legislation at the time; and
b) a suitably qualified person for the provision of fibre ready telecommunication facilities to each lot shown on the endorsed plan in accordance with any industry specifications or any standards set by the Australian Communications and Media Authority, unless the applicant can demonstrate that the land is in an area where the National Broadband Network will not be provided by optical fibre.

87. Before the issue of a Statement of Compliance for any stage of the subdivision under the Subdivision Act 1988, the owner of the land must provide written confirmation from:

a) a telecommunications network or service provider that all lots are connected to or are ready for connection to telecommunications services in accordance with the provider's requirements and relevant legislation at the time; and
b) *a suitably qualified person that fibre ready telecommunication facilities have been provided in accordance with any industry*

specifications or any standards set by the Australian Communications and Media Authority, unless the applicant can demonstrate that the land is in an area where the National Broadband Network will not be provided by optical fibre.

88. The owner of the land must enter into agreements with the relevant authorities for the provision of water supply, drainage, sewerage facilities, electricity and gas services to each lot shown on the endorsed plan in accordance with the authority's requirements and relevant legislation at the time. All existing and proposed easements and sites for existing or required utility services and roads on the land must be set aside in the plan of subdivision submitted for certification in favour of the relevant authority for which the easement or site is to be created. The plan of subdivision submitted for certification under the Subdivision Act 1988 must be referred to the relevant authority in accordance with Section 8 of that Act.

Permit Expiry

89. This permit will expire if one of the following circumstances applies:

a) The plan of subdivision is not certified within 2 years of the date of this permit.

b) *The registration of the relevant stage of subdivision is not completed within five years from the date of certification of the plan of subdivision.*

The Responsible Authority may extend the permit if a request is made in writing in accordance with Section 69 of Planning and Environment Act 1987.

BACKGROUND

Site and Surrounds

The subject site is located immediately east of 9 Raglan Street on the north-western corner of Raglan Street and the Midland Highway. The site is vacant and most of the site is largely devoid of any vegetation, although the boundary of the site with the Midland Highway has well established trees along the whole frontage to the highway. The site has a downward slope towards the north. Mature cedar trees line the eastern and southern boundaries of the site forming the Avenue of Honour.

The Midland Highway is immediately to the east of the site with mature cedar trees forming the Avenue of Honour. Beyond the highway to the east are low density residential lots with some commercial uses. Further east is farming land. The site is bound by Raglan Street to the south which forms the township entrance and runs

east-west through Daylesford. To the south of Raglan Street is the old Daylesford Railway Station, some commercial uses and Wombat Hill.

To the north of the site is land within the Farm Zone which provides views to Wombat Park. To the west the site abuts 9 Raglan Street for which a planning application is currently under consideration by Council for a low density residential subdivision.

Proposal

The application proposes a staged subdivision of seven residential lots ranging from 1500 sqm to 2393 sqm and a super lot of 1.57 hectares intended to accommodate a future medium density (Eco Village) development. Access to the site is to be provided via a 16-metre tree lined road onto Midland Highway. Additional internal connections are proposed to connection to 9 Raglan Street. A shared path is to be provided within the 4047 sqm area of open space along the western side of the site which will benefit the adjoining development at 9 Raglan Street.

Stage 1 will comprise the seven lots abutting the Midland Highway. Each of these lots will contain a building envelope to ensure protection of the existing Cedar trees within the subject site and ultimately within the new lots. Open/transparent fencing will be provided to maintain views into and from the site as an appropriate interface with the Midland Highway and residential properties to the east.

Stages 2 and 3 each relate to the further subdivision of the super lot and the road along the northern boundary will be provided in Stage 3A. It is intended that the road will be constructed and delivered as part of Stage 3.

The proposed residential lots are all large and will each easily accommodate a dwelling and provide the opportunity for well-developed outdoor spaces and new landscape.

The future development will ultimately facilitate the provision of high amenity residential development which will include house designs prepared by leading architects that reflect the style and character of Daylesford. The estate's centerpiece will be the future medium density development. A landscaped road and shared path will create a leafy spine between the future medium density on the western side of the site and the large residential lots on the eastern side of the site.

Relevant Planning Ordinance applying to the site and proposal:

Zoning:	NRZ1
Overlays:	ESO1, ESO2, HO
Particular Provisions	52.17 Native Vegetation 52.29 Land Adjacent to a Principal Road Network

	53.01 Public open space contribution	
Relevant Provisions of the PPF	• Clause 02.02 Vision • Clause 11.01-1L Township and settlements • Clause 13.02-1S Bushfire planning • Clause 15.01-01S Urban design • Clause 15.01-04S Healthy neighbourhoods • Clause 15.01-5L Neighbourhood Character in Daylesford • Clause 15.03-1L Heritage • Clause 15.03-3L Subdivision in Hepburn Shire • Clause 19.03-2S Infrastructure Design and Provision • Clause 19.02-6L Open Space • Clause 19.03-3S Integrated Water Management	
Under what clause(s) is a permit required?	Clause 32.09-3 Clause 42.01 (Schedule 1) Clause 42.10 (Schedule 2) Clause 43.01 HO698	Subdivision of land Subdivision of land and removal of vegetation Subdivision of land Subdivision of land and removal of trees
	Clause 52.29	Subdivision of land
	Clause 52.29	Subdivide land adjacent to a Transport Zone 2
Objections	Ten	

KEY ISSUES

Response to Planning Policy Framework

Clause 02.2 Vision. Council's mission for the Shire is to protect and enhance the districts unique social culture, environmental and heritage characteristics by preserving the heritage character and strong sense of place in the township,

protecting valued landscapes from unsympathetic development, managing natural resources sustainability, facilitating infrastructure to meet community needs.

The proposed subdivision will support the long-term vision for Hepburn Shire by delivering a sensitive subdivision design that will not negatively impact on views of the surrounding environment and is consistent with the township character of Daylesford. The proposal is responsive to the environmental values of the site as designated by the Mineral Springs Protection Area as it will provide reticulated sewerage and a stormwater strategy to ensure any impact posed by future development is mitigated. The proposed design response will also ensure appropriate infrastructure such as public open space and a safe road network is provided to the community.

Clause 11.01-1L Township and Settlements. This clause applies to land identified in townships and the municipality's settlements. The objective of this clause is to achieve a sustainable urban form for townships by containing future development within the township boundaries shown on the township structure plan.

The subject site is located within the township boundary identified on the Daylesford township map and thereby supports the objective of this clause by containing development within the identified boundary.

Clause 13.02-1S Bushfire Planning. The purpose of this clause is to strengthen the resilience of settlements and communities to bushfire through risk based planning that prioritises the protection of human life.

The site is within a Designated Bushfire Prone Area. However, the proposed subdivision is located within the lower risk and defensible area of the existing township. The design also ensures all lots have vehicular access to internal roads which provide access to and from the site in accordance with road safety standards.

Clause 14.02-1S Catchment Planning and Management. The purpose of this Clause is to ensure the protection and restoration of catchments and other waterways/waterbodies.

The subject site is identified within the Mineral Springs Protection Area. All stormwater generated by future development of the site will be treated and returned to natural flow corridors at pre-development quality. The system will detain and regulate the flow of stormwater from the site as detailed within the Stormwater Strategy Report prepared by Axiom Consulting Engineers.

Clause 15.01-1S Urban Design. This clause serves to ensure development creates safe, functional and enriching places that contribute to a sense of place and cultural identity.

The design of the subdivision will contribute to the creation of a safe, healthy and functional environment through a layout which is responsive to and integrated with its surrounding context. The proposal will enhance the existing connection to

Wombat Park view lines via a shared path network, the landscaping will reflect the leafy vegetated character of the Daylesford township. The proposed recreation reserves will contribute to a high amenity and accessible public realm. The lot sizes and layout are responsive to the transitional rural/township context.

Clause 15.01-4S Healthy Neighbourhoods. This clause seeks to achieve neighborhoods that foster healthy and active living and community wellbeing.

The proposed subdivision will facilitate a neighbourhood that encourages a lively public realm that fosters safety and community connection. The provision of two landscaped recreation and drainage reserves with seating and shelter will provide the community with access to high amenity and safe spaces.

Clause 15.01-5L Neighbourhood Character in Daylesford. This clause reinforces preferred character in various precincts throughout Daylesford with particular emphasis on views and landmarks including Wombat Hill.

The subject site is located within Precinct 11 which is characterised by spacious settings and defines the entrance to Daylesford. The proposal has been carefully designed to minimise the removal of trees in the Avenue of Honour and ensure lot sizes are generous to contribute to a spacious urban environment.

Clause 15.03-1L Heritage. This clause supports the Heritage Overlay and specifically ensures that subdivision and demolition proposals respond to the heritage values of the surrounding area.

The site is located within the Daylesford Railway Heritage Precinct however no heritage buildings are located on the subject site. The proposed subdivision recognises the role of the Wombat Park view lines and Avenue of Honour trees to the heritage precinct and accordingly maintains community access to these view lines and a layout which minimises the removal of Avenue of Honour trees.

Clause 15.03-3L Subdivision in Hepburn Shire. This clause applies to subdivision within township boundaries and aims to produce context-based subdivision outcomes that consider surrounding environmental characteristics.

The proposal will deliver a subdivision layout and lot sizes that consider the surrounding landscape, existing grid-based subdivision patterns and rural lot sizes. The larger lot sizes in the design serve to maintain the rural character of the township entrance and are responsive to the tree protection zone along the Avenue of Honour as they will allow more than adequate space between the Ash and Chestnut trees and future building envelopes. The Native Vegetation Assessment and Ecology Report submitted with the application did not record any native vegetation on the subject site.

Clause 19.03-2S Infrastructure Design and Provision. The purpose of this clause is to provide timely, efficient and cost-effective development infrastructure that meets the needs of the community and ensure heritage, vegetation and neighbourhood

character setting is incorporated in the planning, design and construction of infrastructure.

The proposed subdivision will provide appropriate infrastructure that is designed in accordance with the purpose of this clause.

Clause 19.02-6L Open Space. The purpose of this clause is to develop open space networks in towns based on creeks, drainage lines, existing native vegetation, parks and recreation areas, develop safe and accessible walking paths/trails within public open space networks with links to key community facilities.

The proposed subdivision will provide an open space network through two recreation and drainage reserves. The location of these reserves is based on the existing drainage lines that run down the western portion of the site and towards the north-eastern portion of the site. Seating and shelter is to be provided in these reserves to enhance community access to these landscaped areas and encourage outdoor activities The subdivision will also provide safe and accessible shared paths between the recreation and drainage reserves providing a community link to the view lines of Wombat Park.

Clause 19.03-3S Integrated Water Management. The purpose of this clause is to ensure the sustainable management of water supply, water resources, wastewater, drainage and stormwater through an integrated water management approach.

The Stormwater Strategy Plan prepared by Axiom Consulting Engineers will deliver an integrated approach to water management. The proposed layout takes into account the catchment context through the identification of existing drainage lines and corresponding placement of the recreation and drainage reserves. Moreover, the stormwater, wastewater and drainage approach outlined in the stormwater strategy will ensure downstream environments and waterways are protected in accordance with this clause.

Zoning and Overlay Considerations

Neighbourhood Residential Zone (NRZ1)

Pursuant to Clause 32.09 the relevant purposes of the NRZ are:

- To implement the Municipal Planning Strategy and the Planning Policy Framework.
- To recognise areas of predominantly single and double storey residential development.
- To manage and ensure that development respects the identified neighbourhood character, heritage, environmental or landscape characteristics.

The proposed subdivision complies with the purpose of the zone by allowing for future housing within the township boundary with good access to various services and amenities within Daylesford.

Pursuant to Clause 32.09-3 a permit is required to subdivide land. Clause 32.09-13 specifies decision guidelines for subdivision of land for residential development which Council must consider for subdivision of land for residential development, this being the objectives and standards of Clause 56.

The applicant has provided a satisfactory response to Clause 56.

Environmental Significance Overlay Schedule 1

Pursuant to Clause 42.01 the purpose of the Overlay is to

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

Under this clause a permit is required to subdivide land.

Schedule 1 of the Overlay refers to Special Water Supply Catchment Protection with the objective being to ensure all development is undertaken in a manner that protects, restores and enhances natural resources and environmental systems and seeks to eliminate detrimental impacts on the quality and quantity of water in the catchment, to ensure the long-term plentiful supply of quality water.

The subdivision has been designed to comply with the above by ensuring all wastewater will be managed with deep sewer reticulated infrastructure. Stormwater will be managed through the subdivision drainage system and will improve the quality of water released beyond the subdivision boundaries. A Stormwater Management Strategy has been submitted and referred to relevant water authorities who have not raised any objection.

Decision guidelines under the Overlay have been addressed by the applicant and are considered satisfactory.

Adherence to ResCode

The proposed development complies with ResCode, each of the lots can comfortably contain a 15m x 10m envelope and are of sufficient size and orientation to achieve excellent solar access for future dwellings. Internal 16m road reserves are proposed which is sufficient for local access streets and connectivity is provided with a road connection across the north south drainage line. a 5% public open space contribution in land will be facilitated by a condition of planning permit and will be provided generally in association with the north south drainage line.

Environmental and Sustainability Issues

Each of the lots provide excellent opportunities for solar access to future dwellings. No native vegetation is proposed to be removed.

The proposed development also provides an infill development within the township boundary and close to physical and community infrastructure and of course also close to the commercial centre of Daylesford.

Subdivision Layout

The proposed subdivision concept plan shows seven (7) residential lots, all quite large, ranging in size between 1500sqm and 2347sqm. A balance lot will be the subject of further subdivision in the future. An east west road along the northern frontage provides a road connection across the north south drainage line and also allows for maintaining views within the development to the Farming Zone to the north.

Public open space will be provided in a linear corridor adjacent to the north south drainage line and this include a pedestrian path connecting to Raglan Street and the east west local access street. The public open space broadens at the southern extent and allows for the retention of existing trees.

The residential lots are of sufficient size to retain the existing Cedar trees along their boundary with Midland Highway and tree protection can be ensured with the application of building envelopes. Two of the cedar trees are required to be removed to provide for the road access from the Midland Highway.

The proposed development is to be staged with Stage 1 providing the seven residential lots, Stage 2 providing a part of the super lot, Stage 3 providing the balance of the super lot and Stage 3A providing the east west road connection. It is understood from the developer that Stages 3 and 3A will be constructed concurrently. A condition of planning permit can require the completion of Stage 3A prior to a Statement of Compliance for Stage 3 to ensure the road is provided in a timely manner.

POLICY AND STATUTORY IMPLICATIONS

This application meets Council's obligations as Responsible Authority under the *Planning and Environment Act 1987.*

GOVERNANCE ISSUES

The implications of this report have been assessed in accordance with the requirements of the Victorian Charter of Human Rights and Responsibilities.

SUSTAINABILITY IMPLICATIONS

The proposed development also provides an infill development within the township boundary and close to physical and community infrastructure and of course also close to the commercial centre of Daylesford.

FINANCIAL IMPLICATIONS

Any application determined by Council or under delegation of Council is subject to appeal rights and may incur costs at VCAT if appealed.

RISK IMPLICATIONS

No risks to Council other than those already identified.

COMMUNITY AND STAKEHOLDER ENGAGEMENT

The application has been advertised by sending notification of the proposal to adjoining and adjacent owners and a notice on the land. As a result, ten (10) objections have been received. The issues raised in the objections are addressed individually as follows.

Unknown use or development of super lot

The further development of the super lot will be subject to a separate planning permit process whether it be for subdivision or the construction of more than one dwelling on a lot.

Although not subject to the consideration of this application the super lot provides opportunities for pedestrian and vehicular connections within the development and an appropriate interface with the north south drainage corridor.

Neighbourhood Character

The subject site provides very large lots adjacent to the Midland Highway and will provide building envelopes and visually permeable fencing to provide an appropriate interface.

The land to the east of Midland Highway presents as conventional residential development and there is the commercial development further to the south. It is appreciated that this site forms part of a gateway to Daylesford, but the large lots along the eastern boundary and drainage reserve at the southern boundary to Raglan Street provide a separation to the future potential development of the super lot.

The north south drainage line also maintains for longer sightlines to the north.

Impact on services including utility and emergency services.

The application was referred to utilities and no objections were received. It was also referred to the CFA with no objections received. The additional road connection provided to the west will also facilitate safe movements for emergency vehicles.

Stormwater implications and protection of waterway

The broader Middleton Field development is providing two retarding basins to cater for the whole development in 17 Smith Street and 29 Smith Street.

A Stormwater Management Plan has been prepared and addresses stormwater harvesting and treatment to the satisfaction of Council's engineers. A condition of planning permit will require this to be approved under the planning permit.

The Stormwater Management Plan discusses the conveyance of minor and major flows and notes that these can be retarded back to predevelopment flows. Best practice measures will also be implemented to remove pollutants from stormwater flows.

This will result in an improved drainage outcome.

Loss and threat to trees

Two cedar trees at the entry to the proposed development from the Midland Highway will require removal, but all other trees will be retained. There is no impact upon the trees in the Avenue of Honour and the remaining stand of cedar trees can be protected by building envelopes.

Furthermore, the ESO1 triggers a planning permit for the removal of vegetation and the HO698 also triggers a planning permit for the removal of trees, albeit not all of the site is included in the HO698.

Dangerous intersection and road access

The application was referred to the Department of Transport and they had no objection to the proposal subject to conditions.

Risk of further subdivision

Given the residential zoning of the land it is considered unreasonable to require a restriction on further subdivision. However, it is reasonable to require building envelopes to protect the existing Cedar trees and interface with the Midland Highway. This can be facilitated by a condition of planning permit.

Lack of unencumbered open space

It is proposed to provide 5% unencumbered public open space generally along the alignment of the north south drainage line. There will be a 14m corridor providing 10m for the drainage line functions and approximately 4m for the public open space corridor which is more than adequate to provide a path and landscaping.

Consider the provision of affordable housing

There is no mechanism in the planning scheme to require the provision of affordable housing. It is noted that elsewhere in the Middleton Field development at 17 Smith Street four lots are required to be provided to a registered housing agency. This will comprise the lots containing four one-bedroom developments in the medium density development at 17 Smith Street.

Lack of opportunity to make a submission

The application was advertised for the statutory period and commenced before the extended (non-statutory) period required over the Christmas/New year period.

Increase of population and intensity of development

Given the land is zoned for residential purposes there will be an increase in population. The proposed development provides an additional seven lots so will provide a minor increase of approximately 20 additional residents based on an assumed household size of 2.8 persons/household. Even if a much higher than average household size was applied the additional population is minor.

Impact upon the rural landscape

The submitted plan has since been modified to provide a road along the northern boundary providing greater separation between built form and the adjoining farming land to the north. The subject site is zoned for residential purposes and included within the township boundary. In addition to the road along the northern boundary providing a greater separation it also provides for viewlines into the farming zoned land to maintain those vistas from the subject site.

Safety and amenity impacts from construction

A Construction Management Plan will be required as a condition of permit and this will include traffic management for the intersection works with the Midland Highway. In addition, EPA requirements must also be met with respect to hours of operation and site emissions.

CONCEPT LOT LAYOUT PLAN

4719 MIDLAND HIGHWAY, DAYLESFORD 3460

Aerial supplied by: Nearmap
Aerial Date Stamp: 17/12/2021
Survey supplied by: Walsh Mobbs
Plan Number: NPS943 - 018
Revision Number: M
Drawn By: Nivedita Ravindran
Client: Hygge Property

0 6 12 18 24 30 36

Scale: 1:600 @A3 | Date Issued: 28.11.2022 | ©Niche Planning Studio

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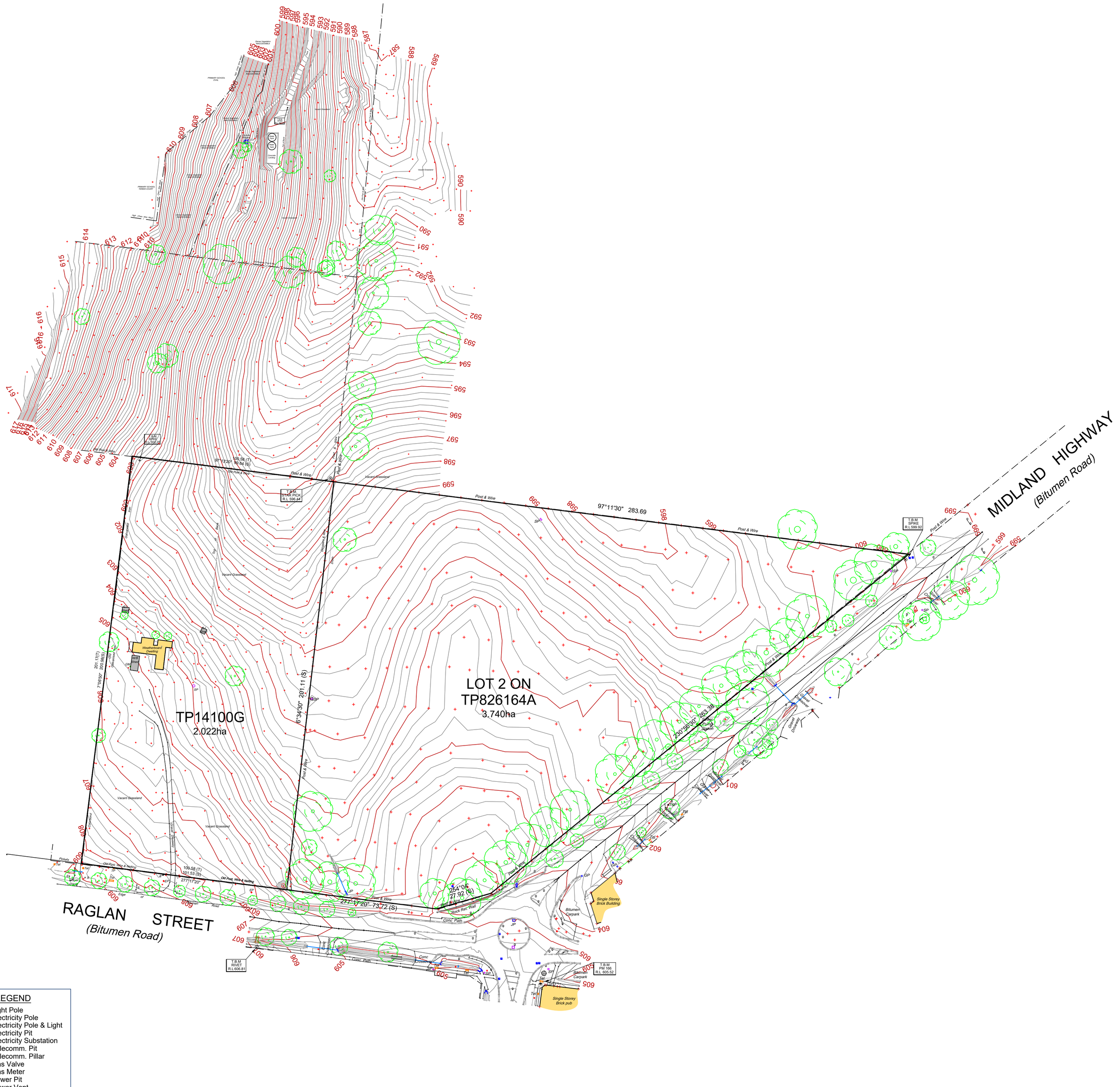
Appendix 2 – Feature Survey

N

MGA20 ZONE 55



LEGEND

- Light Pole
- Electricity Pole
- Electricity Pole & Light
- Electricity Pit
- ES Electricity Substation
- Tel Telecomm. Pit
- Telecomm. Pillar
- Gas Valve
- Gas Meter
- SP Sewer Pit
- Sewer Vent
- SU Sewer Unclassified
- Sewer Inspection Shaft
- Stop Valve
- Fire Plug
- Fire Hydrant
- Water Meter
- Water Tap
- Sprinkler
- WU Water Unclassified
- DP Drainage Pit
- SEP Side Entry Pit
- GP Grated Pit
- JP Junction Pit
- PU Unclassified Pit
- Sign
- Letterbox
- Bollard
- Bin
- tf Top of Fence
- FL Floor Level
- tk Top of Kerb
- Back of Kerb
- Invert of Kerb
- Lip of Kerb
- Edge of Bitumen
- Ridge
- Underside of Gutter
- e Eaveline
- p Parapet Wall
- hw habitable window
- nhw non habitable window
- h Window Head
- s Window Sill
- d Door Height
- Top of Building
- tw Top of Wall

TITLE DESCRIPTION

CERTIFICATE OF TITLE:	V.10448 F.287
LAST PLAN REF:	TP14100G
PARISH:	WOMBAT
SECTION:	2
CROWN ALLOTMENT:	35

NOTES

AHD LEVELS VIDE WOMBAT PM 303 R.L = 612.923

LEVEL LAYERS TURNED OFF FOR CLARITY PURPOSES. REFER TO CAD FILE FOR FULL SURVEY INFORMATION.

CONTOUR INTERVALS SHOWN AT 0.25m

(S) - SURVEY BASED DIMENSIONS
(T) - TITLE DIMENSIONS

CERTIFICATION BY SURVEYOR

I, Myles Sewell, of Unit 2/85 Salmon Street, Port Melbourne VIC 3207, certify that this plan has been prepared from a survey made under my direction and supervision in accordance with the Surveying Act 2004 and completed on 7/9/20, that this plan is accurate and correctly represents the adopted boundaries and that the survey accuracy accords with that required by regulation 7 (1) of the Surveying (Cadastral Surveys) Regulations 2015.

Date: 10/9/20

Licensed Surveyor
Surveying Act 2004

REV	DESCRIPTION	DRN	DATE	APP
D	UPDATED TITLE, COMBINED FEATURE	JD	18/02/22	MS
C	ADDITIONAL EASTERN FEATURE	JD	18/08/21	MS
B	NORHTERN LOTS ADDED	MS	11/9/20	MS

Land Surveys
Unit 2, 85 Salmon Street
Port Melbourne
Victoria 3207
T (03) 9646 0864
E melbourne@landsurveys.net.au
www.landsurveys.net.au

SCALE @ A1: 1:1000

10 0 10 20 30 40 50

SURVEYED BY: MS
SURVEYED ON: 1-3/9/20
DRAWN BY: MS
DRAWN ON: 9/9/20
HOR DATUM: MGA20
VERT DATUM: AHD

TITLE RE-ESTABLISHMENT, FEATURE & LEVEL SURVEY
9 RAGLAN STREET, DAYLESFORD

CLIENT:
HYGGE PROPERTY

JOB No.	PLAN	DRG	REV	SHEET
2002206	- RFL -	001	- C	1 OF 1

ATTACHMENT 10.2.3

DAYLESFORD SECONDARY COLLEGE

230m

CROCKETT STREET

ST. MICHAEL'S PRIMARY SCHOOL

POTENTIAL FUTURE PATH NETWORK (SUBJECT TO COUNCIL AND LANDOWNER APPROVAL)

WOMBAT PARK

WETLAND/ BIORETENTION SUBJECT TO DETAILED DESIGN

PRIMARY LANDSCAPED OPEN SPACE NODE WITH WETLAND VIEWING PLATFORM

HOSPITAL STREET

ECO VILLAGE HOUSING

OLD HOMESTEAD

ECO VILLAGE HOUSING

ECO VILLAGE HOUSING

OLD HOMESTEAD TO BE RETAINED ON LOT OF OVER 1000 SQM.

MINOR LANDSCAPED OPEN SPACE NODE WITH SEATING

MINOR LANDSCAPED OPEN SPACE NODE WITH SEATING

MINOR LANDSCAPED OPEN SPACE NODE WITH SEATING

SMITH STREET

ECO VILLAGE HOUSING

ECO VILLAGE HOUSING

ECO VILLAGE HOUSING

MIDLAND HIGHWAY

HOMESTEAD TO BE RETAINED ON LOT OF OVER 1000 SQM.

HOMESTEAD

INTERSECTION SUBJECT TO DETAILED DESIGN AND NO REMOVAL OF AVENUE OF HONOUR TREES

LARGE HOMESTEAD STYLE LIVING

EXTENDED DRIVEWAY

684m

DAYLESFORD TOWN CENTRE

RAGLAN STREET

INTERSECTION SUBJECT TO DETAILED DESIGN AND NO REMOVAL OF AVENUE OF HONOUR TREES

PRIMARY LANDSCAPED OPEN SPACE NODE WITH SHELTER

KNOX STREET

EAST STREET

HILL STREET

WOMBAT HILL BOTANIC GARDENS

LEGEND

- Site boundary
- Standard lots
- Ecovillage housing
- Public Pedestrian path
- Private Pedestrian path
- Lower order road (design TBC)
- Open space
- Landscape nodes
- Linear Open Space: Shared pathway and with recreation nodes integrated with revegetated drainage corridor for passive stormwater treatment

MIDDLETON FIELD CONCEPT MASTERPLAN

VARIOUS, DAYLESFORD 3460

Aerial supplied by: Nearmap
Aerial Date Stamp: 20.12.2021
Survey supplied by: DH Pty Ltd
Plan Number: NPS943 - 024
Revision Number: G
Drawn By: Nivedita Ravindran
Client: Hygge Property

0 30 60 90 120 150 180m

Scale: 1:3,000 @A3 | Date Issued: 18.10.2022 | ©Niche Planning Studio

DISCLAIMER: This Concept Plan has been prepared based on high level planning advice.
Town Planning compliance is subject to approval from the Ballarat City Council and a suitable town planner will need to be appointed.
All Dimensions, Areas and Calculations are subject to Detailed Survey and Design before Town Planning Permit application.
Built Form is illustrative only and subject to Architectural Design and approval from an RAIA qualified architect. This plan has been prepared for illustrative purposes only and should not be used as a means to judge any properties value or yield potential.

hygge property

NICHE PLANNING STUDIO

DEVELOPMENT SUMMARY

STAGES	Total	Drainage and Recreation	Recreation	*Creditable Open Space*	*Non-creditable Open Space*	NDA	MD Site	Residential Lots	Local Roads	Residential Yield	Average Lot Area
	Area (ha)	Area (ha)	Area (ha)	*(%)*	*(%)*	Area (ha)	Area (ha)	Area (ha)	Area (ha)		(m²)
1	1.57592		0.08056	*0.7*		1.49536		0.92421	0.57115	14	660
2	1.78886	0.23011		*1*	*1*	1.55875	0.14553	1.02675	0.38647	15	685
3	1.51448		0.07869	*0.7*		1.43579	0.48491	0.73285	0.21803	10	733
4	0.57235	0.15355		*0.7*	*0.7*	0.4188		0.30277	0.11603	4	757
5	2.00697					2.00697		1.57594	0.43103	22	716
6	1.51626	0.05107		*0.2*	*0.2*	1.46519		1.14209	0.32310	7	1632
7	0.56097	0.22397	0.01690	*1.2*	*1*	0.3201	0.32010				
8	1.64484		0.17945	*1.6*		1.46539	1.16931		0.29608		
TOTAL	**11.18065**	**0.6587**	**0.35560**	**6.1**	***2.9***	**10.16635**	**2.11985**	**5.70461**	**2.34189**	**72**	**792**

***Notes**: Lineworks and derived areas are approximate only and not based on survey.*
Residential Yield shown above does not include MD Site.
Creditable open space based on 100% of recreation area and 50% of drainage & recreation areas.
50% of drainage and recreation areas deemed non-creditable.

DRAFT
FOR DISCUSSION PURPOSES ONLY

Rev.	Description	Drawn	Date	Checked
B	Amendments on table shown above	KGM	14/11/22	DWA
A	Intial release	KGM	11/11/22	DWA

SCALE 1:1000 @ A1
10 0 10 20 30 40
ALL DISTANCES ARE IN METRES
For a true to scale reproduction of this plan, plot it to A1 with the Paging Scaling set to None.

Surveyor: -
Survey Date: -
Precal/Cad: -

ISO 9001 - ISO14001 - ISO45001
Global-Mark.com.au®

N

LOT:	PLAN/DIA:	C/T: VOLUME - FOL

MIDDLETON FIELD

MIDDLETON FIELD
LAND BUDGET PLAN
17 Smith Street - Daylesford

MNG
MCMULLEN NOLAN GROUP
31/574 Plummer Street
Port Melbourne,Vic,
Victoria 3207, Australia
Offices in: Perth, Broome, Bunbury, Kununurra, Newman, Port Hedland
Tel: (03) 7002 2200
info@mngsurvey.com.au
www.mngsurvey.com.au
ABN 90 009 363 311

CLIENT:
hygge property

Project Mngr.	DWA	Datum	MGA2020

80304 - MP - 011 - B
Job Number | Type | Plan Number | Revision

onemilegrid

Lot 2, 4719 Midland Highway, Daylesford

Transport Impact Assessment

220239TIA001C-F

16 May 2022

onemile**grid**

ABN: 79 168 115 679

(03) 9939 8250
56 Down Street

COLLINGWOOD, VIC 3066
www.onemilegrid.com.au

DOCUMENT INFORMATION

Prepared for	hygge property		
File Name	220239TIA001C-F	**Report Date**	16 May 2022
Prepared by	Lizzy Henry	**Reviewed by**	Valentine Gnanakone
Signature		**Signature**	

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APPENDIX A CONCEPT LAYOUT PLANS
APPENDIX B SWEPT PATH DIAGRAMS

1 INTRODUCTION

onemile**grid** has been requested by hygge property to undertake a Transport Impact Assessment of the proposed residential subdivision at Lot 2, 4719 Midland Highway, Daylesford.

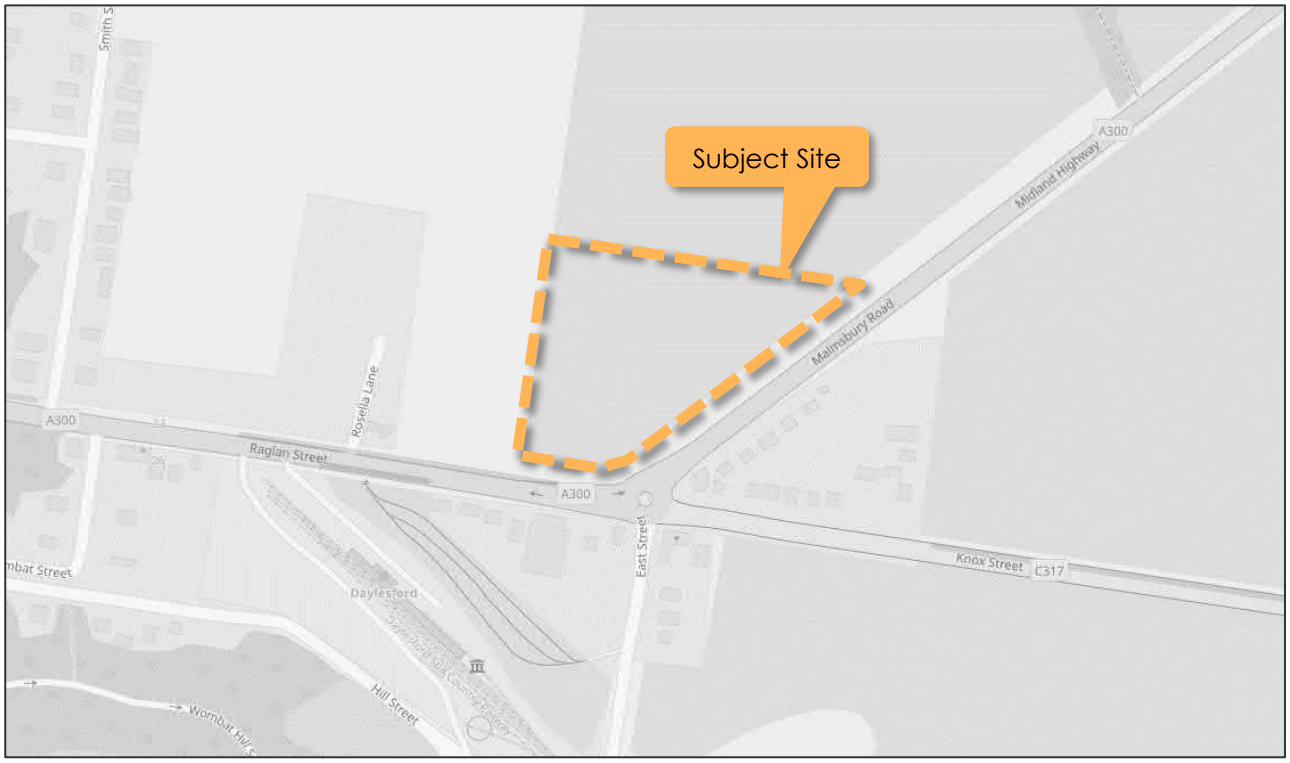
As part of this assessment the subject site has been inspected with due consideration of the development proposal, traffic data has been sourced and relevant background reports have been reviewed.

2 EXISTING CONDITIONS

2.1 Site Location

The subject site is located at Lot 2, 4719 Midland Highway, Daylesford, as shown in Figure 1. The site is Lot 2 of a larger lot which extends to the north.

Figure 1 Site Location



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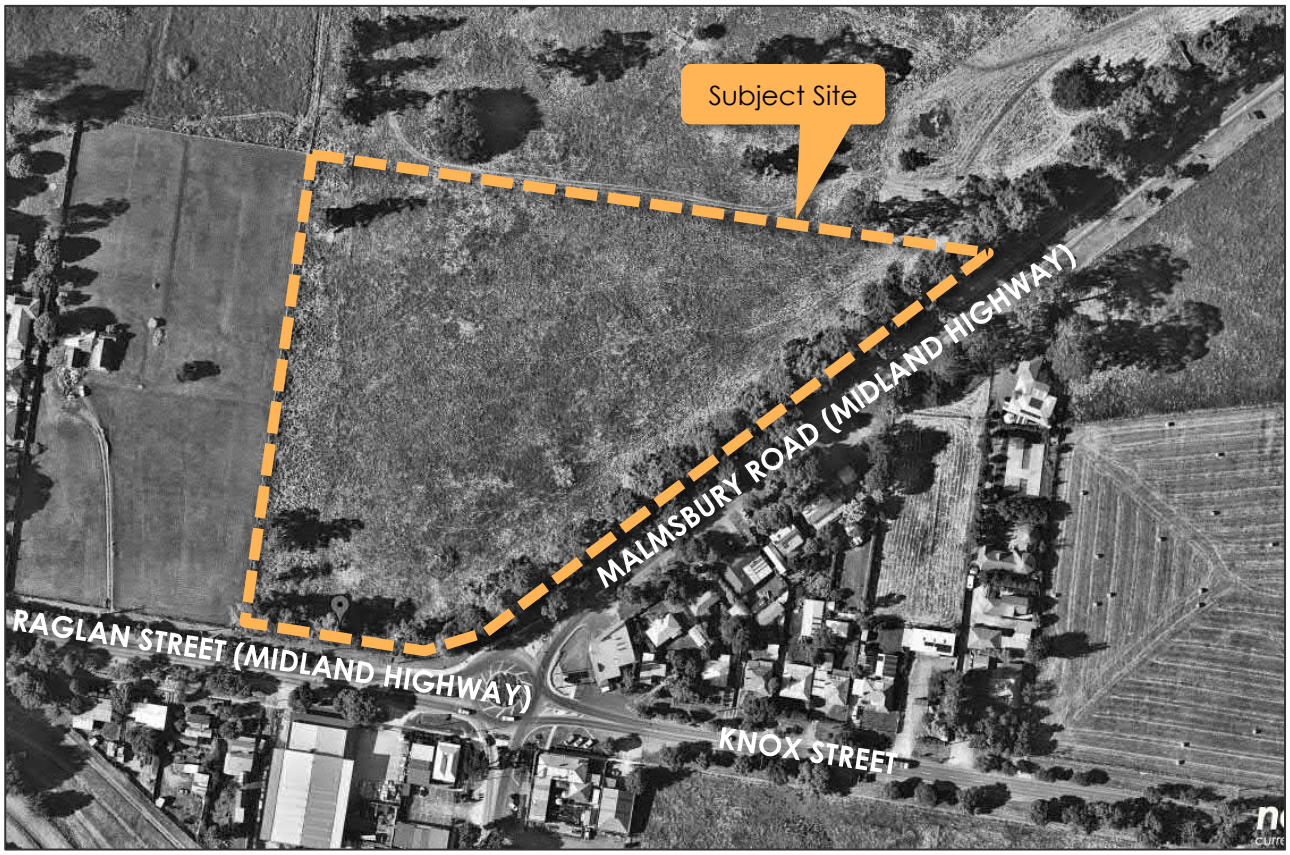
The site is currently unoccupied with trees along the frontages to Midland Highway and Raglan Street. No vehicle access is currently provided to the site.

Land use in the immediate vicinity of the site is residential in nature or farming land.

An aerial view of the subject site is provided in Figure 2.

Figure 2 Site Context (20 December 2021)

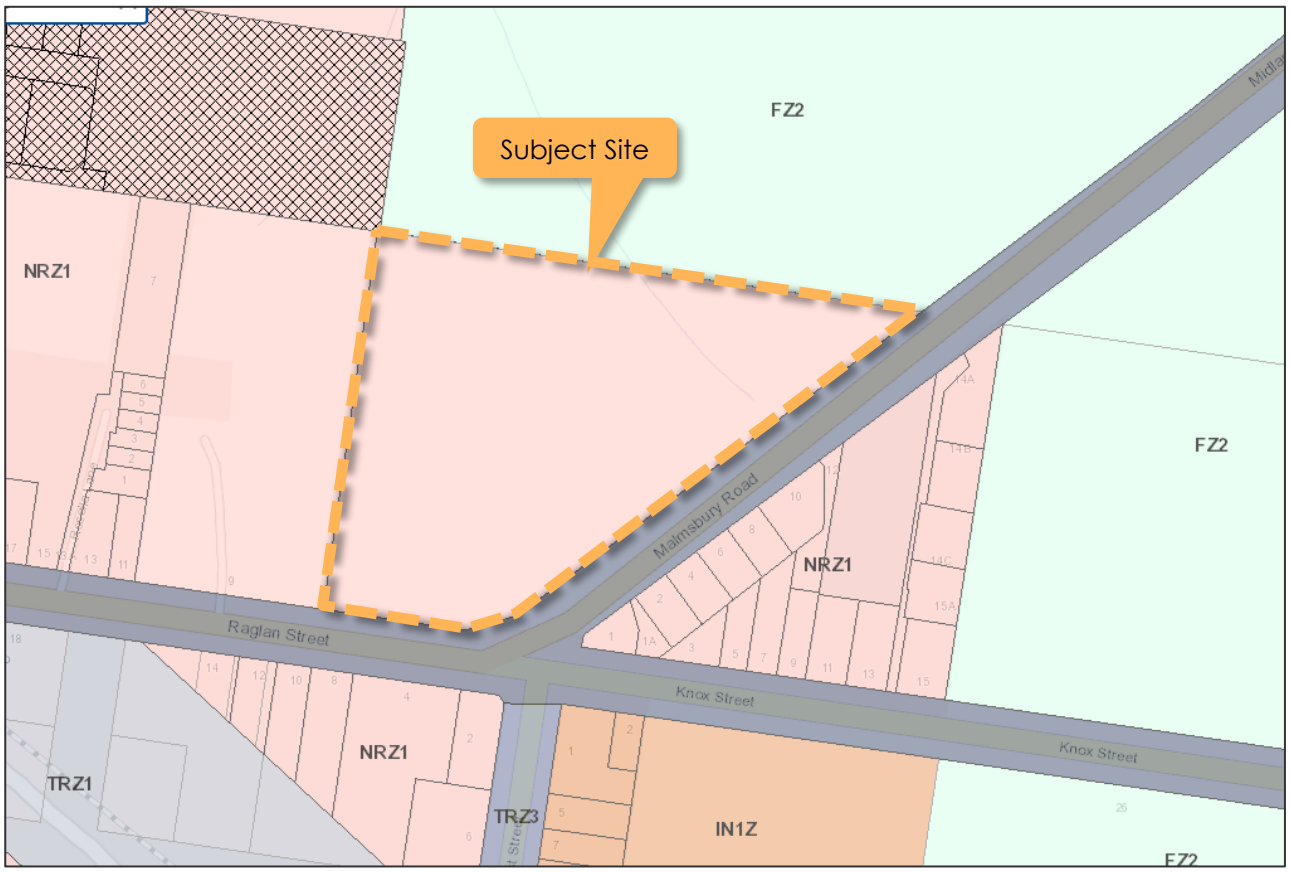


Copyright Nearmap

2.2 Planning Zones and Overlays

It is shown in Figure 3 that the site is located within a Neighbourhood Residential Zone (NRZ). The site is further located within an Environmental Significance Overlay area and partially located within a Heritage Overlay area.

Figure 3 Planning Scheme Zones



2.3 Road Network

2.3.1 Malmsbury Road (Midland Highway)

Malmsbury Road is an arterial road (managed by DoT along the frontage of the site), transitioning into Raglan Street at the roundabout located at the south-east corner of the site frontage, and continuing as Midland Highway further north of the site, at the T-intersection with Daylesford-Malmsbury Road. Malmsbury Road provides a single traffic lane in each direction adjacent to the site with partially sealed shoulders on each side of the road. Adjacent to the roadway are the Avenue of Honour trees which travel the length of the site.

A 60km/h speed limit generally applies to Malmsbury Road in the vicinity of the site, increasing to 80km/h approaching the northern border of the site.

The cross-section of Malmsbury Road at the frontage of the site is shown in Figure 4.

Figure 4 Malmsbury Road, looking south from adjacent to the subject site

2.3.2 Raglan Street (Midland Highway)

Raglan Street is an arterial road (managed by DoT along the frontage of the site changing to a Council managed road to the west) generally aligned east-west, which continues as Malmsbury Road (Midland Highway) in the east and Howe Street in the west. Raglan Street provides a single traffic lane in each direction adjacent to the site with partially sealed shoulders on each side of the road. Adjacent to the roadway are the Avenue of Honour trees which travel the length of the road.

A 60km/h speed limit applies to Raglan Street in the vicinity of the site, reducing to 50 km/h to the west (where the Council ownership takes place).

The cross-section of Raglan Street at the frontage of the site is shown in Figure 4.

Figure 5 Raglan Street, looking east from adjacent to the subject site

2.4 Traffic Volumes

Traffic volume information for Malmsbury Road adjacent to the site was obtained via the Department of Transport (VicRoads) Traffic Profile Viewer. The data indicates that Malmsbury Road carries the following approximate traffic volumes.

Table 1 Existing Traffic Volumes

Direction	*AM Peak*	*PM Peak*
North-eastbound	118 vph (8:00am)	224 vph (4:00pm)
South-westbound	247 vph (8:00am)	220 vph (4:00pm)
Total	**365 (8:00am)**	**444 (4:00pm)**

2.5 Public Transport

Public transport in the area is limited to the following bus services. The site is approximately 1.4 km walking distance from the nearest bus stop located at CFA / Bridport Street.

- Ballan – Hepburn Springs via Daylesford;
- Hepburn Springs – Creswick via Daylesford;
- Bendigo to Geelong via Ballarat (V-Line Bus);
- Daylesford – Melbourne via Woodend or Castlemaine (V-Line Bus); and
- Ballarat – Mildura via Swan Hill and Bendigo (V-Line Bus).

3 DEVELOPMENT PROPOSAL

3.1 General

It is proposed to develop the site for the purposes of residential subdivision comprising 7 residential lots fronting Malmsbury Road and a Superlot to the rear of the site. The Superlot will be subject to a separate a future town planning application.

3.2 Internal Subdivision Design and Access

Access is proposed to be provided via Raglan Street to the south and Malmsbury Road to the east. The Raglan Street site access is proposed as an unsignalised left-in/left-out T-intersection. The intersection to Malmsbury Road is proposed as an unsignalised T-intersection allowing fully directional movements. Both intersections are proposed with flaring to ensure that no trees are impacted by the site access. Localised formalisation of the existing shoulders is proposed on both sides of both T-intersections to allow for turning movements to occur without impacting on through traffic.

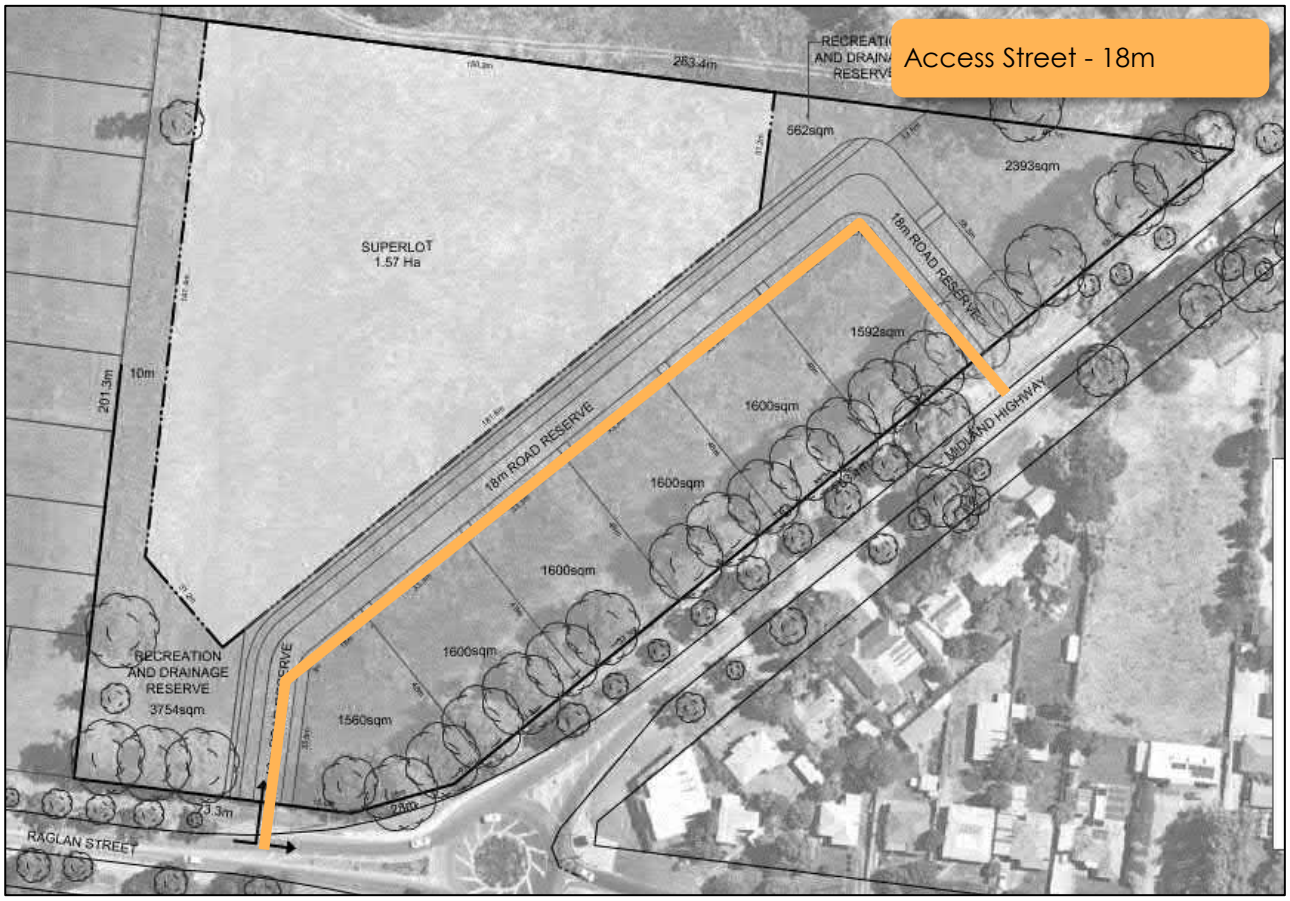
Concept plans have been prepared for each site access and are attached within Appendix A.

An internal access street is proposed connecting the two site accesses with a road reserve of 18 metres including a carriageway of 7.3 metres and a footpath on the north-west side of the street. It is intended that this road will be designed to Council standards to allow it to be transferred to Council ownership.

Swept paths have been prepared, and are attached within Appendix B demonstrating access and egress for each site access with a 9.8 metre Council waste truck, and a 7.8 metre CFA vehicle.

The proposed subdivision layout is shown below in Figure 6.

Figure 6 Proposed Layout



4 DESIGN ASSESSMENT

4.1 Clause 52.29 – Land Adjacent to the Principal Road Network

The development proposal is subject to the requirements of Clause 52.29 of the Hepburn Planning Scheme which applies to land adjacent to the Principal Road Network (Raglan Street (Midland Highway) and Malmsbury Road (Midland Highway)) and aims to ensure appropriate access is provided to identified roads.

Relevant to the proposed development, the Clause states that a permit is required to create or alter access to a road in a Transport Zone 2, and that the proposal is to be referred to the relevant referral authority (in this case the Department of Transport (VicRoads)).

Before deciding on the appropriateness or otherwise of an application to alter access to the Principal Road Network, the responsible authority must consider the following:

- *The Municipal Planning Strategy and the Planning Policy Framework.*
- *The views of the relevant road authority.*
- *The effect of the proposal on the operation of the road and on public safety.*
- *Any policy made by the relevant road authority pursuant to Schedule 2, Clause 3 of the Road Management Act 2004 regarding access between a controlled access road and adjacent land.*

The proposal seeks to provide 7 lots. As detailed in Section 6.1, the proposed development is expected to generate up to 56 traffic movement daily, including 6 movements during the AM and PM peak hour periods. This equates to one movement every ten minutes, which is very low in traffic engineering terms, and not expected to have a notable impact on the surrounding road network. The proposal will provide adequate sight distance at the property boundary to pedestrians along the property and site frontages. As such, the development is not expected to have any material impact on the operation of the road or any impacts on public safety.

In light of the above, it is considered that the proposed development will satisfy the requirements of Clause 52.29.

5 RESIDENTIAL SUBDIVISION DESIGN ASSESSMENT

5.1 General

The design of the proposed residential subdivision has been assessed, in relation to Clause 56 of the Hepburn Planning Scheme (Residential Subdivision), and the Infrastructure Design Manual.

5.2 Hepburn Planning Scheme – Clause 56

Clause 56.06 identifies Access and Mobility Management requirements for residential subdivisions such as that proposed at the site. The following Clauses are applicable.

5.2.1 Clause 56.06-2, Walking and Cycling Network Objectives

Standard C15

The walking and cycling network should be designed to:

- *Implement any relevant regional and local walking and cycling strategy, plan or policy for the area set out in this scheme.*
- *Link to any existing pedestrian and cycling networks.*
- *Provide safe walkable distances to activity centres, community facilities, public transport stops and public open spaces.*
- *Provide an interconnected and continuous network of safe, efficient and convenient footpaths, shared paths, cycle paths and cycle lanes based primarily on the network of arterial roads, neighbourhood streets and regional public open spaces.*
- *Provide direct cycling routes for regional journeys to major activity centres, community facilities, public transport and other regional activities and for regional recreational cycling.*
- *Ensure safe street and road crossings including the provision of traffic controls where required.*
- *Provide an appropriate level of priority for pedestrians and cyclists.*
- *Have natural surveillance along streets and from abutting dwellings and be designed for personal safety and security particularly at night.*
- *Be accessible to people with disabilities.*

The proposed development includes footpaths on one side of the internal access street.

Internal roads are expected to have minimal traffic volumes and low speeds, and are considered suitable for cyclists.

All roads and paths are provided with natural surveillance.

It is therefore considered that the subdivision satisfies the objectives of Clause 56.06-2.

5.2.2 Clause 56.06-3, Public Transport Network Objectives

Standard C16

The public transport network should be designed to:

- *Implement any relevant public transport strategy, plan or policy for the area set out in this scheme.*
- *Connect new public transport routes to existing and proposed routes to the satisfaction of the relevant public transport authority.*

- *Provide for public transport links between activity centres and other locations that attract people using the Principal Public Transport Network in Metropolitan Melbourne and the regional public transport network outside Metropolitan Melbourne.*
- *Locate regional bus routes principally on arterial roads and locate local bus services principally on connector streets to provide:*
  - *Safe and direct movement between activity centres without complicated turning manoeuvres.*
  - *Direct travel between neighbourhoods and neighbourhood activity centres.*
  - *A short and safe walk to a public transport stop from most dwellings.*

As detailed in Section 2.5, the site is located approximately 1.4 km walking distance from several bus routes, providing the site with adequate public transport access.

It is therefore considered that the subdivision satisfies the objectives of Clause 56.06-3.

5.2.3 Clause 56.06-4, Neighbourhood Street Network Objective

Standard C17

The neighbourhood street network must:

- *Take account of the existing mobility network of arterial roads, neighbourhood streets, cycle paths, cycle paths, footpaths and public transport routes.*
- *Provide clear physical distinctions between arterial roads and neighbourhood street types.*
- *Comply with the Roads Corporation's arterial road access management policies.*
- *Provide an appropriate speed environment and movement priority for the safe and easy movement of pedestrians and cyclists and for accessing public transport.*
- *Provide safe and efficient access to activity centres for commercial and freight vehicles.*
- *Provide safe and efficient access to all lots for service and emergency vehicles.*
- *Provide safe movement for all vehicles.*
- *Incorporate any necessary traffic control measures and traffic management infrastructure.*

The neighbourhood street network should be designed to:

- *Implement any relevant transport strategy, plan or policy for the area set out in this scheme.*
- *Include arterial roads at intervals of approximately 1.6 kilometres that have adequate reservation widths to accommodate long term movement demand.*
- *Include connector streets approximately halfway between arterial roads and provide adequate reservation widths to accommodate long term movement demand.*
- *Ensure connector streets align between neighbourhoods for direct and efficient movement of pedestrians, cyclists, public transport and other motor vehicles.*
- *Provide an interconnected and continuous network of streets within and between neighbourhoods for use by pedestrians, cyclists, public transport and other vehicles.*
- *Provide an appropriate level of local traffic dispersal.*
- *Indicate the appropriate street type.*
- *Provide a speed environment that is appropriate to the street type.*
- *Provide a street environment that appropriately manages movement demand (volume, type and mix of pedestrians, cyclists, public transport and other motor vehicles).*
- *Encourage appropriate and safe pedestrian, cyclist and driver behaviour.*
- *Provide safe sharing of access lanes and access places by pedestrians, cyclists and vehicles.*
- *Minimise the provision of culs-de-sac.*
- *Provide for service and emergency vehicles to safely turn at the end of a dead-end street.*
- *Facilitate solar orientation of lots.*
- *Facilitate the provision of the walking and cycling network, integrated water management systems, utilities and planting of trees.*

- *Contribute to the area's character and identity.*
- *Take account of any identified significant features.*

The internal road network has been designed in consideration of the objectives of Clause 56.06-4.

It is therefore considered that the subdivision generally satisfies the objectives of Clause 56.06-4.

5.2.4 Clause 56.06-5, Walking and Cycling Detail Network Objectives

Standard C18

Footpaths, shared paths, cycle paths and cycle lanes should be designed to:

- *Be part of a comprehensive design of the road or street reservation.*
- *Be continuous and connect.*
- *Provide for public transport stops, street crossings for pedestrians and cyclists and kerb crossovers for access to lots.*
- *Accommodate projected user volumes and mix.*
- *Meet the requirements of Table C1.*
- *Provide pavement edge, kerb, channel and crossover details that support safe travel for pedestrians, footpath bound vehicles and cyclists, perform required drainage functions and are structurally sound.*
- *Provide appropriate signage.*
- *Be constructed to allow access to lots without damage to the footpath or shared path surfaces.*
- *Be constructed with a durable, non-skid surface.*
- *Be of a quality and durability to ensure:*
  - *Safe passage for pedestrians, cyclists, footpath bound vehicles and vehicles.*
  - *Discharge of urban run-off.*
  - *Preservation of all-weather access.*
  - *Maintenance of a reasonable, comfortable riding quality.*
  - *A minimum 20 year life span.*
- *Be accessible to people with disabilities and include tactile ground surface indicators, audible signals and kerb ramps required for the movement of people with disabilities.*

It is noted that a number of objectives are related to detailed design not covered by the current drawing set. Nonetheless, will be satisfied as part of detailed designs.

5.2.5 Clause 56.06-6, Public Transport Network Detail Objectives

Standard C19

Bus priority measures must be provided along arterial roads forming part of the existing or proposed Principal Public Transport Network in Metropolitan Melbourne and the regional public transport network outside Metropolitan Melbourne to the requirements of the relevant roads authority.

Road alignment and geometry along bus routes should provide for the efficient, unimpeded movement of buses and the safety and comfort of passengers.

The design of public transport stops should not impede the movement of pedestrians.

Bus and tram stops should have:

- *Surveillance from streets and adjacent lots.*
- *Safe street crossing conditions for pedestrians and cyclists.*
- *Safe pedestrian crossings on arterial roads and at schools including the provision of traffic controls as required by the roads authority.*

- *Continuous hard pavement from the footpath to the kerb.*
- *Sufficient lighting and paved, sheltered waiting areas for forecast user volume at neighbourhood centres, schools and other locations with expected high patronage.*
- *Appropriate signage.*

The road network has not been designed to cater for a public transport route, therefore the requirements of Clause 56.06-6 do not apply.

5.2.6 Clause 56.06-7, Neighbourhood Street Network Detail Objective

Standard C20

The design of streets and roads should:

- *Meet the requirements of Table C1. Where the widths of access lanes, access places, and access streets do not comply with the requirements of Table C1, the requirements of the relevant fire authority and roads authority must be met.*
- *Provide street blocks that are generally between 120 metres and 240 metres in length and generally between 60 metres to 120 metres in width to facilitate pedestrian movement and control traffic speed.*
- *Have verges of sufficient width to accommodate footpaths, shared paths, cycle paths, integrated water management, street tree planting, lighting and utility needs.*
- *Have street geometry appropriate to the street type and function, the physical land characteristics and achieve a safe environment for all users.*
- *Provide a low-speed environment while allowing all road users to proceed without unreasonable inconvenience or delay.*
- *Provide a safe environment for all street users applying speed control measures where appropriate.*
- *Ensure intersection layouts clearly indicate the travel path and priority of movement for pedestrians, cyclists and vehicles.*
- *Provide a minimum 5 metre by 5 metre corner splay at junctions with arterial roads and a minimum 3 metre by 3 metre corner splay at other junctions unless site conditions justify a variation to achieve safe sight lines across corners.*
- *Ensure streets are of sufficient strength to:*
  - *Enable the carriage of vehicles.*
  - *Avoid damage by construction vehicles and equipment.*
- *Ensure street pavements are of sufficient quality and durability for the:*
  - *Safe passage of pedestrians, cyclists and vehicles.*
  - *Discharge of urban run-off.*
  - *Preservation of all-weather access and maintenance of a reasonable, comfortable riding quality.*
- *Ensure carriageways of planned arterial roads are designed to the requirements of the relevant road authority.*
- *Ensure carriageways of neighbourhood streets are designed for a minimum 20 year life span.*
- *Provide pavement edges, kerbs, channel and crossover details designed to:*
  - *Perform the required integrated water management functions.*
  - *Delineate the edge of the carriageway for all street users.*
  - *Provide efficient and comfortable access to abutting lots at appropriate locations.*
  - *Contribute to streetscape design.*
- *Provide for the safe and efficient collection of waste and recycling materials from lots.*
- *Be accessible to people with disabilities.*
- *Meet the requirements of Table C1. Where the widths of access lanes, access places, and access streets do not comply with the requirements of Table C1, the requirements of the relevant fire authority and roads authority must be met. Where the widths of connector streets do not comply with the requirements of Table C1, the requirements of the relevant public transport authority must be met.*

A street detail plan should be prepared that shows, as appropriate:

- *The street hierarchy and typical cross-sections for all street types.*
- *Location of carriageway pavement, parking, bus stops, kerbs, crossovers, footpaths, tactile surface indicators, cycle paths and speed control and traffic management devices.*
- *Water sensitive urban design features.*
- *Location and species of proposed street trees and other vegetation.*
- *Location of existing vegetation to be retained and proposed treatment to ensure its health.*
- *Any relevant details for the design and location of street furniture, lighting, seats, bus stops, telephone boxes and mailboxes.*

Table C1 Design of roads and neighbourhood streets

Element	*Access Lane*	*Access Place*	*Access Street – Level 1*	*Access Street – Level 2*	*Connector Street – Level 1*	*Connector Street – Level 2*
Traffic Volume	300 vpd	300-1000 vpd	1000-2000 vpd	2000-3000 vpd	3000 vpd	3000-7000 vpd
Target Speed	10 km/h	15 km/h	30 km/h	40 km/h	50 km/h (40 km/h at schools, 20km/h at crossing points)	60 km/h or 50 km/h (40 km/h at schools)
Carriageway Width	5.5m	5.5m	5.5m	7 – 7.5m	3.5m per lane (4.0m at intersections)	3.5m per lane (4.0m at intersections)
Parking Within Street	None	1 verge space per 2 lots, or one-side on carriageway	1 verge space per 2 lots	Both sides	Dedicated lane 2.3m where required	Dedicated lane 2.3m where required
Verge Width	Not required	7.5m (3.5m / 2.5m min)	4.0 / 4.0m	4.5 / 4.5m	4.5 / 4.5m	6.0 / 6.0m
Footpath Provision	Shared Zone	1.5m (Not required if < 5 dwellings)	2 x 1.5m (2.0m at schools, shop, activity centre)	2 x 1.5m (2.0m at schools, shop, activity centre)	2 x 1.5m (2.0m at schools, shop, activity centre)	2 x 1.5m (2.0m at schools, shop, activity centre)
Cycle Path Provision	None	None	Shared Zone	Shared Zone	0.7 - 1.7m	0.7 - 1.7m or shared path

Appropriate splays are provided on the corner of intersections.

Road cross-sections are generally in accordance with Table C1 of the Planning Scheme. The internal access street is provided with a road reserve of 18m, including a road reserve of 7.3 metres accommodating parking on both sides of the street with sufficient space for one-way traffic flow (when two cars are parked on both sides, and two-way flow otherwise), in accordance with the above requirement for an Access Street – Level 2. The access street provides a footpath on one side of the road, which is considered appropriate noting the low speeds and traffic volumes expected within the subdivision.

The availability for kerbside parking on the internal access street is dependent on the location of accesses to the superlot which will be determined as part of a future application. Regardless, it is expected that the provision for kerbside parking will be acceptable in meeting the visitor parking demands associated with development of the site, with at least one space per two dwellings expected to be achieved.

It is therefore considered that the subdivision satisfies the objectives of Clause 56.06-7.

5.2.7 Clause 56.06-8, Lot Access Objective

Standard C21

Vehicle access to lots abutting arterial roads should be provided from service roads, side or rear access lanes, access places or access streets where appropriate and in accordance with the access management requirements of the relevant roads authority.

Vehicle access to lots of 300 square metres or less in area and lots with a frontage of 7.5 metres or less should be provided via rear or side access lanes, places or streets.

The design and construction of a crossover should meet the requirements of the relevant road authority.

The internal road network proposes no arterial roads. All lots are provided with access via the access street.

It is therefore considered that the subdivision satisfies the objectives of Clause 56.06-8.

5.3 Infrastructure Design Manual

The Infrastructure Design Manual (IDM) is a document prepared by numerous Victorian rural and regional Councils, providing a set of consistent requirements and standards for the design and development of infrastructure.

The manual provides cross-sectional requirements for rural and urban roads, with the relevant requirements to the subject site reproduced in Table 2.

Table 2 IDM Road Cross-Sectional Requirements – Urban Roads

Road Type	*Max. Traffic Volumes (veh/day)*	*Min. Reserve*	*Carriageway Width*	*Min. Verge Width*	*Parking*	*Pedestrian / Cycle Provision*
Access Lane	300	N/A	5.5m	N/A	Yes (x1)	No footpath No cycles
Access Place	300	14.0m	6.0m	3.5m	Yes (x1)	Footpath x2 No cycles
Access Street	1,000	16.0m	7.3m	3.5m	Yes (x2)	Footpath x2 No cycles
Court Bowl (Residential)	N/A	28.0m	10.0m radius	3.5m	N/A	Footpath x2 No cycles

Road cross-section of the access street is generally in accordance with the Infrastructure Design Manual. The internal access street is proposed with a road reserve of 18 metres, including a 7.3 metre carriageway, accommodating parking on both sides of the street with sufficient space for one-way traffic flow (when two cars are parked on both sides, and two-way flow otherwise), in accordance with the above. A footpath is proposed on one side of the access street, which is considered appropriate noting the low speeds and traffic volumes expected within the subdivision.

It is therefore considered that the subdivision generally satisfies the requirements of the IDM.

6 TRAFFIC

6.1 Traffic Generation

It is generally accepted that single dwellings on a lot in outer suburban areas may generate traffic at up to 10 vehicle trips per day (with 10% of these movements occurring in the respective peak hours), whilst in areas with good public transport, and for higher density dwellings, lower traffic generation rates are often recorded.

Considering the proximity of the proposed dwellings to the Daylesford city centre, it is expected that the level of traffic generated will be lower. Notwithstanding, to provide a conservative assessment, it will be assumed that the lots generate up to 8 vehicle trips per lot per day, including 0.8 trips per lot during the peak periods.

Application of the above rates to the 7 lots proposed equates to a daily traffic generation of 56 movements, including 6 movements during the AM and PM peak hour periods.

6.2 Traffic Distribution

For the purposes of this assessment, the following directional splits will be adopted:

- AM peak hour: 75 % outbound, 25 % inbound; and
- PM peak hour: 40 % outbound, 60 % inbound.

Application of the above rates to the proposed 67 lots equates to the traffic volumes detailed in Table 3.

Table 3 Anticipated Traffic Generation

Period	*Inbound*	*Outbound*	*Total*
AM Peak	2	4	6
PM Peak	4	2	6

Considering the location of the site in relation to the arterial road network, public transport facilities, schools, recreation and retail and employment precincts, the directional distribution shown in Table 4 has been adopted.

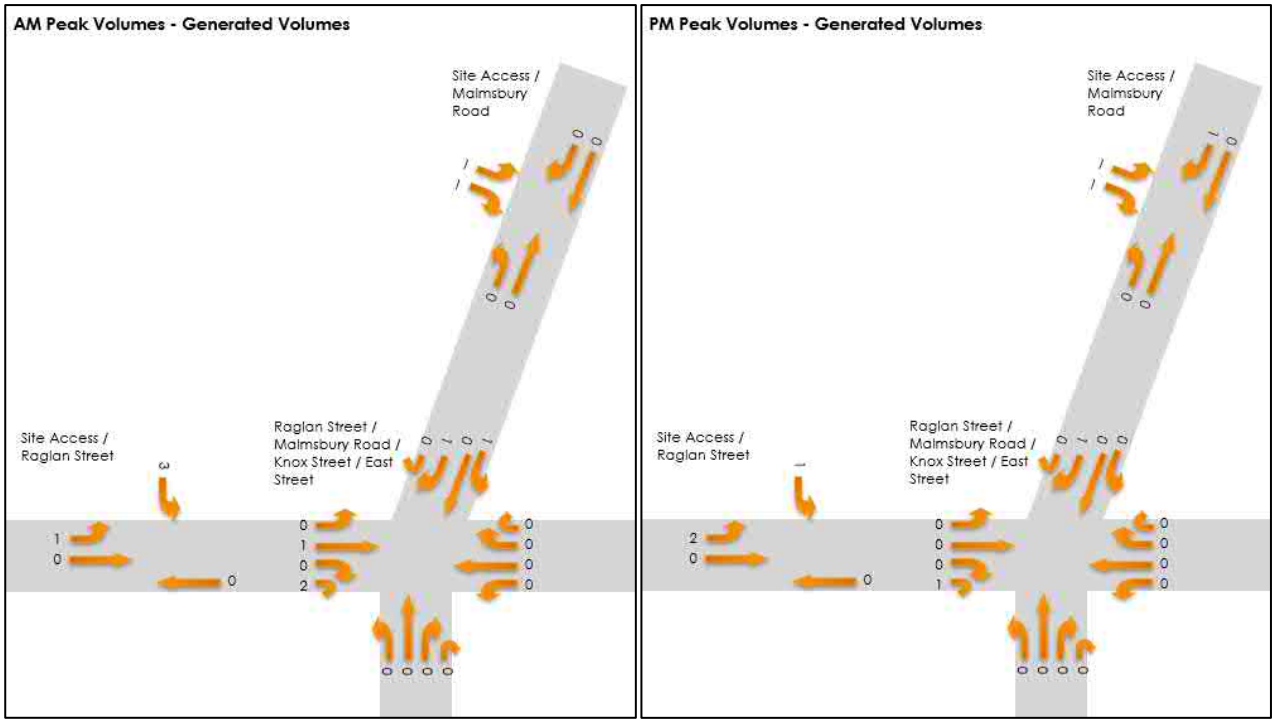
Table 4 Adopted Directional Traffic Distribution

Origin/Destination	*Percentage*	*Distribution to Raglan Street Access*		*Distribution to Malmsbury Road Access*	
		Inbound	Outbound	Inbound	Outbound
Malmsbury Road – North	35%	-	-	100%	100%
Raglan Street – West	50%	100%	75%	-	25%
Knox Street – East	15%	-	75%	25%	100%

6.3 Generated Traffic Volumes

Based on the above, the following traffic volumes are expected to be generated by the proposed development, as shown in Figure 7.

Figure 7 Generated Traffic Volumes

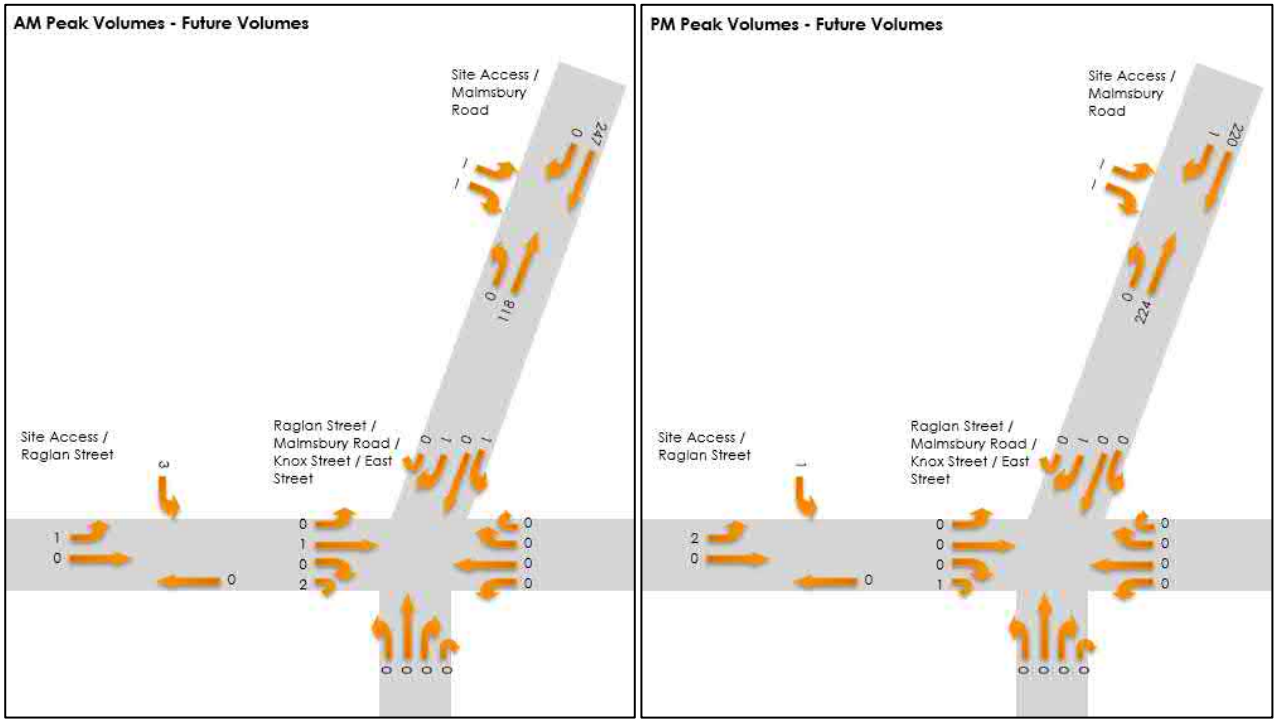


6.4 Future Traffic Volumes

Based on the above, the future traffic volumes can be calculated by combining the existing volumes with the traffic anticipated to be generated by the proposed development.

The resultant peak hour traffic volumes are shown in Figure 8.

Figure 8 Resultant Future Traffic Volumes



6.5 Traffic Impact

With regard to the AM peak hour, it is shown in Figure 8 that a maximum of 3 movements are expected to be generated for any one movement, equating to one movement every twenty minutes, which is very low in traffic engineering terms. This is expected for the left turn out of the site onto Raglan Street.

With regard to the PM peak hour, as shown in Figure 8 a maximum of 2 vehicle movements are expected to be generated for any one movement, equivalent to one movement every thirty minutes, which again is very low in traffic engineering terms. This is projected for the left turn into the site from Raglan Street. As this is proposed to operate as an unsignalised left-in/left-out intersection, this is not expected to cause queues or notable delays on Raglan Street.

The above traffic volumes are not expected to have a significant impact on the surrounding road network.

6.6 Further Development

The development of the superlot will be subject to a separate and future permit application. The development of the superlot will rely on access that is delivered by this application which includes two connections to the external road network. These multiple connections will afford motorists choice in terms of movement across the road network. From a capacity point of view, two connections to the external road network will result in a high level of distribution across the road network thus resulting in a limited (if any) impact.

Based on the above, it is considered that there is ample capacity across the road network to cater for additional development yield within the superlot.

6.7 Road Treatments

As part of the 7-lot subdivision, there is not expected to be any intersection treatment works required at the site access points.

Nevertheless, simple treatments can be installed as part of the subdivision to allow for future capacity if required by the superlot. These treatments include a basic left turn treatment (BAL) and a basic right turn treatment (BAR) at the Malmsbury Road / Site Access intersection and a BAL at the Raglan Street /Site Access intersection.

A view of each of the intersection treatments is provided in Appendix A.

7 CONCLUSIONS

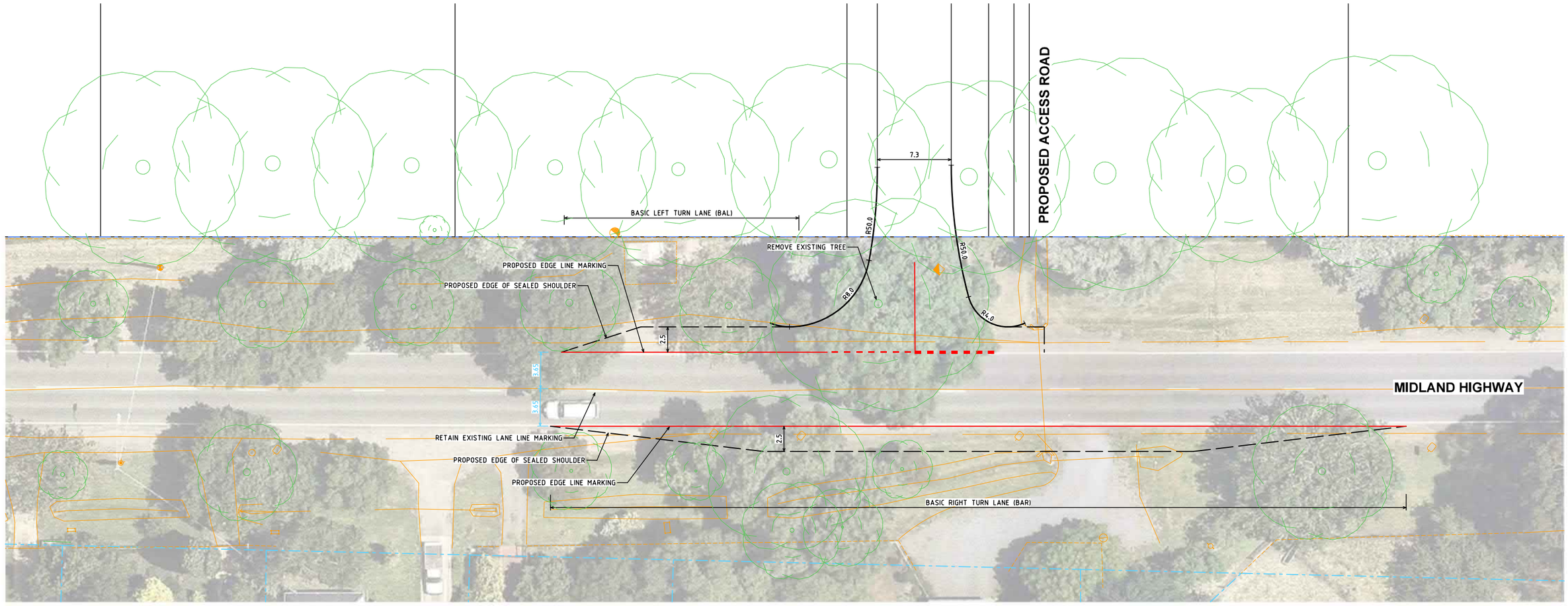
It is proposed to develop the subject site for the purposes of a residential subdivision comprising 7 lots and a superlot.

Considering the analysis presented above, it is concluded that:

- The subdivision road network has been designed in accordance with Clause 56 requirements of the Hepburn Planning Scheme and the IDM guidelines;
- The layout of access street provides for on-street parking for use by visitors to the area;
- The 7 lots proposed on site are projected to generate 56 daily vehicle movements, including up to 6 vehicle movements during the peak hour periods;
- The proposed development is expected to have a negligible impact on the surrounding road network when compared to the existing operation; and
- The proposed intersection treatments will allow for the development and any future traffic associated with the superlot.

Appendix A Concept Layout Plans

ATTACHMENT 10.2.5



GENERAL NOTES

1. ALL DIMENSIONS TO FACE OF KERB AND CHANNEL UNLESS NOTED.
2. DECLARED ROAD - MIDLAND HIGHWAY(SPEED ZONE 60KM/H).
3. SIGNS AND LINE MARKING TO BE INSTALLED IN ACCORDANCE WITH VICROADS SUPPLEMENT TO AS1742.2.
4. ADOPT VICROADS SUPPLEMENT TO AUSTRALIAN STANDARDS AS REQUIRED.
5. REMOVE ALL REDUNDANT SIGNS AND LINE MARKING.

Aerial Photography
Aerial photography provided by Nearmap

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Scale
1:400 @ A3
0 2 4 8

Drawing Title
4719 MIDLAND HIGHWAY, DAYLESFORD
PROPOSED INTERSECTION (MIDLAND HIGHWAY)
CONCEPT LAYOUT PLAN

Designed	Approved	Melway Ref
DK	VG	VR

Project Number	Drawing Number	Revision
220239	CLP101	A

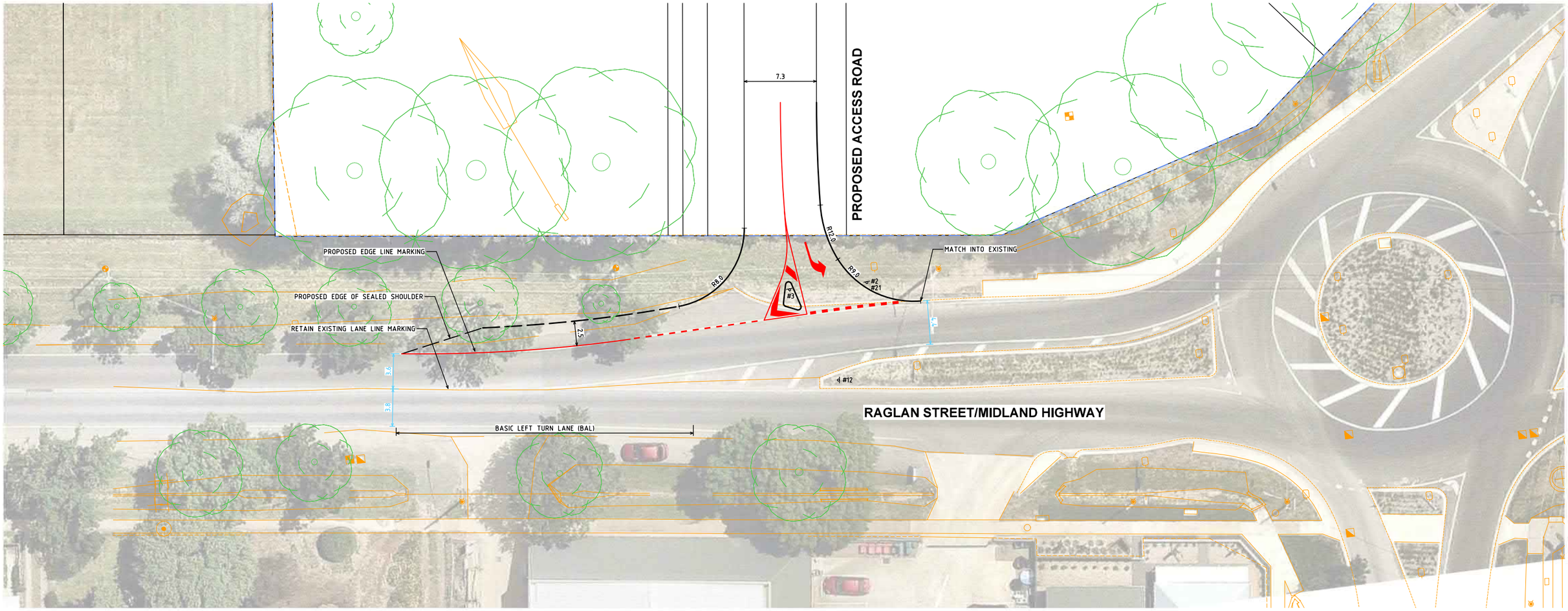
CAD File: N:\Projects\2022\220239\Drawings\220239CLP101.dgn

Date Plotted: 05-04-2022 8:47:15 AM

ATTACHMENT 10.2.5

SIGN SCHEDULE

#2	GIVE WAY	R1-2	#12	NO RIGHT TURN	R2-6(R)
#3	KEEP LEFT	R2-3(L)	#21	ONLY	R2-14(L)



GENERAL NOTES

1. ALL DIMENSIONS TO FACE OF KERB AND CHANNEL UNLESS NOTED.
2. DECLARED ROAD - RAGLAN STREET / MIDLAND HIGHWAY(SPEED ZONE 60KM/H).
3. SIGNS AND LINE MARKING TO BE INSTALLED IN ACCORDANCE WITH VICROADS SUPPLEMENT TO AS1742.2.
4. ADOPT VICROADS SUPPLEMENT TO AUSTRALIAN STANDARDS AS REQUIRED.
5. REMOVE ALL REDUNDANT SIGNS AND LINE MARKING.

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Scale
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0 2 4 8

Drawing Title
4719 MIDLAND HIGHWAY, DAYLESFORD
PROPOSED INTERSECTION (RAGLAN STREET)
CONCEPT LAYOUT PLAN

Designed	Approved	Melway Ref
DK	VG	VR

Project Number	Drawing Number	Revision
220239	CLP100	A

CAD File: N:\Projects\2022\220239\Drawings\220239CLP100.dgn

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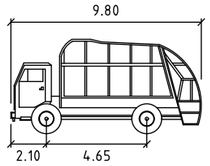
Appendix B Swept Path Diagrams

ATTACHMENT 10.2.5

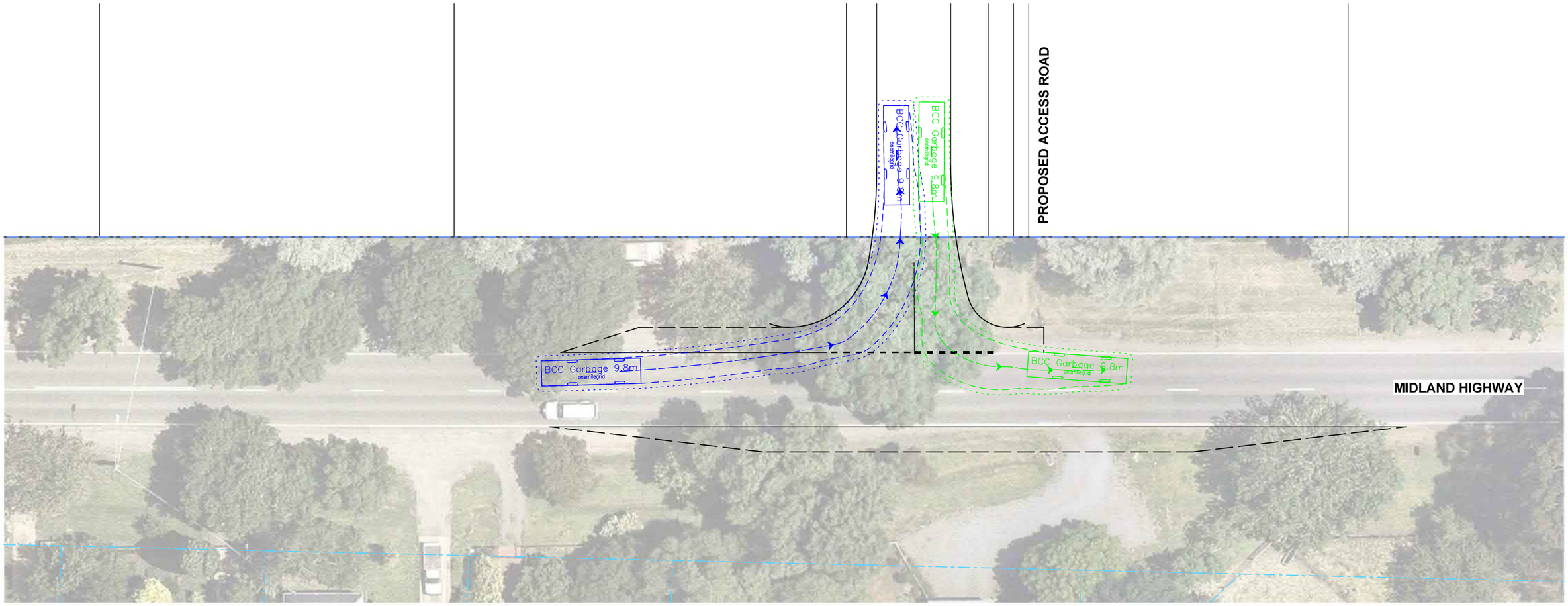


BCC GARBAGE 9.8m meters

Width	: 2.50
Track	: 2.50
Lock to Lock Time	: 4.0
Steering Angle	: 35.8

SWEPT PATH LEGEND

– – – – – DESIGN VEHICLE SWEPT PATHS SHOWN DASHED
--------- 500mm CLEARANCE ENVELOPE SHOWN DOTTED



CAD File: N:\Projects\2022\220239\Drawings\220239SPA103.dgn

Date Plotted: 01-04-20223:29:11 PM

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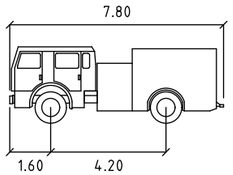
Scale
1:400 @ A3
0 2 4 8

Drawing Title
4719 MIDLAND HIGHWAY, DAYLESFORD
PROPOSED INTERSECTION (MIDLAND HIGHWAY)
SWEPT PATH ANALYSIS (WASTE TRUCK)

Designed	Approved	Melway Ref
DK	VG	VR

Project Number	Drawing Number	Revision
220239	SPA102	A

ATTACHMENT 10.2.5



CFA Tanker
meters

Width	: 3.02
Track	: 2.94
Lock to Lock Time	: 6.0
Steering Angle	: 46.1

SWEPT PATH LEGEND

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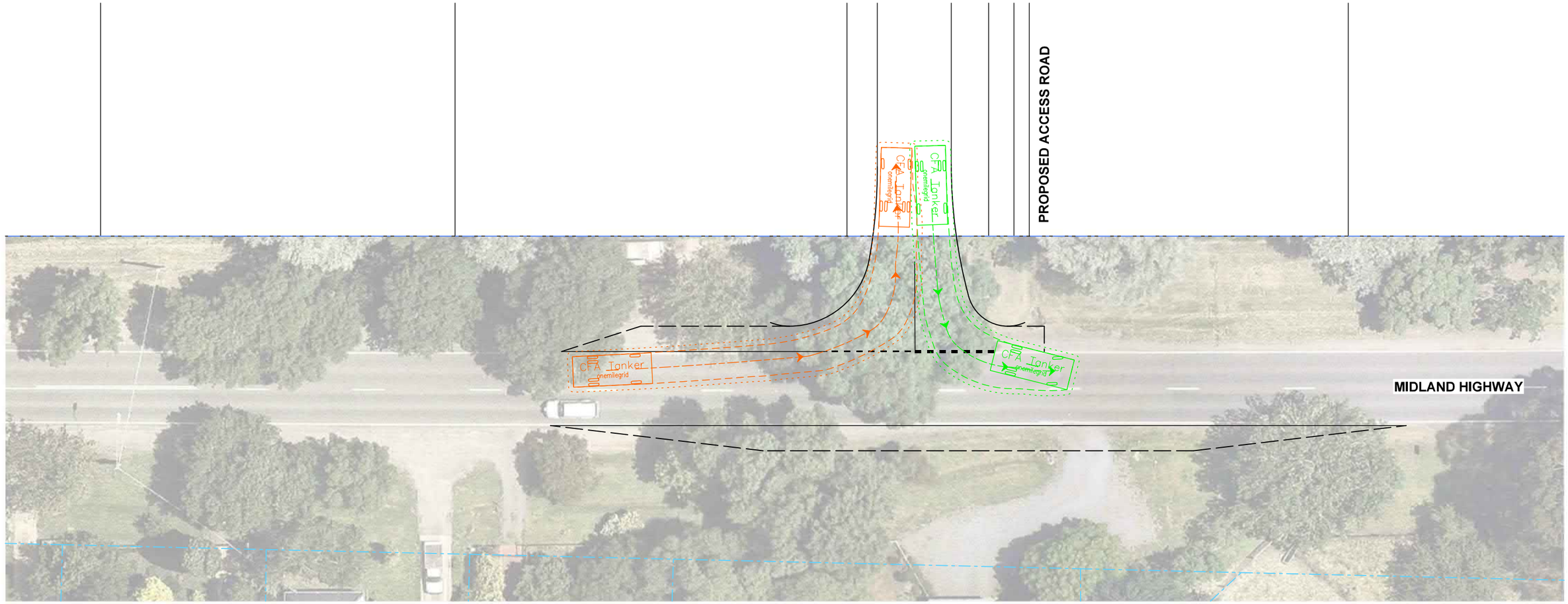

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Scale
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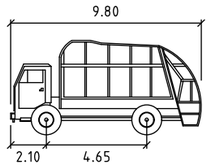
Drawing Title
4719 MIDLAND HIGHWAY, DAYLESFORD
PROPOSED INTERSECTION (MIDLAND HIGHWAY)
SWEPT PATH ANALYSIS (FIRE TRUCK)

Designed	Approved	Melway Ref
DK	VG	VR

Project Number	Drawing Number	Revision
220239	SPA102	A

ATTACHMENT 10.2.5



BCC GARBAGE 9.8m meters

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SWEPT PATH LEGEND

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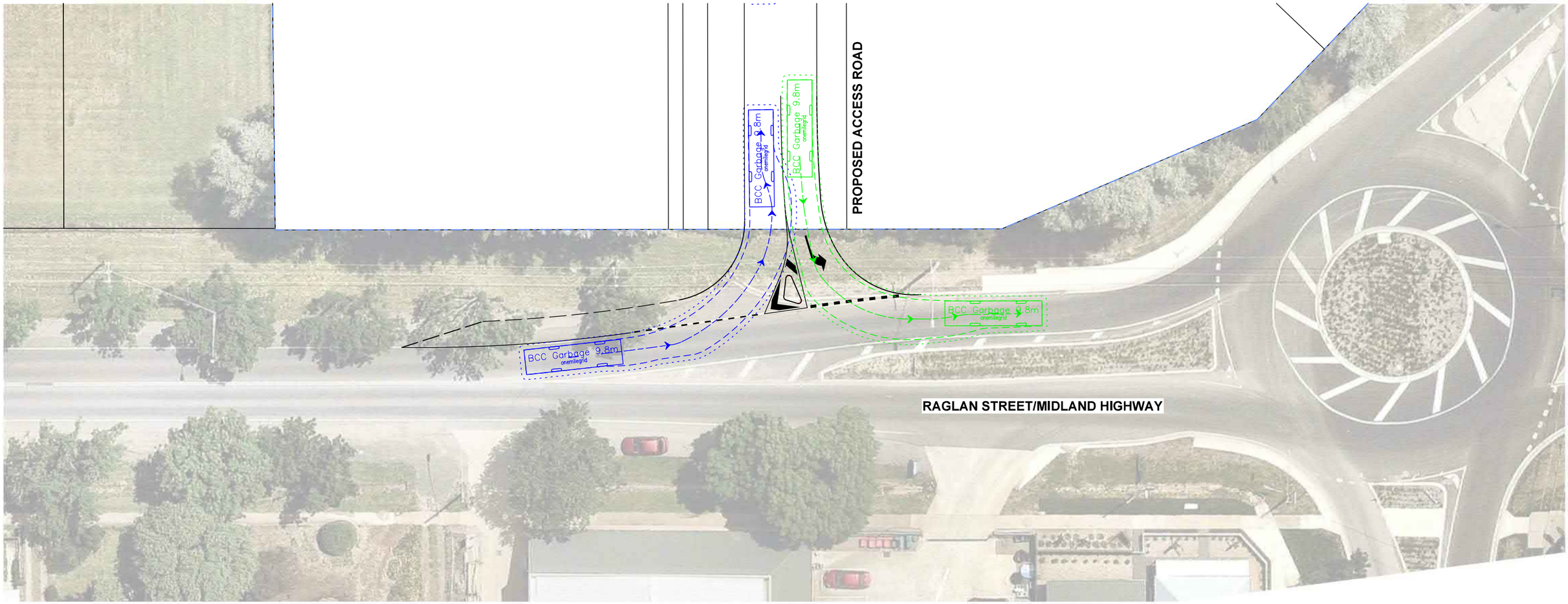

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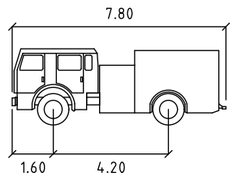
Drawing Title
4719 MIDLAND HIGHWAY, DAYLESFORD
PROPOSED INTERSECTION (RAGLAN STREET)
SWEPT PATH ANALYSIS (WASTE TRUCK)

Designed	Approved	Melway Ref
DK	VG	VR

Project Number	Drawing Number	Revision
220239	SPA101	A

ATTACHMENT 10.2.5



CFA Tanker
meters

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Steering Angle	: 46.1

SWEPT PATH LEGEND

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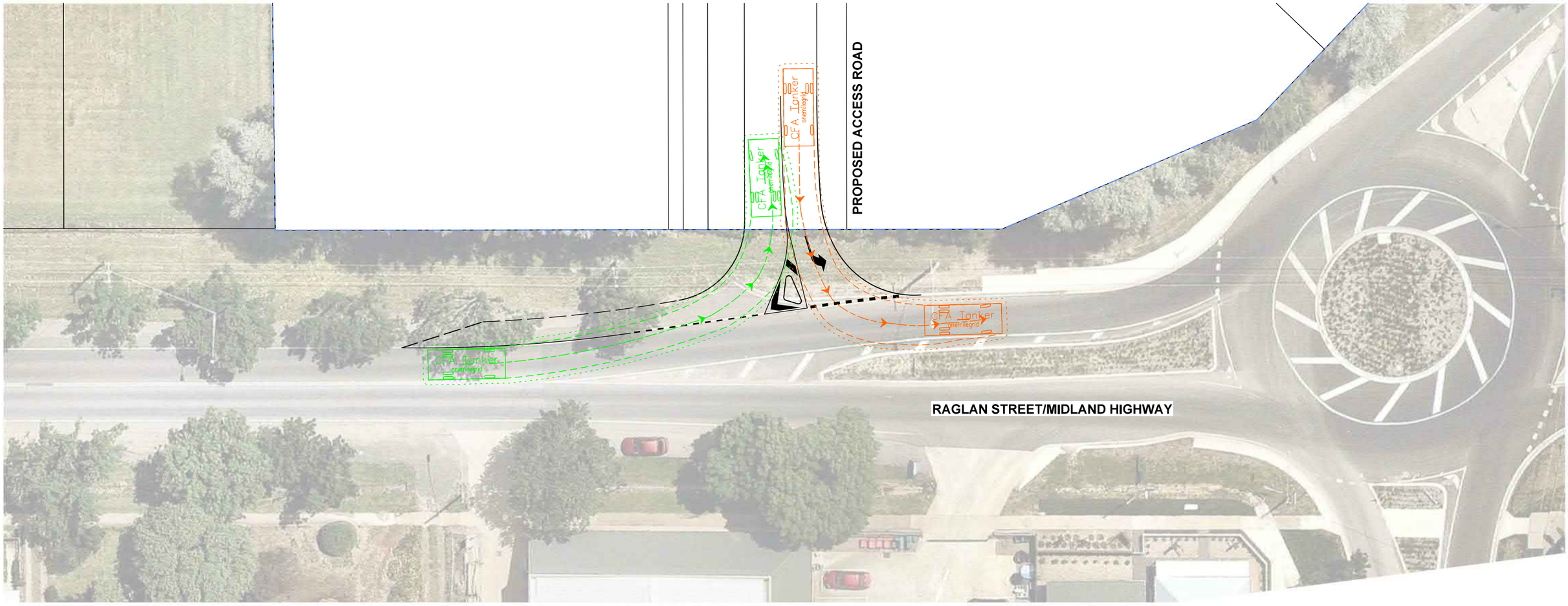

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Drawing Title
4719 MIDLAND HIGHWAY, DAYLESFORD
PROPOSED INTERSECTION (RAGLAN STREET)
SWEPT PATH ANALYSIS (FIRE TRUCK)

Designed	Approved	Melway Ref
DK	VG	VR

Project Number	Drawing Number	Revision
220239	SPA100	A

terramatrix

Bushfire Development Report

for Middleton Field at
17 Smith Street, 9 Raglan Street and
4719 Midland Highway
Daylesford VIC 3460

Report prepared for
Smith Development Partnership Pty Ltd

November 2022

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Report prepared by Terramatrix on behalf of Smith Development Partnership Pty Ltd

Cover photo – Looking west into 4719 Midland Highway from the highway.

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Version Control

Version	Date	Comments	Undertaken by / distribution
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0.1	2022-11-04	Peer review	JE
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1. Summary

Smith Development Partnership Pty Ltd are proposing to develop the Middleton Field residential estate in Daylesford VIC 3460. This report deals with that part of the estate on 17 Smith Street, 9 Raglan Street and 4719 Midland Highway.

The land is zoned Neighbourhood Residential Zone – Schedule 1 (NRZ1) and is on the north-eastern edge of the established township area of Daylesford, north of and opposite the Daylesford Railway Station. The proposed development is consistent with the current zoning. The site is exposed to a bushfire hazard in the form of Grassland (pasture) to the north and east. The closest Forest is a narrow strip along Bund Creek approximately 500m to the north-east, with more extensive areas of Forest beyond, to the east of Hepburn Springs.

The site is wholly within a Bushfire Prone Area (BPA) but not covered by the Bushfire Management Overlay (BMO). As the development comprises accommodation in a BPA, the development must respond to the objective and applicable strategies of Clause 13.02-1S *Bushfire Planning* (Hepburn Planning Scheme, 2018).

Key points:

- The entire site is within a designated BPA but not covered by the BMO.
- The site is on the north-eastern edge of the established township area of Daylesford, with well-established low threat residential and commercial properties to the west and south and farmland to the north-east.
- Future buildings on the site can achieve a BAL-12.5 construction standard.
- Adequate access and egress for emergency management vehicles can be provided by the existing and proposed road network, that will access Midland Highway to the east, Raglan Street to the south and Smith Street to the west.
- A reliable water supply for fire fighting can be provided via a reticulated hydrant system.
- There is easy egress, for future occupants of the site, to areas of Daylesford that would be rated as BAL-LOW using the AS 3959-2018 site assessment methodology.
- Development of the site will not increase the bushfire risk to existing and future residents, property or community infrastructure.

2. Introduction

This Bushfire Development report has been prepared for Smith Development Partnership Pty Ltd, to assess how the Middleton Field[1] residential development at 17 Smith Street, 9 Raglan Street and 4719 Midland Highway, Daylesford VIC 3460 ('the site') can respond to the bushfire risk and the applicable Victorian planning and building controls that relate to bushfire, in particular the objective and applicable strategies of the Planning Policy Framework (PPF) at Clause 13.02-1S *Bushfire Planning* (Hepburn Planning Scheme, 2018a) and the requirements of the Building Regulations.

The site is currently in a designated Bushfire Prone Area (BPA). BPAs are those areas subject to or likely to be subject to bushfires, as determined by the Minister for Planning. Higher hazard land within a BPA that may be subject to extreme bushfire behaviour is covered by the Bushfire Management Overlay (BMO); however, no part of the site is affected by the BMO and the closest BMO area is approximately 300m to the north.

The site comprises undeveloped land on the north-eastern outskirts of the established township area of Daylesford, between Smith Street to the west and the Midland Highway to the east (see Figure 1). It abuts urban area on all sides, other than the north-east where the neighbouring land is pasture in the Farm Zone (FZ).

[1] Note this report does not include 29 Smith Street.

3. Proposed development

The Middleton Field estate comprises 71 residential lots (two of which will retain existing homesteads), three areas of Eco Village housing and associated roads and public open space (see Figure 1). All but the four northernmost lots on 29 Smith Street, are the subject of this report.

This report assesses the bushfire hazard in relation to the site. It identifies how development of the site can appropriately mitigate any bushfire risk by responding to and complying with the applicable bushfire planning and building controls. It has been prepared in accordance with applicable guidance for the assessment of, and response to, bushfire risk provided in:

- *Planning Permit Applications Bushfire Management Overlay Technical Guide*[2] (DELWP, 2017); and
- AS 3959-2018 *Construction of buildings in bushfire prone areas* (Standards Australia, 2020).

[2] Although the area and surrounding land is not affected by the BMO, DELWP's BMO technical guide provides useful descriptors and guidance for assessing the bushfire risk at the landscape scale.

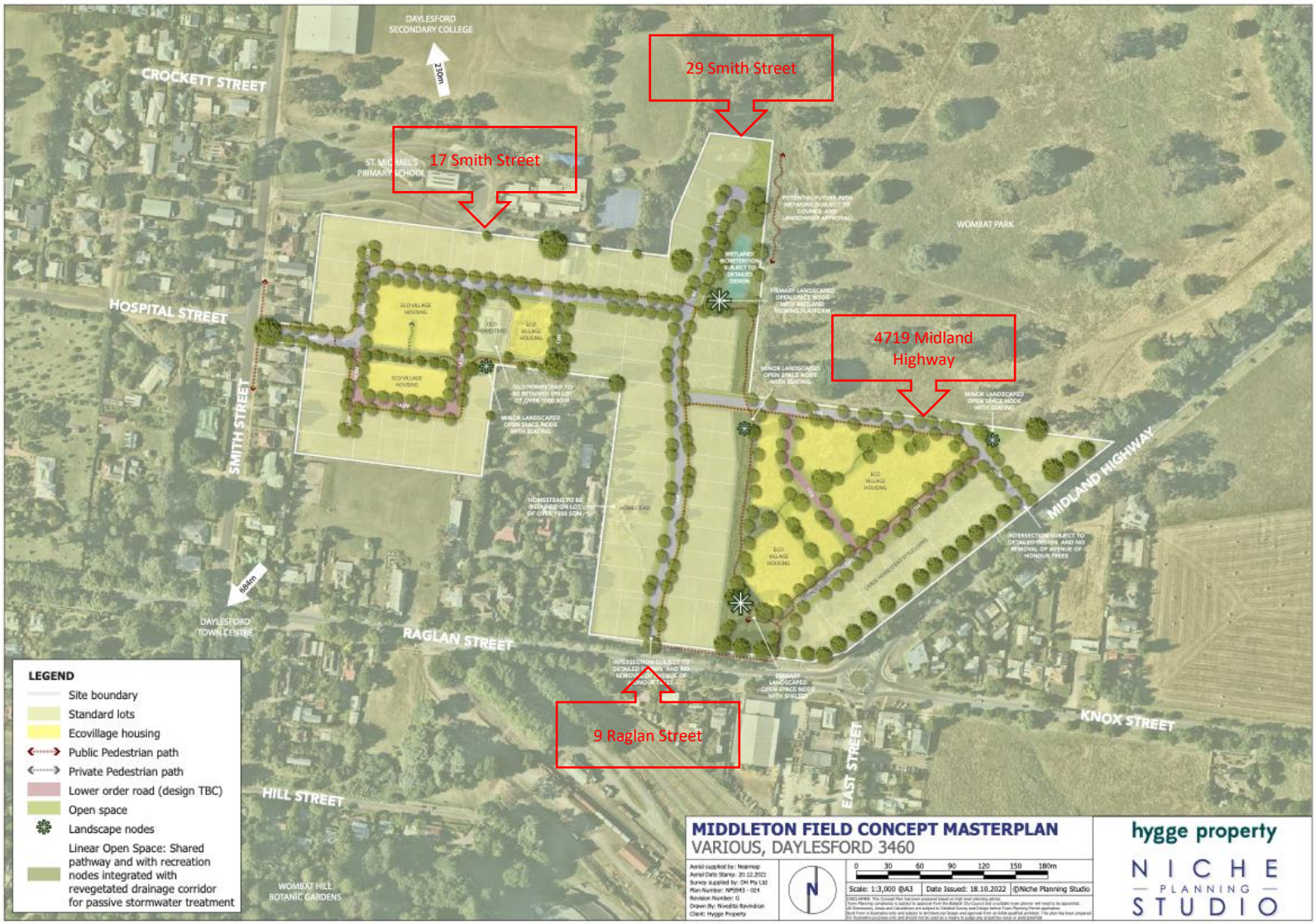


Figure 1 – Middleton Field Concept Masterplan (Niche, 2022) (note that the northern 29 Smith St component is not addressed in this report).

4. Bushfire planning and building controls

This section summarises the applicable planning and building controls that relate to bushfire. Sections 8 and 9 describe how planning and design of the site can respond to and comply with the controls.

4.1. Claus 71.02-3 Integrated Decision Making

Clause 71.02-3 states that planning and responsible authorities should endeavour to integrate policies and balance conflicting objectives in favour of net community benefit and sustainable development. However, in bushfire affected areas, the protection of human life must be prioritised over all other policy considerations (Hepburn Planning Scheme, 2018b).

4.2. Clause 13.02-1S Bushfire Planning

The State Planning Policy at Clause 13.02-1S *Bushfire Planning* requires that bushfire risk be considered for strategic planning, planning scheme amendments and planning applications involving a range of uses including development in a BPA that involves accommodation, subdivisions of more than 10 lots and that will result in people congregating in large numbers (Hepburn Planning Scheme, 2018a).

The proposed development of Middleton Field will need to address the policy objective and the applicable strategies.

Objective – To strengthen the resilience of settlements and communities to bushfire through risk-based planning that prioritises the protection of human life.

Strategies:

- *Protection of human life*
- *Bushfire hazard identification and assessment*
- *Settlement planning*
- *Areas of biodiversity conservation value*
- *Use and development control in a Bushfire Prone Area*

Clause 13.02-1S requires priority to be given to the protection of human life by:

- *'Prioritising the protection of human life over all other policy considerations.*
- *Directing population growth and development to low risk locations and ensuring the availability of, and safe access to, areas where human life can be better protected from the effects of bushfire.*
- *Reducing the vulnerability of communities to bushfire through consideration of bushfire risk in decision-making at all stages of the planning process'* (Hepburn Planning Scheme, 2018a).

Key strategies are stipulated in Clause 13.02-1S, which require that strategic planning documents, planning scheme amendments and development plan approvals properly assess bushfire risk and

include appropriate bushfire protection measures. This also applies to planning permit applications for:

- Subdivisions of more than 10 lots;
- Accommodation;
- Child care centre;
- Education centre;
- Emergency services facility;
- Hospital;
- Indoor recreation centre;
- Major sports and recreation facility;
- Place of assembly; and
- Any application for development that will result in people congregating in large numbers.

Development should not be approved where '*…a landowner or proponent has not satisfactorily demonstrated that the relevant policies have been addressed, performance measures satisfied or bushfire protection measures can be adequately implemented*' (Hepburn Planning Scheme, 2018a).

The manner in which the proposed development will respond to these strategies is documented in this Bushfire Development Report in Section 9.

4.3. Other planning controls

4.3.1.Zoning

The site is currently Neighbourhood Residential Zone Schedule 1 (NRZ1) and no re-zoning is intended.

4.3.2.Overlays

17 Smith Street, 9 Raglan Street and 4719 Midland Highway are affected by the Environmental Significance Overlay, Schedule 1 *Special Water Supply Catchment Protection* (ESO1) (Hepburn Planning Scheme, 2022a) and Schedule 2 *Mineral Springs and Groundwater Protection* (ESO2) (Hepburn Planning Scheme, 2022b). These overlays have no implications for bushfire planning for the site.

9 Raglan Street and the western part of 4719 Midland Highway are also affected by the Heritage Overlay and Schedule 698 *Daylesford Railway Heritage Precinct* (HO698) (Hepburn Planning Scheme, 2022c). This overlay has no implications for bushfire planning for the site.

No part of the site is covered by the Bushfire Management Overlay (BMO). The nearest BMO coverage is more than 300m to the north.

4.3.3.Local planning policy

The site is in Daylesford Neighbourhood Character Precinct Eleven, which has the objective of maintaining the spaciousness of the dwelling settings and strengthening the definition of the

entrance to the town (Hepburn Planning Scheme, 2022d). This policy appears to have no implications for bushfire planning for the site.

4.4. Bushfire Prone Area

BPAs are those areas subject to, or likely to be subject to bushfire, as determined by the Minister for Planning. Those areas of highest bushfire risk within the BPA are designated as BMO areas.

In a BPA, the Building Act 1993 and associated Building Regulations 2018, through application of the National Construction Code (NCC), require bushfire protection standards for class 1, 2 and 3[3] buildings, 'Specific Use Bushfire Protected Buildings'[4] and associated class 10A buildings[5] or decks. The applicable performance requirement in the NCC is:

> *'A building that is constructed in a designated bushfire prone area must, to the degree necessary, be designed and constructed to reduce the risk of ignition from a bushfire, appropriate to the —*
>
> *(a) potential for ignition caused by burning embers, radiant heat or flame generated by a bushfire; and*
>
> *(b) intensity of the bushfire attack on the building'* (ABCB, 2020).

A BAL is a means of measuring the severity of a building's potential exposure to ember attack, radiant heat, and direct flame contact. There are six BALs defined in AS 3959-2018, which range from BAL-LOW, which has no bushfire construction requirements, to BAL-FZ (Flame Zone) where flame contact with a building is expected.

[3] Class 1, 2 and 3 buildings are defined in the NCC and are generally those used for residential accommodation, including houses and other dwellings, apartments, hotels and other buildings with a similar function or use.

[4] Specific Use Bushfire Protected Buildings are defined in the Victorian *Building Regulations 2018,* they generally comprise 'vulnerable' uses and include schools, kindergartens, childcare facilities, aged care facilities and hospitals.

[5] Class 10a buildings are defined in the NCC as non-habitable buildings including sheds, carports, and private garages.

5. Regional bushfire risk assessments and plans

5.1. Grampians Bushfire Management Strategy

The Bushfire Management Strategy recognises Daylesford as a major population centre in the region and subject to a significant influx of tourists over weekends and holiday periods (DELWP, 2020a). Daylesford is identified as one of the settlements at greatest bushfire risk, with forest on public land to the north, west and south that allows a bushfire to become large and intense before impacting the township (DELWP, 2020). The Joint Fuel Management Program provides large areas of Asset Protection Zone and Bushfire Moderation Zone to the north, west and south of the township where planned burning is used to reduce the bushfire risk, supported by mechanical clearing (FFMV, online).

5.2. Regional Bushfire Planning Assessment (RBPA) Grampians Region

As part of the response to the 2009 Victorian Bushfires Royal Commission, Regional Bushfire Planning Assessments (RBPAs) were undertaken across six regions that covered the whole of Victoria. The RBPAs provide information about 'identified areas' where a range of land use planning matters intersect with a bushfire hazard to influence the level of risk to life and property from bushfire. The RBPAs state that '*This information should be addressed as part of strategic land use and settlement planning at the regional, municipal and local levels*' (DPCD, 2012).

The *Regional Bushfire Planning Assessment – Grampians Region* covers the Hepburn LGA. It identified the following areas at Daylesford:

- Sailors Falls to Daylesford – Rural-residential lots from Sailors Falls to Hepburn, including around Daylesford are in a bushfire hazard are associated with the Hepburn Regional Park and surrounding vegetation. Existing vegetation includes areas of high and very high conservation significance (Identified Area Code 29-012);
- Daylesford – Residential lots in Daylesford are in the bushfire hazard area associated with surrounding Hepburn Regional Park (Identified Area Code 29-017);
- Daylesford – Daylesford Structure Plan provides for rural-residential lots in close proximity to bushfire hazard. Existing vegetation includes areas of vegetation of high and very high conservation significance (Identified Area Code 29-032); and
- Hepburn Springs to Daylesford – Townships rely primarily on Main Road for access and egress from bushfire hazard area (Identified Area Code 29-038) (DPCD, 2012).

None of these issues particularly apply to the site, which has direct exposure to only a Grassland hazard.

5.3. Hepburn Shire Municipal Emergency Management Plan (MEMP) and Municipal Fire Management Plan (MFMP)

The MEMP details all hazards emergency management arrangements but does not specifically mention Daylesford or bushfire management, although bushfire is identified as having a High Risk Rating (Hepburn Shire Council, 2018).

Although listed in the MEMP as having been produced, the MFMP is not available on the Hepburn Shire Council web site.

6. Bushfire hazard landscape assessment

One of the bushfire hazard identification and assessment strategies in Clause 13.02-1S, is to use the best available science to identify the hazard posed by vegetation, topographic and climatic conditions (Hepburn Planning Scheme, 2018a). The basis for the hazard assessment should be:

- *'Landscape conditions - meaning the conditions in the landscape within 20 kilometres and potentially up to 75 kilometres from a site;*
- *Local conditions - meaning conditions in the area within approximately 1 kilometre from a site;*
- *Neighbourhood conditions - meaning conditions in the area within 400 metres of a site; and,*
- *The site for the development'* (Hepburn Planning Scheme, 2018a).

This section includes a bushfire assessment to describe the landscape conditions, local conditions and neighbourhood conditions. The assessment of the site is presented in Section 7 in accordance with AS 3959-2018 *Construction of buildings in bushfire prone areas*, which requires a site assessment of the vegetation and topography up to 100m around a building or site, for the purposes of determining the applicable BAL construction standard (Standards Australia, 2020).

6.1. Landscape conditions

6.1.1. Broader landscape hazard

As required by the Bushfire hazard identification and assessment at Clause 13.02-S, bushfire hazard has been considered at the landscape scale (up to 20km of the site).

Daylesford is located in an inherently flammable landscape, surrounded by large areas of forest extending from Maldon and Castlemaine, more than 30km to the north of Daylesford, to the outskirts of Bacchus Marsh approximately 40km to the southeast and to Mount Macedon more than 40km to the east.

Topography under much of the forest is complex, with some steep slopes.

Beyond the forest are large tracts of dry land farming susceptible to fast moving grass fires under elevated fire weather conditions.

There is potential for a large, landscape scale bushfire to develop in the hilly, forested terrain to the north or south of Daylesford, and approach the township under the influence of a north or north-westerly wind or a south-westerly following the passage of a cold front. These are the typical directions of approach of bushfire under Severe or higher fire danger ratings in Victoria (Long, 2006).

The area around Daylesford has a significant recent bushfire history, including the 2009 bushfire to the south of the town, and several smaller fires in the immediate surrounds since 2000. Further afield, large fires have occurred in the Wombat State Forest east of Blackwood and to the west around Creswick (see Map 1).

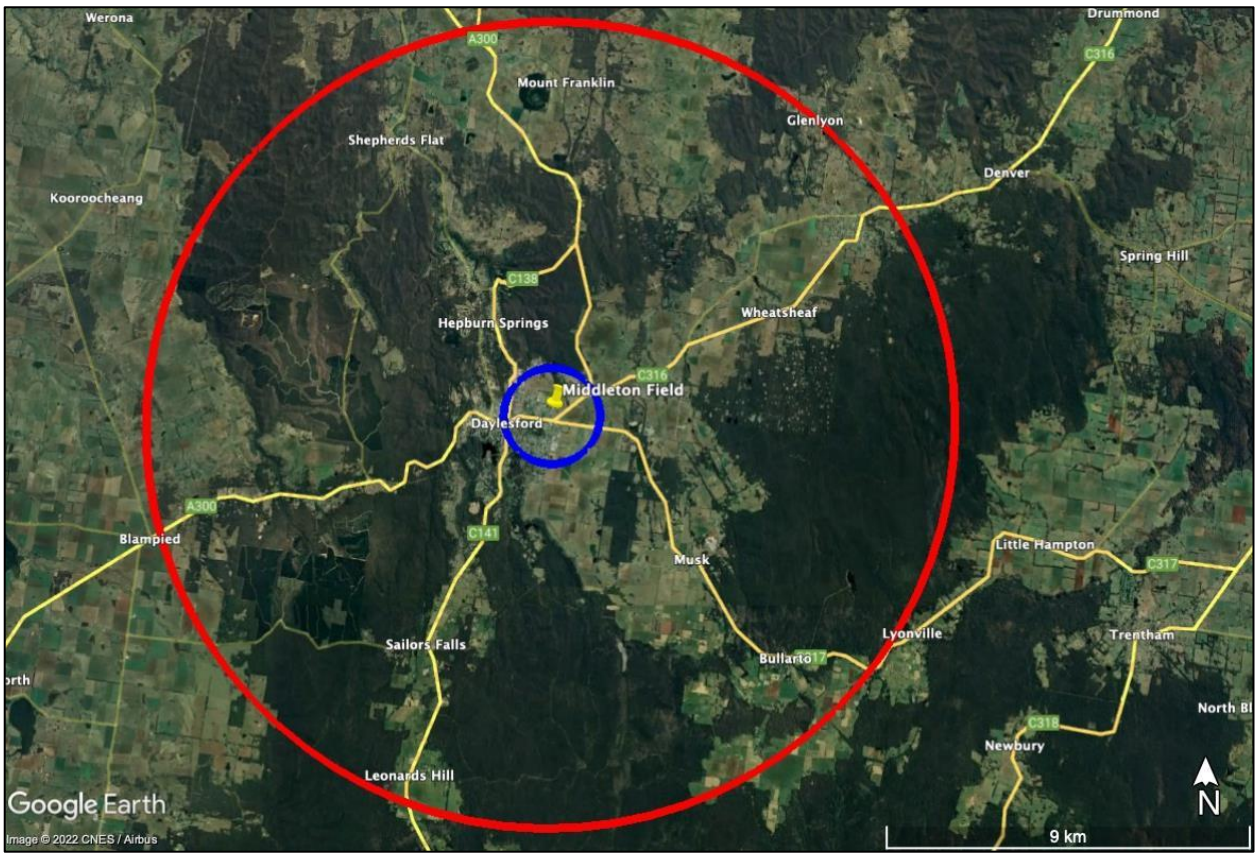


Figure 2 – Location of Middleton Field, Daylesford (site indicated by yellow pin, 1km buffer in blue outline, 10km buffer in red outline (Google Earth imagery 8/9/2021)).

6.1.2.Fire weather

The recently introduced Australian Fire Danger Rating System establishes four fire danger rating categories and a numerical Fire Behaviour Index (FBI) that applies to all fuel types across the country. The Victorian planning and building systems, however, still use the previous Forest Fire Danger Index (FFDI) and the Grassland Fire Danger Index (GFDI) to represent the level of bushfire threat based on weather (and fuel) conditions. An FFDI 100/GFDI 130 (equivalent to a Catastrophic fire danger rating under the new system) is applied in non-alpine areas of Victoria by the building system, to establish building setback distances from classified vegetation in accordance with AS 3959-2018. The potential fire behaviour and impact for Grassland under a Catastrophic fire danger rating is summarised in Table 1.

The new AFDRS and FBIs do not correlate directly with the FFDI/GFFDI indices that are still applied in the planning and building system. However, the benchmark FFDI 100 used to represent a 'one size fits all' model of extreme fire weather conditions (and the threshold for the previous ‘Code Red’ FDR), can be considered analogous to the new FBI 100 ‘Catastrophic’ FDR. Note that these extreme

conditions have been exceeded during some significant fire events, including in Victoria on 'Black Saturday' 2009. Therefore, it is important to note that this is not necessarily the *worst-case* conditions for any location, including the study area.

In southern Australia, since the 1950s there has been an increase in the length of the fire weather season and an increase in extreme fire weather. It is projected that there will be further increase in the number of dangerous fire weather days and a longer fire season for southern and eastern Australia (CSIRO/BOM, 2020). There is a 'high confidence' that climate change will result in a harsher fire weather climate for the Murray Basin sub-region that the study area is in, with 'high' or 'very high' confidence that there will be more hot days and warm spells and less rainfall (CSIRO/BMO, 2021).

Currently the CFA and DELWP have no published policy on FFDI/GFDI recurrence intervals. There is, therefore, no compelling rationale for applying a different FFDI/GFDI from the 'default' FFDI 100/GFDI 130 threshold currently used throughout non-Alpine areas of Victoria in the planning and building system.

Table 1 - Fire Danger Ratings (Source: Victoria State Government; BoM 2022).

Forest Behaviour Index	Fire Danger Rating (FDR)	Fire Behaviour	Action
>=100	Catastrophic	If a fire starts and takes hold, lives are likely to be lost.	○ These are the most dangerous conditions for a fire. ○ Your life may depend on the decisions on you make, even before there is a fire. ○ For your survival, do not be in bushfire risk areas. ○ Stay safe by going to a safer location early in the morning or the night before. ○ If a fire starts and takes hold, lives and properties are likely to be lost. ○ Homes cannot withstand fires in these conditions. You may not be able to leave and help may not be available.
50-99	Extreme	Fires will spread quickly and be extremely dangerous.	○ These are dangerous fire conditions. ○ Check your bushfire plan and that your property is fire ready. ○ If a fire starts, take immediate action. If you and your property are not prepared to the highest level, go to a safer location well before the fire impacts. ○ Reconsider travel through bushfire risk areas. ○ Expect hot, dry and windy conditions. ○ Leaving bushfire risk areas early in the day is your safest option.
24-49	High	Fires can be dangerous.	○ There is a heightened risk. Be alert for fires in your area. ○ Decide what you will do if a fire starts. ○ If a fire starts, your life and property may be at risk. The safest option is to avoid bushfire risk areas.
12-23	Moderate	Most fires can be controlled.	○ Stay up to date and be ready to act if there is a fire.

Map 1 – Bushfire hazard landscape assessment.

6.2. Local and neighbourhood conditions

As required by the Bushfire hazard identification and assessment strategies at Clause 13.02-1S, bushfire hazard has been considered at the local (within 1km) and neighbourhood (within 400m) scales. They are dealt with together as the nature of the hazard is consistent at the two scales.

The forest comes close to the western and southern edges of the town and borders the linear development of Hepburn Springs to the north. To the east, the town is abutted by grassland.

Middleton Field is an expansion of the built township area of Daylesford, and is zoned for residential use. The site is exposed to a Grassland hazard in the paddocks to the north-east but has no direct exposure to higher hazard Forest.

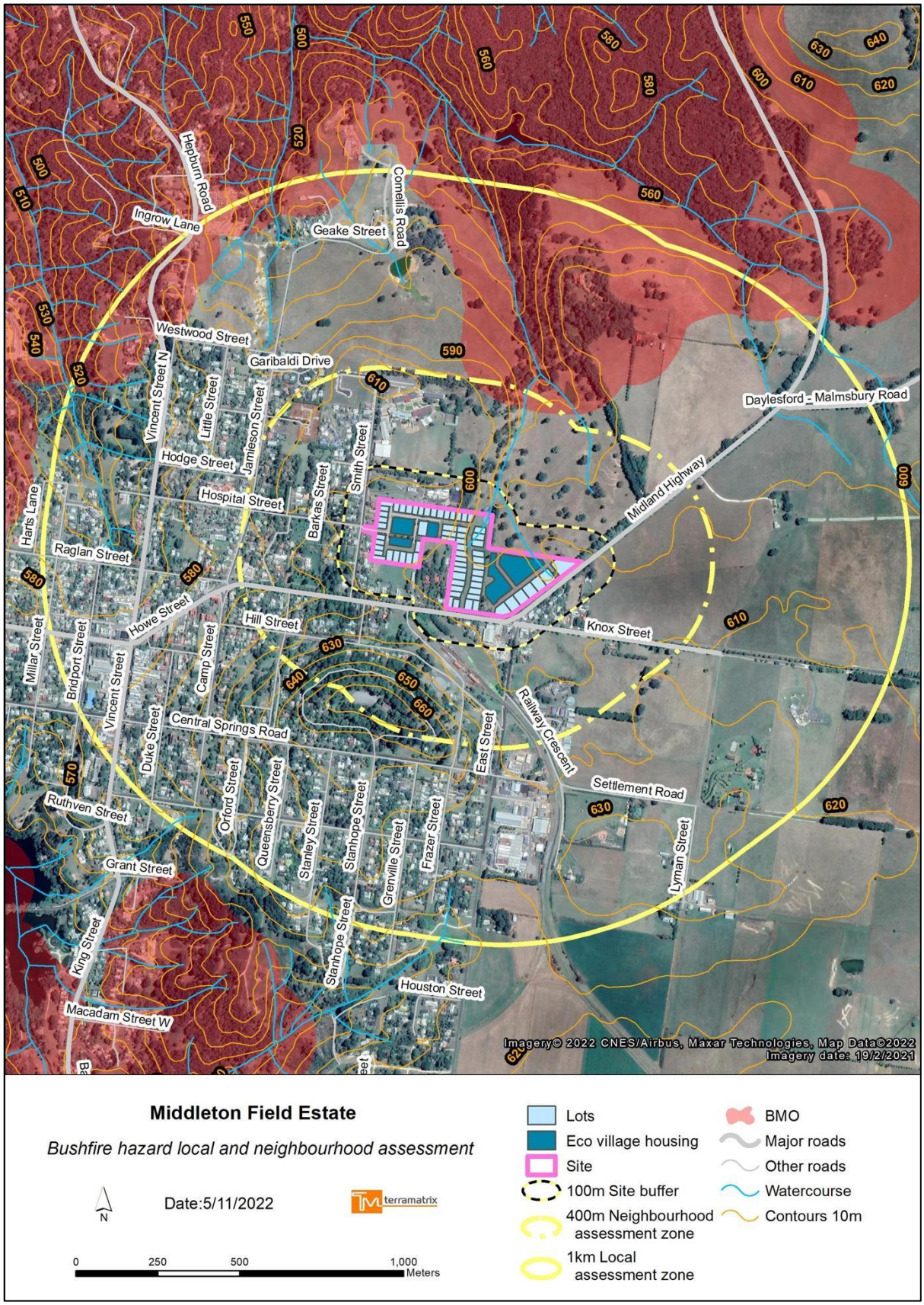
There will be easy egress from the site to the reliably low threat township area immediately adjacent, including the designated Neighbourhood Safer Place west of Camp Street.

To assist in defining landscape risk, four 'broader landscape types', representing different risk levels, are described in *Planning Permit Applications Bushfire Management Overlay* (DELWP, 2017). The typologies are useful descriptors of the risk beyond the site level and are intended to streamline decision-making and support more consistent decision-making based on the landscape risk. The four types range from low risk landscapes where there is little hazardous vegetation beyond 150m of the site and extreme bushfire behaviour is not credible, to extreme risk landscapes with limited or no evacuation options.

It is considered that whilst at a landscape scale Daylesford, as a whole, sits within Broader Landscape Type 3 (see Table 2), at a neighbourhood level Middleton Field fits Broader Landscape Type 2. This means that although an established bushfire could approach Daylesford from multiple directions, Middleton Field is on the edge of the township area and can only be credibly impacted from the north, and by a grassfire rather than a forest fire.

Table 2 - Landscape risk typologies (from DELWP, 2017).

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.
I N C R E A S I N G R I S K →			



Map 2 – Bushfire hazard local and neighbourhood assessment.

7. Bushfire hazard site assessment

7.1. Vegetation

Vegetation within a 100m BAL assessment zone around the site has been classified in accordance with the AS 3959-2018 methodology. Classified vegetation is vegetation that is deemed hazardous from a bushfire perspective.

The classification system is not directly analogous to Ecological Vegetation Classes (EVCs) but uses a generalised description of vegetation based on the AUSLIG (Australian Natural Resources Atlas: No. 7 - Native Vegetation) classification system. The classification is largely based on the structural characteristics of the vegetation at maturity, but the key determinant should be the likely fire behaviour that it will generate.

7.1.1.Grassland

Pasture to the north-east of Middleton Field has been classified as Grassland (see Map 3). Grassland is defined as all forms of vegetation (except Tussock Moorlands) including situations with shrubs and trees, if overstorey foliage cover is less than 10%. Includes pasture and cropland (Standards Australia, 2020).

Grassland vegetation is considered hazardous, and therefore classifiable, when it is not managed in a minimal fuel condition. Minimal fuel condition means there is insufficient fuel available to significantly increase the severity of the bushfire attack (e.g. short-cropped grass, to a nominal height of 100 mm) (Standards Australia, 2020).

Figure 3 – Looking east from 17 Smith Street to the Grassland in the paddock beyond.

7.1.2.Excluded vegetation and non-vegetated areas

Areas of low threat vegetation and non-vegetated areas can be excluded from classification in accordance with Section 2.2.3.2 of AS 3959-2018, if they meet one or more of the following criteria:

(a) 'Vegetation of any type that is more than 100m from the site.
(b) Single areas of vegetation less than 1 ha in area and not within 100m of other areas of vegetation being classified vegetation.
(c) Multiple areas of vegetation less than 0.25 ha in area and not within 20 m of the site, or each other, or of other areas of vegetation being classified vegetation.
(d) Strips of vegetation less than 20 m in width (measured perpendicular to the elevation exposed to the strip of vegetation) regardless of length and not within 20 m of the site or each other, or other areas of vegetation being classified vegetation.
(e) Non-vegetated areas, that is, areas permanently cleared of vegetation, including waterways, exposed beaches, roads, footpaths, buildings and rocky outcrops.
(f) Vegetation regarded as low threat due to factors such as flammability, moisture content or fuel load. This includes grassland managed in a minimal fuel condition[6], mangroves and other saline wetlands, maintained lawns, golf courses (such as playing areas and fairways), maintained public reserves and parklands, sporting fields, vineyards, orchards, banana plantations, market gardens (and other non-curing crops), cultivated gardens, commercial nurseries, nature strips and windbreaks' (Standards Australia, 2020).

Areas of low threat vegetation excluded from classification include adjacent residential areas, to the south-west beyond the Midland Highway, on both sides of Raglan Street (including the Daylesford Station area) and along Smith Street to the west of the site. The grounds and sporting facilities of St Michaels Primary School to the north are also low threat (see Map 3).

The buildings, driveways, car parks and the road network within the 100m site assessment zone comprise non-vegetated areas (see Map 3).

[6] Minimal fuel condition means there is insufficient fuel available to significantly increase the severity of the bushfire attack, recognisable as short-cropped grass for example, to a nominal height of 100mm (Standards Australia, 2020).

Figure 4 – Looking south along the western boundary of the site, with low threat residential properties along Smith Street in the right of image.

Figure 5 – Looking east along Raglan Street, south of the site, with low threat residential properties either side.

Figure 6 – Low threat grounds of St Michaels Primary School to the north of the site.

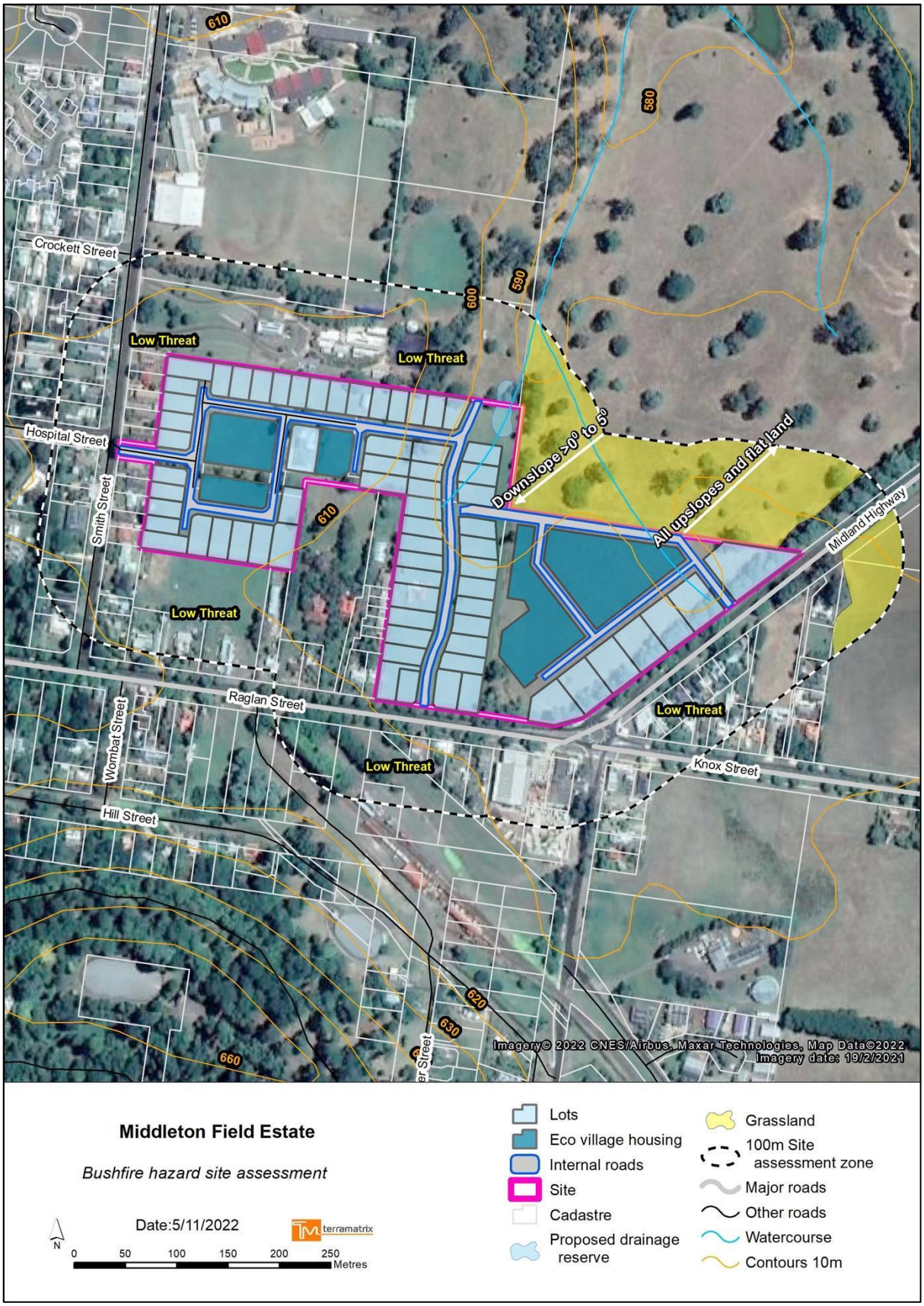
Figure 7 – Looking into the site from Smith Street.

7.2. Topography

The AS 3959-2018 methodology, called up by Clause 13.02-1S *Bushfire Planning* for assessment of bushfire hazard at the site scale, requires that the 'effective slope' be identified to determine the BAL and applicable defendable space or vegetation setback distances. This is the slope of land under the classified vegetation that will most significantly influence the bushfire attack on a building or other asset. Two broad types apply:

- Flat and/or Upslope - land that is flat or on which a bushfire will be burning downhill in relation to the development. Fires burning downhill (i.e. on an upslope) will generally be moving more slowly with a reduced intensity.
- Downslope - land under the classified vegetation on which a bushfire will be burning uphill in relation to the development. As the rate of spread of a bushfire burning on a downslope (i.e. burning uphill towards a development) is significantly influenced by increases in slope, downslopes are grouped into five classes in 5˚ increments from 0˚ up to 20˚.

The topography around the site is benign from a bushfire perspective, with no significant changes in elevation that would exacerbate bushfire behaviour. The classified Grassland to the north-east of the site is either on a gentle 'Downslope >0^{o}-5^{o}' or flat or upslope relative to the site.



Map 3 – Bushfire hazard site assessment.

8. Planning and design response

This section identifies how future development can respond to the bushfire risk, including the requirements of Clause 13.02-1S, published CFA and DELWP guidance and the building regulations applicable to construction in a BPA.

8.1. Analysis of BAL construction standard and setback options

Future dwellings in the residential area can achieve a BAL-12.5 rating by providing low threat setbacks of 22m or 19m in response to the presence of classified Grassland on a 'Downslope of >0°-5°' and 'All upslopes and flat land'.

Building setbacks are measured from the edge of the classified vegetation to the external wall of a building, excluding eaves, roof overhangs and some other building appurtenances[7] (Standards Australia, 2020) (see Figure 8).

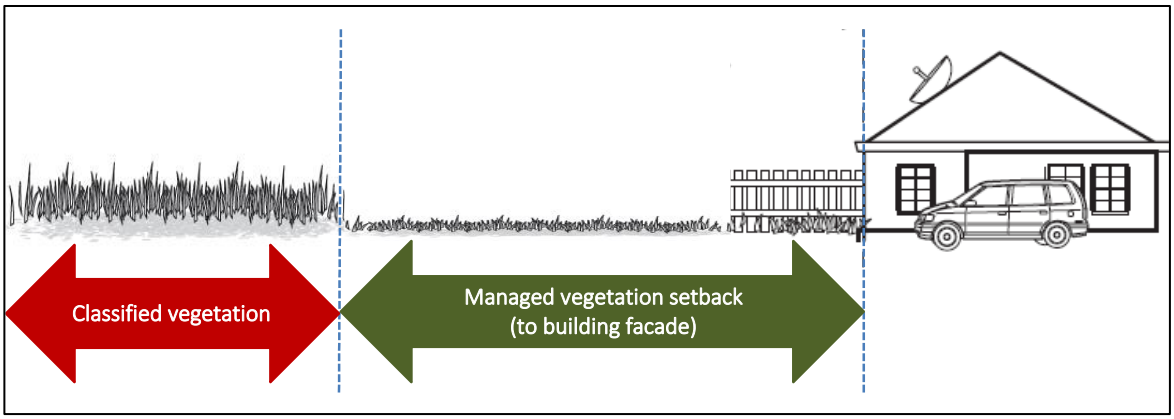
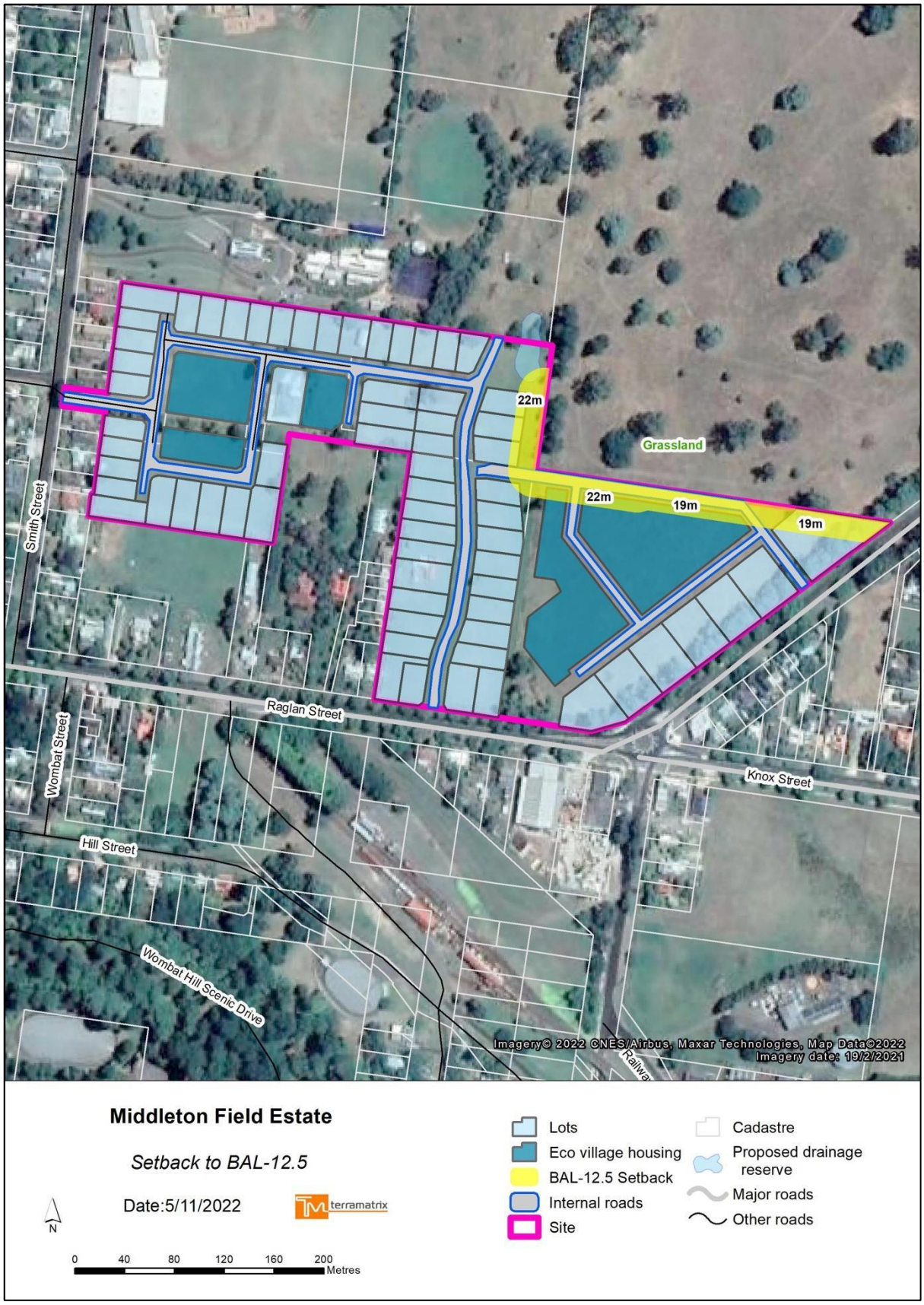


Figure 8 - Example of building-classified vegetation setback (adapted from CFA, 2013).

The BAL-12.5 setbacks are provided through low threat managed public open space east of the lots on 9 Raglan Street and a perimeter road north of the Eco Village at 4719 Midland Highway, supplemented by internal setback of buildings within their lots where required (see Map 4).

[7] The setback distance is measured from the edge of the classified vegetation to the external wall of the building, or for parts of the building that do not have external walls (including carports, verandas, decks, landings, steps and ramps), to the supporting posts or columns. The following parts of a building are excluded:

a) Eaves and roof overhangs.
b) Rainwater and domestic fuel tanks.
c) Chimneys, pipes, cooling or heating appliances or other services.
d) Unroofed pergolas.
e) Sun blinds (Standards Australia, 2020).



Map 4 - Low threat setbacks required to achieve a BAL-12.5 rating.

8.2. Perimeter roads

DELWP guidance for settlement planning at the bushfire interface states that '*Perimeter roads are the preferred design outcome on the settlement interface and where a site abuts or is near a bushfire hazard*' (DELWP, 2020b). A perimeter road will be provided between the Grassland hazard to the north and most of the residential areas of 4719 Midland Highway (see Figure 1 and Map 4).

8.3. Public open space

The DELWP guideline also commends the use of low threat public space to provide setbacks on the edge of settlements (DELWP, 2020b). The residential lots in the north-east corner of 9 Raglan Street will be buffered from the Grassland to their east by a drainage reserve that will be managed in a low threat condition (see Figure 1 and Map 4).

8.4. Water supply for fire fighting

The fire hydrants objective at Clause 56.09-3 (Hepburn Planning Scheme, 2014) will presumably apply to the precinct, which requires the provision of reticulated fire hydrants within 120m of the rear of each lot.

8.5. Access

Access and egress for emergency management vehicles can be provided by the existing and proposed road network, that will access Midland Highway to the east, Raglan Street to the south and Smith Street to the west.

This provides multiple roads leading away from the hazard edge in line with good practice (DELWP, 2020b).

9. Clause 13.02-1S Bushfire Planning

The applicable strategies at Clause 13.02-1S are detailed in the following sub-sections, and a summary response is provided about how the proposed development can respond to the strategies.

9.1. Protection of human life strategies

Priority must be given to the protection of human life.

Prioritising the protection of human life over all other policy considerations.

The site will form part of the well-established low threat township area of Daylesford. The site has a relatively low bushfire risk as it is directly exposed only to Grassland, with the nearest area of higher hazard Forest being a narrow strip along Bund Creek approximately 500m to the north-east. The presence of the urban area of Daylesford also shelters the site from an approach of bushfire from the north-west, west and south-west.

Future residents will have easy access to reliably low threat areas within the township area immediately to the west. The town centre of Daylesford, bounded by Camp Street in the east, is a designated Neighbourhood Safer Place. There is easy, safe egress from Middleton Field to the NSP.

There will be no increase in risk to nearby residents or community infrastructure from the proposed development.

Directing population growth and development to low risk locations and ensuring the availability of, and safe access to, areas where human life can be better protected from the effects of bushfire.

The site will form part of the well-established low threat township area of Daylesford. The site has a relatively low bushfire risk as it is directly exposed only to Grassland, with the nearest area of higher hazard Forest being a narrow strip along Bund Creek approximately 500m to the north-east.

There is easy, safe egress from Middleton Field to the NSP in the town centre of Daylesford, to the west of the site.

Reducing the vulnerability of communities to bushfire through consideration of bushfire risk in decision-making at all stages of the planning process.

This report provides the basis for incorporating bushfire risk into decision making associated with planning development of the site.

The fire authority considers that community resilience to bushfire will be strengthened (and hence, presumably, vulnerability to bushfire will be reduced) when a planning proposal demonstrates that Clause 13.02-1S strategies have been applied. The CFA provide principles to respond to Clause 13.02 -1S including that planning decisions should:

- *'Direct development to locations of lower bushfire risk.*

- *Carefully consider development in locations where there is significant bushfire risk that cannot be avoided.*
- *Avoid development in locations of extreme bushfire risk.*
- *Avoid development in areas where planned bushfire protection measures may be incompatible with other environmental objectives'* (CFA, 2015).

It is considered that the development of Middleton Field can appropriately implement the strategies in Clauses 13.02-1S that aim to prioritise protection of human life and will, therefore, meet the CFA strategic planning principles for bushfire.

9.2. Bushfire hazard identification and assessment strategies

The bushfire hazard must be identified, and an appropriate risk assessment be undertaken.

Applying the best available science to identify vegetation, topographic and climatic conditions that create a bushfire hazard.

This report identifies the hazard in accordance with the commonly accepted methodologies of AS 3959-2018 and, as appropriate, additional guidance provided in *Planning Permit Applications Bushfire Management Overlay Technical Guide*[8] (DELWP, 2017).

The type and extent of (hazardous) vegetation within, and up to 1km around, the site has been considered and, within 100m of the buildings, classified into AS 3959-2018 vegetation groups. Classification was based on the anticipated long-term state of the vegetation, aerial imagery, site assessment and published guidance on vegetation assessment for bushfire purposes.

The site assessment and publicly available contour data for the area determined slopes (see Map 3). In relation to climatic conditions and fire weather, the AS 3959-2018 default FFDI 100/GFDI 130 benchmark used in the Victorian planning and building system, has been applied.

Considering the best available information about bushfire hazard including the map of designated bushfire prone areas prepared under the Building Act 1993 or regulations made under that Act.

The extent of BPA coverage has been considered (see Section 4.4) and is shown in Map 2. This is based on the most recent BPA mapping for the area.

Applying the Bushfire Management Overlay in planning schemes to areas where the extent of vegetation can create an extreme bushfire hazard.

No part of the site area is covered by the BMO. The closest BMO area is approximately 300m to the north.

[8] Although the site is not affected by the BMO, DELWP's BMO technical guide provides useful descriptors and guidance for assessing the bushfire risk at the landscape scale, as discussed in Section 5.

Considering and assessing the bushfire hazard on the basis of:

- ***Landscape conditions - meaning the conditions in the landscape within 20 kilometres and potentially up to 75 kilometres from a site;***
- ***Local conditions - meaning conditions in the area within approximately 1 kilometre from a site;***
- ***Neighbourhood conditions - meaning conditions in the area within 400 metres of a site; and***
- ***The site for the development.***

The hazard has been assessed and described at the landscape, local, neighbourhood and site scales (see Section 5).

At the site scale, the assessment follows the AS 3959-2018 methodology applied in a BPA, of classifying vegetation and topography for 100m around the site (see Map 3).

At the broader landscape scale, 5km and 20km radii around the site has been applied (see Section 5).

Consulting with emergency management agencies and the relevant fire authority early in the process to receive their recommendations and implement appropriate bushfire protection measures.

The author is not aware of any consultation that may have occurred with CFA during the planning process for this site. It is anticipated that this report will be the basis of any consultation required.

Ensuring that strategic planning documents, planning scheme amendments, planning permit applications and development plan approvals properly assess bushfire risk and include appropriate bushfire protection measures.

DELWP advisory and practice notes and Clause 13.02-1S specify the general requirements and standards for assessing the risk. These have been applied in this report as appropriate and bushfire protection measures have been identified commensurate with the risk.

Not approving development where a landowner or proponent has not satisfactorily demonstrated that the relevant policies have been addressed, performance measures satisfied or bushfire protection measures can be adequately implemented.

If the objectives and strategies of Clause 13.02-1S are successfully implemented, as discussed in this report, then the risk can be deemed to be acceptably mitigated such that development can proceed.

The CFA specify that areas where development should not proceed could include:

- *'Isolated settlements where the size and/or configuration of the settlements will be insufficient to modify fire behaviour and provide protection from a bushfire.*
- *Where bushfire protection measures will not reduce the risk to an acceptable level.*
- *Where evacuation (access) is severely restricted.*

- *Where the extent and potential impact of required bushfire protection measures may be incompatible with other environmental objectives or issues, e.g. vegetation protection, land subject to erosion or landslip'* (CFA, 2015).

None of these criteria or characteristics are applicable to the site.

9.3. Settlement planning strategies

The proposed development of Middleton Field does not comprise 'Settlement planning' and, hence, these strategies are listed here but no response is provided. But is should be noted that future buildings on all lots can achieve a BAL-12.5 rating if appropriately sited.

Directing population growth and development to low risk locations, being those locations assessed as having a radiant heat flux of less than 12.5 kilowatts/square metre under AS 3959-2009 Construction of Buildings in Bushfire-prone Areas (Standards Australia, 2009).

Ensuring the availability of, and safe access to, areas assessed as a BAL-LOW rating under AS 3959-2009 Construction of Buildings in Bushfire-prone Areas (Standards Australia, 2009) where human life can be better protected from the effects of bushfire.

Ensuring the bushfire risk to existing and future residents, property and community infrastructure will not increase as a result of future land use and development.

Achieving no net increase in risk to existing and future residents, property and community infrastructure, through the implementation of bushfire protection measures and where possible reduce bushfire risk overall.

Assessing and addressing the bushfire hazard posed to the settlement and the likely bushfire behaviour it will produce at a landscape, settlement, local, neighbourhood and site scale, including the potential for neighbourhood-scale destruction.

Assessing alternative low risk locations for settlement growth on a regional, municipal, settlement, local and neighbourhood basis.

Not approving any strategic planning document, local planning policy, or planning scheme amendment that will result in the introduction or intensification of development in an area that has, or will on completion have, more than a BAL-12.5 rating under AS 3959-2009.

9.4. Areas of high biodiversity conservation value

Ensure settlement growth and development approvals can implement bushfire protection measures without unacceptable biodiversity impacts by discouraging settlement growth and development in bushfire affected areas that are of high biodiversity conservation value.

The site appears to have a history of disturbance and is not covered by a Vegetation Protection Overlay. No bushfire protection measures are proposed that would have additional biodiversity impacts.

9.5. Use and development control in a Bushfire Prone Area

Clause 13.02-1S requires that '*In a bushfire prone area designated in accordance with regulations made under the Building Act 1993, bushfire risk should be considered when assessing planning applications for the following uses and development:*

- *Subdivisions of more than 10 lots.*
- *Accommodation.*
- *Child care centre.*
- *Education centre.*
- *Emergency services facility.*
- *Hospital.*
- *Indoor recreation facility.*
- *Major sports and recreation facility.*
- *Place of assembly.*
- *Any application for development that will result in people congregating in large numbers'* (Hepburn Planning Scheme, 2018a).

It further states that:

'When assessing a planning permit application for the above uses and development:

- *Consider the risk of bushfire to people, property and community infrastructure.*
- *Require the implementation of appropriate bushfire protection measures to address the identified bushfire risk.*
- *Ensure new development can implement bushfire protection measures without unacceptable biodiversity impacts'* (Hepburn Planning Scheme, 2018a).

The residential development of Middleton Field at 17 Smith Street, 9 Raglan Street and 4719 Midland Highway responds to this strategy and achieves acceptable safety by:

- Buildings being sufficiently setback from classified vegetation to enable BAL-12.5 construction;
- Providing a perimeter road along part of the northern boundary;
- Providing multiple points of access and egress to nearby lower threat areas;
- Adequate access and egress for emergency management vehicles being provided by the internal road network, with links to Midland Highway, Raglan Street and Smith Street; and
- A reliable water supply for fire fighting being provided via a reticulated hydrant system.

10. Conclusion

This report has assessed the bushfire hazard in and around 17 Smith Street, 9 Raglan Street and 4719 Midland Highway, Daylesford in accordance with Clauses 13.02-1S in the Hepburn Planning Scheme, the AS 3959-2018 methodology and additional guidance regarding landscape risk provided in the DELWP technical guide *Planning Permit Applications Bushfire Management Overlay* (DELWP, 2017).

The site is in a designated BPA; but no part is covered by the BMO.

The type and extent of (hazardous) vegetation up to 100m around the site has been identified and classified into AS 3959-2018 vegetation groups, based on aerial imagery and site investigation. The classification is based on the current state of the vegetation and identifies that the bushfire hazard is confined to Grassland on gentle slopes to the north-east of the site.

The site will form part of the well-established low threat township area and have easy egress to that part of the town centre designated as an NSP.

Bushfire behaviour can reasonably be expected to be well within AS 3959-2018 presumptions and design parameters. Accordingly, it is considered that the risk can be mitigated to an acceptable level and the development can appropriately prioritise the protection of human life, if dwellings (and any other buildings that require a BAL) are built to a BAL-12.5 construction standard.

Good access and egress for emergency management vehicles and residents, in the event of a bushfire, can be achieved from the proposed road network.

A reliable water supply for fire fighting can be provided by a reticulated hydrant system.

This assessment of the development proposal indicates that bushfire protection measures can be practically applied commensurate to the level of bushfire risk.

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Appendix 4 – Clause 56 Assessment

NICHE PLANNING STUDIO

Suite 2 Parry Village, 188 Parry Avenue
BULLCREEK, WA 6146

Level 1, The Mezz, 286 Ferrars Street
SOUTH MELBOURNE, VIC 3207

Ballarat Tech Park, Lydiard St Sth
BALLARAT, VIC 3350

Level 1, 14 Molle Street
HOBART, TAS 7000

CLAUSE 56 ASSESSMENT

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1. INTRODUCTION

Clause 32.09-3 of the Neighbourhood Residential Zone states that an application to subdivide land, other than an application to subdivide land into lots each containing an existing dwelling or car parking space, must meet the requirements of Clause 56 and:

- *Must meet all of the objectives included in the clauses specified in the following table.*
- *Should meet all of the standard included in the clauses specified in the following table.*

As the subdivision is to create 8 lots, the following additional objectives and standards are to be met:

All except Clauses 56.02-1, 56.03-1 to 56.03-4, 56.05-2, 56.06-1, 56.06-3 and 56.06-6.

Please refer to planning permit application report for Subdivision Site and Context Description and the Design Response.

2. ASSESSMENT

OBJECTIVES	STANDARDS	RESPONSE
56.01 SUBDIVISION SITE AND CONTEXT DESCRIPTION AND DESIGN RESPONSE		

56.01-1 Subdivision Site and Context Description
 	
The sire and context description ay use a site plan, photographs or other techniques and must accurately describe:
 	
- In relation to the site:
  - Site shape, size, dimensions and orientation.
  - Levels and contours of the site.
  - Natural features including trees and other significant vegetation, drainage lines, water courses, wetlands, ridgelines and hill tops.
  - The siting and use of existing buildings and structures.
  - Street frontage features such as poles, street trees and kerb crossovers.
  - Access points.
  - Location of drainage and other utilities.
  - Easements.
  - Any identified natural or cultural features of the site.
  - Significant views to and from the site.
  - Noise and odour sources or other external influences.
		Complies - Please refer Proposed Plan of Subdivision at Appendix 3.

- Soil conditions, including any land affected by contamination, erosion, salinity, acid sulphate soils or fill.
- Any other notable features or characteristics of the site.
- Adjacent uses.
- Any other factor affecting the capacity to develop the site including whether the site is affected by inundation.

- An application for subdivision of 3 or more lots must also describe in relation to the surrounding area:
  - The pattern of subdivision.
  - Existing land uses.
  - The location and use of existing buildings on adjacent land.
  - Abutting street and path widths, materials and detailing.
  - The location and type of significant vegetation.
- An application for subdivision of 60 or more lots must also describe in relation to the surrounding area:
  - Location, distance and type of any nearby public open space and recreational facilities.
  - Direction and distances to local shops and community facilities.
  - Directions and walking distances to public transport routes and stops.
  - Direction and walking distances to existing neighbourhood, major and principal activity centres and major employment areas.
  - Existing transport routes, including freeways, arterial roads and streets connecting neighbourhoods.

- Local street network including potential connections to adjacent subdivisions. - Traffic volumes and movements on adjacent roads and streets. - Pedestrian, bicycle and shared paths identifying whether their primary role is neighbourhood or regional access. - Any places of cultural significance. - Natural features including trees and other significant vegetation, drainage lines, water courses, wetlands, ridgelines and hill tops. - Proximity of any fire threats. - Pattern of ownership of adjoining lots. If in the opinion of the responsible authority a requirement of the site and context description is not relevant to the assessment of an application, the responsible authority may waive or reduce the requirement:	
56.01-2 Subdivision Design Response The design response must explain how the proposed design: - Derives from and responds to the site and context description. - Responds to any site and context features for the area identified in a local planning policy or a Neighbourhood Character Overlay.	**Complies -** Please refer Design Response Plan at Appendix 4.

- Responds to any relevant objective, policy, strategy or plan set out for the area in this scheme. - Meets the relevant objectives of Clause 56. The design response must include a dimensioned plan to scale showing the layout of the subdivision in context with the surrounding area. If in the opinion of the responsible authority this requirement is not relevant to the assessment of an application, it may waive or reduce the requirement. An application for subdivision of 60 or more lots must also include a plan that meets the requirements of Standard C2. The plan must also show the: - Proposed uses of each part of the site. - Natural features of the site and identify any features proposed to be altered. - Proposed integrated water management system. - Proposed staging of the subdivision.		
56.02 POLICY IMPLEMENTATION		
55.02-1 Strategic Implementation Objective To ensure that the layout of a subdivision is consistent with and implements any objective, policy, strategy or plan for the area set out in this scheme.	*Standard C1* An application must be accompanied by a written statement that describes how the subdivision is consistent with and implements any relevant growth area, activity centre, housing, access and mobility, community facilities, open space and recreation, landscape (including any native vegetation precinct	**Complies –** Please refer Planning Report.

	plan) and urban design objective, policy, strategy or plan for the area set out in this scheme.	
56.03 LIVEABLE AND SUSTAINABLE COMMUNITIES		
56.03-5 Neighbourhood Character Objective To design subdivisions that respond to neighbourhood character.	*Standard C6* Subdivision should: - Respect the existing neighbourhood character or achieve a preferred neighbourhood character consistent with any relevant neighbourhood character objective, policy or statement set out in this scheme. - Respond to and integrate with the surrounding urban environment. - Protect significant vegetation and site features.	**Complies –** The proposed subdivision pays regard to and compliments the existing character of Daylesford and surrounding suburbs. The subject site is identified within Precinct 11 of Daylesford's Neighbourhood character precincts which seeks to ensure development maintains the spaciousness of the dwelling settings and strengthens the definition of the entrance way to the town. The proposal will implement and meet the neighbourhood character objectives laid out in local policy. The proposal provides a layout, built form and urban landscape that enhances a sense of place and cultural identity. Refer to the Planning Report for how the application will comply with the preferred identity and character of the locality.
56.04 LOT DESIGN		
56.04-1 Lot Diversity and Distribution Objectives To achieve housing densities that support compact and walkable neighbourhoods and the efficient provision of public transport services.	*Standard C7* A subdivision should implement any relevant housing strategy, plan or policy for the area set out in this scheme. Lot sizes and mix should achieve the average net residential density specified in any zone or overlay that	**Complies** - The 7 larger residential lots on the eastern portion of the site will be complemented by the future Eco-Village to be delivered on the superlot, which will deliver different dwelling types. This supports the strategic directions identified in Hepburn's Municipal Planning Strategy, which serves to foster housing diversity

To provide higher housing densities within walking distance of activity centres. To achieve increased housing densities in designated growth areas. To provide a range of lot sizes to suit a variety of dwelling and household types.	applies to the land or in any relevant policy for the area set out in this scheme. A range and mix of lot sizes should be provided including lots suitable for the development of: - Single dwellings. - Two dwellings or more. - Higher density housing. - Residential buildings and Retirement villages. Unless the site is constrained by topography or other site conditions, lot distribution should provide for 95 per cent of dwellings to be located no more than 400 metre street walking distance from the nearest existing or proposed bus stop, 600 metres street walking distance from the nearest existing or proposed tram stop and 800 metres street walking distance from the nearest existing or proposed railway station. Lots of 300 square metres or less in area, lots suitable for the development of two dwellings or more, lots suitable for higher density housing and lots suitable for Residential buildings and Retirement villages should be located in and within 400 metres street walking distance of an activity centre.	within the Township in order to increase affordability and allow ageing in place. The zone and overlays do not specify a residential lot density, therefore the proposed lot density has been designed in reference to existing subdivision patterns in the area and Daylesford's future housing objectives for the area as identified in the Municipal Planning Strategy. No local public transport exists, yet the site adjoins Raglan Street which could support a future public transport route.
56.04-2 Lot Area and building envelopes objectives To provide lots with areas and dimensions that enable the appropriate siting and construction of a dwelling, solar access, private open space, vehicle access and parking, water management, easements and	*Standard C8* An application to subdivide land that creates lots of less than 300 square metres should be accompanied by information that shows: - That the lots are consistent or contain building envelope that is consistent with a development approved under this scheme, or	Complies - The site will provide lots with areas and dimensions that allow for appropriate siting and construction of dwellings to ensure solar access, private open space, vehicle access, parking, water management, easement and retention of significant vegetation. The 7 lots on the eastern portion of the site are greater than 500 square metres: in accordance with this standard, they can contain a rectangle

the retention of significant vegetation and site features.	- That a dwelling may be constructed on each lot in accordance with the requirements of this scheme. Lots of between 300 square metres and 500 square metres should: Contain a building envelope that is consistent with a development of the lot approved under this scheme, or - If no development of the lot has been approved under this scheme, contain a building envelope and be able to contain a rectangle measuring 10 metres by 15 metres, or 9 metres by 15 metres if a boundary wall is nominated as part of the building envelope. If lots of between 300 square metres and 500 square metres are proposed to contain dwellings that are built to the boundary, the long axis of the lots should be within 30 degrees east and 20 degrees west of north unless there are significant physical constraints that make this difficult to achieve. Lots greater than 500 square metres should be able to contain a rectangle measuring 10 metres by 15 metres, and may contain a building envelope. A building envelope may specify or incorporate any relevant siting and design requirement. Any requirement should meet the relevant standards of Clause 54, unless: - The objectives of the relevant standards are met, and	measuring 10 metres by 15 metres. The lots are large enough that potential building envelopes can be located with generous setbacks so that they won't overlap or interfere with any existing trees on the site. The proposed superlot will facilitate diverse lot and dwelling types. This development will be proposed through a separate planning permit application, which will require lot dimensions and building envelopes that: protect solar access for future dwellings; achieve the energy rating requirements of the Building Regulations; protect proposed easements on lots and; protect any significant vegetation and site features.

	- The building envelope is shown as a restriction on a plan of subdivision registered under the Subdivision Act 1988, or is specified as a covenant in an agreement under Section 173 of the Act. Where a lot with a building envelope adjoins a lot that is not on the same plan of subdivision or is not subject to the same agreement relating to the relevant building envelope: - The building envelope must meet Standards A10 and A11 of Clause 54 in relation to the adjoining lot, and - The building envelope must not regulate siting matters covered by Standards A12 to A15 (inclusive) of Clause 54 in relation to the adjoining lot. - This should be specified in the relevant plan of subdivision or agreement. Lot dimensions and building envelopes should protect: - Solar access for future dwellings and support the siting and design of dwellings that achieve the energy rating requirements of the Building Regulations. - Existing or proposed easements on lots. - Significant vegetation and site features.	
56.04-3 Solar Orientation of Lots Objective To provide good solar orientation of lots and solar access for future dwellings.	*Standard C9* Unless the site is constrained by topography or other site conditions, at least 70 percent of lots should have appropriate solar orientation.	Complies - The orientation of the lots satisfies this objective, ensuring appropriate solar orientation and access in response to the topography and constraints of the site.

	Lots have appropriate solar orientation when: - The long axis of lots are within the range north 20 degrees west to north 30 degrees east, or east 20 degrees north to east 30 degrees south. - Lots between 300 square metres and 500 square metres are proposed to contain dwellings that are built to the boundary, the long axis of the lots should be within 30 degrees east and 20 degrees west of north. - Dimensions of lots are adequate to protect solar access to the lot, taking into account likely dwelling size and the relationship of each lot to the street.	The 7 lots on the eastern portion of the site will be greater that 500sqm. This will permit generous setbacks which will allow for flexible building siting and solar access for dwellings. The proposed superlot will facilitate diverse lot and dwelling types. This development will be proposed through a separate planning permit application, which will require lot dimensions and building envelopes that protect solar access for future dwellings.
56.04-4 Street Orientation Objective To provide a lot layout that contributes to community social interaction, personal safety and property security.	*Standard C10* Subdivision should increase visibility and surveillance by: - Ensuring lots front all roads and streets and avoid the side or rear of lots being oriented to connector streets and arterial roads. - Providing lots of 300 square metres or less in area and lots for 2 or more dwellings around activity centres and public open space. - Ensuring streets and houses look onto public open space and avoiding sides and rears of lots along public open space boundaries. - Providing roads and streets along public open space boundaries.	Complies – All lots will front the internal street and avoid lots being oriented towards Midland Highway or Raglan Street. All lots will include crossovers to the internal road, which will contribute to greater social interaction, safety and passive surveillance. The proposed subdivision provides streets along the boundaries of the drainage and recreation reserves.

56.04-5 Common Area Objective To identify common areas and the purpose for which the area is commonly held. To ensure the provision of common area is appropriate and that necessary management arrangements are in place. To maintain direct public access throughout the neighbourhood street network.	*Standard C11* An application to subdivide land that creates common land must be accompanied by a plan and a report identifying: - The common area to be owned by the body corporate, including any streets and open space. - The reasons why the area should be commonly held. - Lots participating in the body corporate. - The proposed management arrangements including maintenance standards for streets and open spaces to be commonly held.	**Complies** – The subdivision layout does not include any common areas.

56.05 URBAN LANDSCAPE

56.05-1 Integrated Urban Landscape Objectives To provide attractive and continuous landscaping in streets and public open spaces that contribute to the character and identity of new neighbourhoods and urban places or to existing or preferred neighbourhood character in existing urban areas. To incorporate natural and cultural features in the design of streets and public open space where appropriate. To protect and enhance native habitat and discourage the planting and spread of noxious weeds.	*Standard C12* An application for subdivision that creates streets or public open space should be accompanied by a landscape design. The landscape design should: - Implement any relevant streetscape, landscape, urban design or native vegetation precinct plan, strategy or policy for the area set out in this scheme. - Create attractive landscapes that visually emphasise streets and public open spaces. - Respond to the site and context description for the site and surrounding area.	**Complies** – A Landscape Plan will be provided as a condition to the permit which will ensure landscaping will be designed in accordance with these objectives and standards

To provide for integrated water management systems and contribute to drinking water conservation.	- Maintain significant vegetation where possible within an urban context. - Take account of the physical features of the land including landform, soil and climate. - Protect and enhance any significant natural and cultural features. - Protect and link areas of significant local habitat where appropriate. - Support integrated water management systems with appropriate landscape design techniques for managing urban run-off including wetlands and other water sensitive urban design features in streets and public open space. - Promote the use of drought tolerant and low maintenance plants and avoid species that are likely to spread into the surrounding environment. - Ensure landscaping supports surveillance and provides shade in streets, parks and public open space. - Develop appropriate landscapes for the intended use of public open space including areas for passive and active recreation, the exercising of pets, playgrounds and shaded areas. - Provide for walking and cycling networks that link with community facilities. - Provide appropriate pathways, signage, fencing, public lighting and street furniture. - Create low maintenance, durable landscapes that are capable of a long life.	

	- The landscape design must include a maintenance plan that sets out maintenance responsibilities, requirements and costs.	
56.06 ACCESS AND MOBILITY MANAGEMENT		
56.06-2 Walking and Cycling Network Objectives To contribute to community health and well being by encouraging walking and cycling as part of the daily lives of residents, employees and visitors. To provide safe and direct movement through and between neighbourhoods by pedestrians and cyclists. To reduce car use, greenhouse gas emissions and air pollution.	*Standard C15* The walking and cycling network should be designed to: - Implement any relevant regional and local walking and cycling strategy, plan or policy for the area set out in this scheme. - Link to any existing pedestrian and cycling networks. - Provide safe walkable distances to activity centres, community facilities, public transport stops and public open spaces. - Provide an interconnected and continuous network of safe, efficient and convenient footpaths, shared paths, cycle paths and cycle lanes based primarily on the network of arterial roads, neighbourhood streets and regional public open spaces. - Provide direct cycling routes for regional journeys to major activity centres, community facilities, public transport and other regional activities and for regional recreational cycling. - Ensure safe street and road crossings including the provision of traffic controls where required. - Provide an appropriate level of priority for pedestrians and cyclists.	Complies - The subdivision will contribute to increasing community health and wellbeing through encouraging active transport modes by including shared paths, tree lined streets and drainage and recreation reserves to increase walkability. The street layout provides pedestrian and cycling access from Raglan Street through to the north-eastern drainage and recreation reserve. The proximity of the subject site to Daylesford town centre (less than 1.5km) will encourage uptake of active transport modes by future residents. All lots have been designed to ensure they front the street and provide safe crossovers for pedestrians. This will also ensure passive surveillance, increasing security at night. The shared path network will be accessible to people with limited mobility, such as people with disabilities and people using prams.

	- Have natural surveillance along streets and from abutting dwellings and be designed for personal safety and security particularly at night. - Be accessible to people with disabilities.	
56.06-4 Neighbourhood Street Network Objective To provide for direct, safe and easy movement through and between neighbourhoods for pedestrians, cyclists, public transport and other motor vehicles using the neighbourhood street network.	*Standard C17* The neighbourhood street network must: - Take account of the existing mobility network of arterial roads, neighbourhood streets, cycle paths, shared paths, footpaths and public transport routes. - Provide clear physical distinctions between arterial roads and neighbourhood street types. - Comply with the Head, Transport for Victoria's arterial road access management policies. - Provide an appropriate speed environment and movement priority for the safe and easy movement of pedestrians and cyclists and for accessing public transport. - Provide safe and efficient access to activity centres for commercial and freight vehicles. - Provide safe and efficient access to all lots for service and emergency vehicles. - Provide safe movement for all vehicles. - Incorporate any necessary traffic control measures and traffic management infrastructure. The neighbourhood street network should be designed to: - Implement any relevant transport strategy, plan or policy for the area set out in this scheme.	Complies - The proposal will provide direct, safe and easy access to and through the development for pedestrians, cyclists and motor vehicles. The provision of shared paths in the street network will ensure an appropriate mix of pedestrians, cyclists and motor vehicles and encourage safe behaviours. The proposed street network provides a clear physical distinction between both Midland Highway and Raglan street through scale, design and street-tree planting. The speed requirement will be provided for by the responsible authority. The road will be constructed to ensure safe access for service, emergency and all other vehicles. The necessary traffic control measures will be based on the requirements of the responsible authority. The street network supports the integration of the walking and cycling network with integrated water management systems, utilities and tree-plantings. The street network responds to both the significant features of the site and contributes to the character of the neighbourhood by creating a community connection to the Wombat Park view

	- Include arterial roads at intervals of approximately 1.6 kilometres that have adequate reservation widths to accommodate long term movement demand. - Include connector streets approximately halfway between arterial roads and provide adequate reservation widths to accommodate long term movement demand. - Ensure connector streets align between neighbourhoods for direct and efficient movement of pedestrians, cyclists, public transport and other motor vehicles. - Provide an interconnected and continuous network of streets within and between neighbourhoods for use by pedestrians, cyclists, public transport and other vehicles. - Provide an appropriate level of local traffic dispersal. - Indicate the appropriate street type. - Provide a speed environment that is appropriate to the street type. - Provide a street environment that appropriately manages movement demand (volume, type and mix of pedestrians, cyclists, public transport and other motor vehicles). - Encourage appropriate and safe pedestrian, cyclist and driver behaviour. - Provide safe sharing of access lanes and access places by pedestrians, cyclists and vehicles. - Minimise the provision of cul-de-sacs.	lines. Further, the street trees proposed along either side of the road reserve will create a high-amenity public realm.

	- Provide for service and emergency vehicles to safely turn at the end of a dead-end street. - Facilitate solar orientation of lots. - Facilitate the provision of the walking and cycling network, integrated water management systems, utilities and planting of trees. - Contribute to the area's character and identity. - Take account of any identified significant features.	

56.06-5 Walking and Cycling Network Objectives
 	
To design and construct footpaths, shared path and cycle path networks that are safe, comfortable, well-constructed and accessible for people with disabilities.
 	
To design footpaths to accommodate wheelchairs, prams, scooters and other footpath bound vehicles.
	Standard C18
	
	Footpaths, shared paths, cycle paths and cycle lanes should be designed to:
	
	- Be continuous and connect.
	- Provide for public transport stops, street crossings for pedestrians and cyclists and kerb crossovers for access to lots.
	- Accommodate projected user volumes and mix.
	- Meet the requirements of Table C1.
	- Provide pavement edge, kerb, channel and crossover details that support safe travel for pedestrians, footpath bound vehicles and cyclists, perform required drainage functions and are structurally sound.
	- Provide appropriate signage.
	- Be constructed to allow access to lots without damage to the footpath or shared path surfaces.
	- Be constructed with a durable, non-skid surface.
	- Be of a quality and durability to ensure:
	  - Safe passage for pedestrians, cyclists, footpath bound vehicles and vehicles.
	  - Discharge of urban run-off.
		Complies – The footpaths to be included in the proposal will be designed to be safe and accessible for people with disabilities and other footpath bound vehicles and accommodate projected user volumes and mix.
		
		The requirements in Table C1 will be met.
		
		The street network design will provide for appropriate pavement edges, kerbs, channels and crossovers to ensure safe pedestrian and cycle access.
		
		The footpaths will connect to both drainage and recreation reserves and to the view lines of Wombat Park.
		
		The footpaths will be of a durable quality to ensure it performs the necessary functions in accordance with this standard. They will also be in accordance with Council's requirements for accessibility.

	- Preservation of all-weather access. - Maintenance of a reasonable, comfortable riding quality. - A minimum 20-year life span. - Be accessible to people with disabilities and include tactile ground surface indicators, audible signals and kerb ramps required for the movement of people with disabilities.	
56.06-7 Neighbourhood Street Network Objectives To design and construct street carriageways and verges so that the street geometry and traffic speeds provide an accessible and safe neighbourhood street system for all users.	*Standard C20* The design of streets and roads should: - Meet the requirements of TableC1. Where the widths of access lanes, access places, and access streets do not comply with the requirements of Table C1, the requirements of the relevant fire authority and roads authority must be met. - Provide street blocks that are generally between 120 metres and 240 metres in length and generally between 60 metres to 120 metres in width to facilitate pedestrian movement and control traffic speed. - Have verges of sufficient width to accommodate footpaths, shared paths, cycle paths, integrated water management, street tree planting, lighting and utility needs. - Have street geometry appropriate to the street type and function, the physical land characteristics and achieve a safe environment for all users. - Provide a low speed environment while allowing all road users to proceed without unreasonable inconvenience or delay.	Complies – Street carriageways and verges will be constructed to ensure that street geometry and traffic speeds will provide a safe and accessible environment for all. The requirements in Table C1 will be met. The street geometry will be appropriate to the street type and function and will achieve a safe environment for all. The appropriate speed control measures will be implemented by the responsible authority to ensure a safe environment for all. The street will be of sufficient strength to last at least 20 years. Street pavements will be of sufficient quality to enable the carriage of vehicles, cyclists and pedestrians. The street design will allow for the safe collection of waste from each lot. The street layout will include water sensitive urban design and appropriate design features for trees and native vegetation.

	- Provide a safe environment for all street users applying speed control measures where appropriate.
	- Ensure intersection layouts clearly indicate the travel path and priority of movement for pedestrians, cyclists and vehicles.
	- Provide a minimum 5 metre by 5 metre corners play at junctions with arterial roads and a minimum 3 metre by 3 metre corners play at other junctions unless site conditions justify a variation to achieve safe sight lines across corners.
	- Ensure streets are of sufficient strength to:
	  - Enable the carriage of vehicles.
	  - Avoid damage by the construction vehicles and equipment.
	- Ensure street pavements are of sufficient quality and durability for the:
	  - Safe passage of pedestrians, cyclists and vehicles.
	  - Discharge of urban run-off.
	  - Preservation of all-weather access and maintenance of a reasonable, comfortable riding quality.
	- Ensure carriageways of planned arterial roads are designed to the requirements of the relevant road authority.
	- Ensure carriageways of neighbourhood streets are designed for a minimum 20 year life span.
	- Provide pavement edges, kerbs, channel and crossover details designed to:
	  - Perform the required integrated water management functions.
		The street and sidewalk will be accessible to people with disabilities.

- Delineate the edge of the carriageway for all street users.
- Provide efficient and comfortable access to abutting lots at appropriate locations.
- Contribute to streetscape design.

- Provide for the safe and efficient collection of waste and recycling materials from lots.
- Be accessible to people with disabilities.
- Meet the requirements of Table C1. Where the width s of access lanes, access places, and access streets do not comply with the requirements of Table C1, the requirements of the relevant fire authority and roads authority must be met. Where the widths of connector streets do not comply with the requirements of Table C1, the requirements of the relevant public transport authority must be met.

A street detail plan should be prepared that shows, as appropriate:

- The street hierarchy and typical cross-sections for all street types.
- Location of carriageway pavement, parking, bus stops, kerbs, crossovers, footpaths, tactile surface indicators, cycle paths and speed control and traffic management devices.
- Water sensitive urban design features.
- Location and species of proposed street trees and other vegetation.
- Location of existing vegetation to be retained and proposed treatment to ensure its health.

	- Any relevant details for the design and location of street furniture, lighting, seats, bus stops, telephone boxes and mailboxes.	
56.06-8 Lot Access Objective To provide for safe vehicle access between roads and lots.	*Standard C21* Vehicle access to lots abutting arterial roads should be provided from service roads, side or rear access lanes, access places or access streets where appropriate and in accordance with the access management requirements of the relevant roads authority. Vehicle access to lots of 300 square metres or less in area and lots with a frontage of 7.5 metres or less should be provided via rear or side access lanes, places or streets. The design and construction of a crossover should meet the requirements of the relevant road authority.	**Complies** – The subdivision and street layout will provide safe access between roads and lots for vehicles. Vehicle access to lots will be provided internally, to avoid access via Midland Highway or Raglan Street (arterial roads). The design and construction of crossovers will abide by the requirements of the relevant authority.
56.07 Integrated Water Management		
56.07-1 Drinking water supply objectives To reduce the use of drinking water. To provide an adequate, cost-effective supply of drinking water.	*Standard C22* The supply of drinking water must be: - Designed and constructed in accordance with the requirements and to the satisfaction of the relevant water authority. - Provided to the boundary of all lots in the subdivision to the satisfaction of the relevant water authority.	**Complies** - Reticulated recycled water systems are not currently available in Daylesford. The supply of drinking water will be provided to the boundary of all lots and to the satisfaction of the relevant authority. As shown in the Servicing Report at Appendix 7, a water main is available along Midland Highway and on the opposite side of the road in Raglan Street.

56.07-2 Reused and Recycled Water Objective To provide for the substitution of drinking water for non-drinking purposes with reused and recycled water.	*Standard C23* Reused and recycled water supply systems must be: - Designed, constructed and managed in accordance with the requirements and to the satisfaction of the relevant water authority, Environment Protection Authority and Department of Health and Human Services. - Provided to the boundary of all lots in the subdivision where required by the relevant water authority.	N/A - Third pipe infrastructure is not available in Daylesford.
56.07-3 Waste Water Management Objective To provide a waste water system that is adequate for the maintenance of public health and the management of effluent in an environmentally friendly manner.	*Standard C24* Waste water systems must be: - Designed, constructed and managed in accordance with the requirements and to the satisfaction of the relevant water authority and the Environment Protection Authority. - Consistent with a domestic waste water management plan adopted by the relevant council. Reticulated waste water systems must be provided to the boundary of all lots in the subdivision where required by the relevant water authority.	Complies - All lots will be connected to reticulated sewage in accordance with the relevant requirements. Reticulated sewage will be provided in accordance with domestic wastewater management plans adopted by Council and will be provided to the boundary of all lots. Please refer Servicing Report at Appendix 7.
56.07-4 Stormwater Management Objectives To minimise damage to properties and inconvenience to residents from stormwater.	*Standard C25* The stormwater management system must be: - Designed and managed in accordance with the requirements and to the satisfaction of the relevant drainage authority.	Complies - Damage to properties and residents from storm water will be minimised. The urban stormwater management system will ensure stormwater runoff is retarded and treated in accordance with relevant stormwater management standards. This response to drainage

To ensure that the street operates adequately during major storm events and provides for public safety. To minimise increases in stormwater and protect the environmental values and physical characteristics of receiving waters from degradation by stormwater. To encourage stormwater management that maximises the retention and reuse of stormwater. To encourage stormwater management that contributes to cooling, local habitat improvements and provision of attractive and enjoyable spaces.	- Designed and managed in accordance with the requirements and to the satisfaction of the water authority where reuse of stormwater is proposed. - Designed to meet the current best practice performance objectives for stormwater quality as contained in the Urban Stormwater-Best Practice Environmental Management Guidelines (Victorian Stormwater Committee, 1999). - Designed to ensure that flows downstream of the subdivision site are restricted to pre-development levels unless increased flows are approved by the relevant drainage authority and there are no detrimental downstream impacts. - Designed to contribute to cooling, improving local habitat and providing attractive and enjoyable spaces. The stormwater management system should be integrated with the overall development plan including the street and public open space networks and landscape design. For all storm events up to and including the 20% Average Exceedence Probability (AEP) standard: - Stormwater flows should be contained within the drainage system to the requirements of the relevant authority. - Ponding on roads should not occur for longer than 1 hour after the cessation of rainfall. For storm events greater than 20% AEP and up to and including 1% AEP standard:	will limit damage to properties and the Hepburn Springs. The system has been designed to meet the current best practice performance objectives for stormwater quality as seen in the Urban Stormwater- Best Practice Environmental Management Guidelines. The system has been designed to ensure that flows downstream of the subdivision site are restricted to pre-development levels. The system design will be integrated with the street and public open space networks and landscape design. Please refer to the Stormwater Strategy at Appendix 5 for further information.

- Provision must be made for the safe and effective passage of stormwater flows.
- All new lots should be free from inundation or to a lesser standard of flood protection where agreed by the relevant floodplain management authority.
- Ensure that streets, footpaths and cycle paths that are subject to flooding meet the safety criteria da Vave < 0.35 m2/s (where, da = average depth in metres and Vave = average velocity in metres per second).

The design of the local drainage network should:

- Ensure stormwater is retarded to a standard required by the responsible drainage authority.
- Ensure every lot is provided with drainage to a standard acceptable to the relevant drainage authority. Wherever possible, stormwater should be directed to the front of the lot and discharged into the street drainage system or legal point of discharge.
- Ensure that inlet and outlet structures take into account the effects of obstructions and debris build up. Any surcharge drainage pit should discharge into an overland flow in a safe and predetermined manner.
- Include water sensitive urban design features to manage stormwater in streets and public open space. Where such features are provided, an application must describe maintenance responsibilities, requirements and costs.

	Any flood mitigation works must be designed and constructed in accordance with the requirements of the relevant floodplain management authority.	
56.08 SITE MANAGEMENT		
56.08-1 Site Management Objectives To protect drainage infrastructure and receiving waters from sedimentation and contamination. To protect the site and surrounding area from environmental degradation or nuisance prior to and during construction of subdivision works. To encourage the re-use of materials from the site and recycled materials in the construction of subdivisions where practicable.	*Standard C26* A subdivision application must describe how the site will be managed prior to and during the construction period and may set out requirements for managing: - Erosion and sediment. - Dust. - Run-off. - Litter, concrete and other construction wastes. - Chemical contamination. - Vegetation and natural features planned for retention. Recycled material should be used for the construction of streets, shared paths and other infrastructure where practicable.	Complies - Drainage infrastructure will be protected from sedimentation and contamination. Materials will be reused where practicable. The high point of the site is located at the south-east portion of the site, thus, water will drain towards Wombat Park to the north. Stormwater run-off will therefore be treated onsite to pre-development levels to product the site and surrounding area from environmental damage. Details of site management during construction will be included in the Construction Management Plan required by a condition to the permit.
56.09 UTILITIES		
56.09-1 Site Management Objectives To maximize the opportunities for shared trenching. To minimize constraints on landscaping within street reserves.	*Standard C27* Reticulated services for water, gas, electricity and telecommunications should be provided in shared trenching to minimize construction costs and land allocation for underground services.	Complies - Reticulated services for water, electricity and telecommunications will be provided for in shared trenching. Please refer Servicing Report at Appendix 7.

56.09-2 Electricity, Telecommunications and Gas Objectives To provide public utilities to each lot in a timely, efficient and cost effective manner. To reduce greenhouse gas emissions by supporting generation and use of electricity from renewable sources.	*Standard C28* The electricity supply system must be designed in accordance with the requirements of the relevant electricity supply agency and be provided to the boundary of all lots in the subdivision to the satisfaction of the relevant electricity authority. Arrangements that support the generation or use of renewable energy at a lot or neighbourhood level are encouraged. The telecommunication system must be designed in accordance with the requirements of the relevant telecommunications servicing agency and should be consistent with any approved strategy, policy or plan for the provision of advanced telecommunications infrastructure, including fibre optic technology. The telecommunications system must be provided to the boundary of all lots in the subdivision to the satisfaction of the relevant telecommunications servicing authority. Where available, the reticulated gas supply system must be designed in accordance with the requirements of the relevant gas supply agency and be provided to the boundary of all lots in the subdivision to the satisfaction of the relevant gas supply agency.	Complies - All lots will be provided with public utilities as part of the development and use of renewable energy is proposed across the Middleton Field estate. In order to improve sustainable energy outcomes, reticulated gas is not proposed. Please refer Servicing Report at Appendix 7.
56.09-3 Fire Hydrants Objective To provide fire hydrants and fire plugs in positions that enable fire fighters to access water safely, effectively and efficiently.	*Standard C29* Fire hydrants should be provided: - A maximum distance of 120 metres from the rear of each lot.	Complies - Fire Hydrants will be provided as required.

	- No more than 200 metres apart. Hydrants and fire plugs must be compatible with the relevant fire service equipment. Where the provision of fire hydrants and fire plugs does not comply with the requirements of standard C29, fire hydrants must be provided to the satisfaction of the relevant fire authority.	
56.09-3 Public Lighting Objective To provide public lighting to ensure the safety of pedestrians, cyclists and vehicles. To provide pedestrians with a sense of personal safety at night. To contribute to reducing greenhouse gas emissions and to saving energy.	*Standard C30* Public lighting should be provided to streets, footpaths, public telephones, public transport stops and to major pedestrian and cycle paths including public open spaces that are likely to be well used at night to assist in providing safe passage for pedestrians, cyclists and vehicles. Public lighting should be designed in accordance with the relevant Australian Standards. Public lighting should be consistent with any strategy, policy or plan for the use of renewable energy and energy efficient fittings.	Complies – Public lighting will be incorporated as part of development works. Public lighting will be designed in accordance with the relevant Australian Standards and will be consistent with any plan or strategy for the use of renewable energy and energy efficient fittings.

3. CONCLUSION

The proposed application complies with all Scheme objectives and requirements specifically in relation to:

- Planning Policy Framework
- Local Planning Policy Framework

There are no variations sought.

This report supports the planning application and seeks Council's approval to the proposed planning permit.

Appendix 5 – Stormwater Strategy

AXIOM
CONSULTING
ENGINEERS

STORMWATER STRATEGY

RESIDENTIAL SUBDIVISION
4719 Midland Highway, Daylesford

Prepared For
Smith Development Partnership Pty Ltd

Document Reference
984-01Rev A

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This investigation and report have been authorised by Mr. Chris Coughlan, the Director of Axiom Consulting Engineers Pty Ltd.

Chris Coughlan BEng (Civil), MIEAust

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Definitions

AEP	Annual Exceedance Probability
OSD	On-site Stormwater Detention
Rational Method	A method of estimating the runoff at a specific point and time by means of the rational formula $Q = C.I.A/360$, where C is a runoff coefficient based on type of surface, I is the rainfall intensity in mm/hour, and A is the area in hectares.
WSUD	Water Sensitive Urban Design
AS3500.3	Australian Standard for Plumbing and Drainage – Stormwater Drainage

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1. EXECUTIVE SUMMARY

It is proposed for land at 4719 Midland Highway, Daylesford to be subdivided into 7 low-density residential allotments and a superlot, which will become a medium density development. Drainage infrastructure is to be provided to convey storm flows to a nominated discharge point.

There will be four elements to the proposed stormwater drainage system:

- Conveyance of flows that arise in minor storm events up to the of 20% AEP event; Those minor flows will be conveyed along the underground drainage system that will be constructed as part of the development;
- Detention of minor flows back to the discharge rate that is calculated for pre-development flow;
- Conveyance of major flows that arise in storm events greater than the 20% AEP event up to the 1% AEP event along overland flow paths to appropriately sized drainage infrastructure;
- Reduction of pollutants in stormwater flows to best practice targets

2. SITE AND SURROUNDS AND EXISTING DRAINAGE

The subject site totals approximately 3.8ha in area and exhibits a natural fall to the north and northwest. A plan showing contours of the natural surface is shown in Appendix A.

All lots will have vehicular access to proposed internal roads. The proposed layout for the development can be seen in Appendix B.

Based on the existing slopes, the site can be divided into two separate catchments – Catchments A and B. A plan showing the catchments can be found in Appendix C.

The site is located within the limits of the Hepburn Shire region and is zoned Neighbourhood Residential Zone (NRZ). The surrounding area is made up of Farming Zone (FZ) to the north, NRZ to the east and west and Industrial Zone 1 (IN1Z) to the south.

3. PROPOSED DRAINAGE STRATEGY

a. Conveyance of Minor Flows

The proposed development will incorporate a drainage system that is to be designed and constructed in accordance with the IDM[1] as follows:

i. An underground drainage system consisting of stormwater pits to collect surface flow and underground pipes connected to the pits to convey the flow towards the existing waterway/depression on the western and northern boundaries of the site;
ii. Surfaces designed and constructed so that they are free flowing and facilitate overland flows towards the receiving drainage infrastructure;

b. Detention of Minor Flows

In order to provide stormwater detention for the road reserves and lots, it is proposed to provide a detention basin for each catchment, generally as shown in Appendix D. Each basin is to be controlled by an orifice pit (dual chamber pit with diving baffle wall and orifice located at the invert).

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The orifice diameter will be determined in the detailed design phase and is dependant on the amount of head in the orifice pit (subject to detailed design of the retarding basins). Each orifice will be designed to let out a maximum flow rate equivalent of the 20% AEP pre-development flow for each catchment during a post-development 20% AEP event.

A summary of the OSD computations for the road reserves is shown below.

	CATCHMENT A		CATCHMENT B	
	20% AEP PRE-DEVELOPMENT	20% AEP POST DEVELOPMENT	20% AEP PRE-DEVELOPMENT	20% AEP POST DEVELOPMENT
Catchment Area (Ha)	1.25		1.929	
Coefficient of Runoff	0.14	0.52	0.14	0.54
Time of Concentration (min)	9	6	11	6
Rainfall Intensity (mm/h)	68	99	54	99
Flow (m^3/s)	0.048	0.168	0.062	0.244
Detention Volume Required (m^3)	51		83	

The above computations allow for the superlot to be developed as medium density rediential.

c. Major Flows

The surface of the proposed allotments will be designed such that the development is free flowing towards the stormwater pits and road reserves to ensure no damage to private property occurs. Pits and pipes will be designed to convey flows in a 20% AEP event.

Roads will act as overland flow paths for events greater than the 20% AEP and be designed to meet flood safety criteria (maximum flood depth of 0.3m, maximum velocity of 1.5m/s and maximum d x v of $0.3m^2/s$) for the 1% AEP event.

d. Water Sensitive Urban Design

To address the WSUD requirements for stormwater quality treatment post development, a MUSIC model has been produced based. MUSIC is a software tool used to measure the pollutant loads on stormwater networks based on development and the reduction of pollutants based on various treatment options. Refer to Appendix E for model layout and pollutant reduction results.

The model comprises of rainwater tanks, which would be plumbed to each dwelling for reuse in toilet flushing, laundry and irrigation. The allocated reuse volume for each lot is 2,000 litres and a reuse rate of 150 litres per day is assumed.

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Runoff from the balance of lots and road reserves will be treated using a bioretention system in each catchment, which is located in the base of the retarding basins. Storm flows will infiltrate through the filter media within the bioretention systems and be directed to the piped stormwater network via a series of agi drains.

All runoff from both catchments will discharge into the swale/depression at the western and northern boundaries of the site.

The following table shows the targets that are required to be met in order to satisfy the best practice guidelines[2] against the performance of the proposed treatment cycle (via tanks):

	Target	Projected Performance
Reduction in suspended solids	80%	90.0%
Reduction in total nitrogen	45%	56.4%
Reduction in total phosphorous	45%	53.8%

The MUSIC model demonstrates best practice targets are met. And makes allowance for the superlot to be developed as medium density residential.

4. CONCLUSION

A drainage system is to be included in the development in accordance with the Infrastructure Design Manual that conveys minor flows in subsurface drainage pipes and allows major flows to discharge through the catchments to the existing waterways west and north of the site (or 1% AEP pipe if no overland flow path is available).

Detention is to be provided that will reduce the storm flows to pre-development flow rates in a 20% AEP event.

WSUD best practice guidelines will be achieved by directing storm flows from roofs to water tanks and balance land to bioretention systems.

5. REFERENCES

1 Infrastructure Design Manual (version 5.10), *Local Government Infrastructure Design Association*, 11 January 2018.

2 WSUD ENGINEERING PROCEDURES STORMWATER, CSIRO PUBLISHING, 2005

3 SPEL are a leading provider in Australia of Stormwater Treatment products

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APPENDIX A – Site Contours

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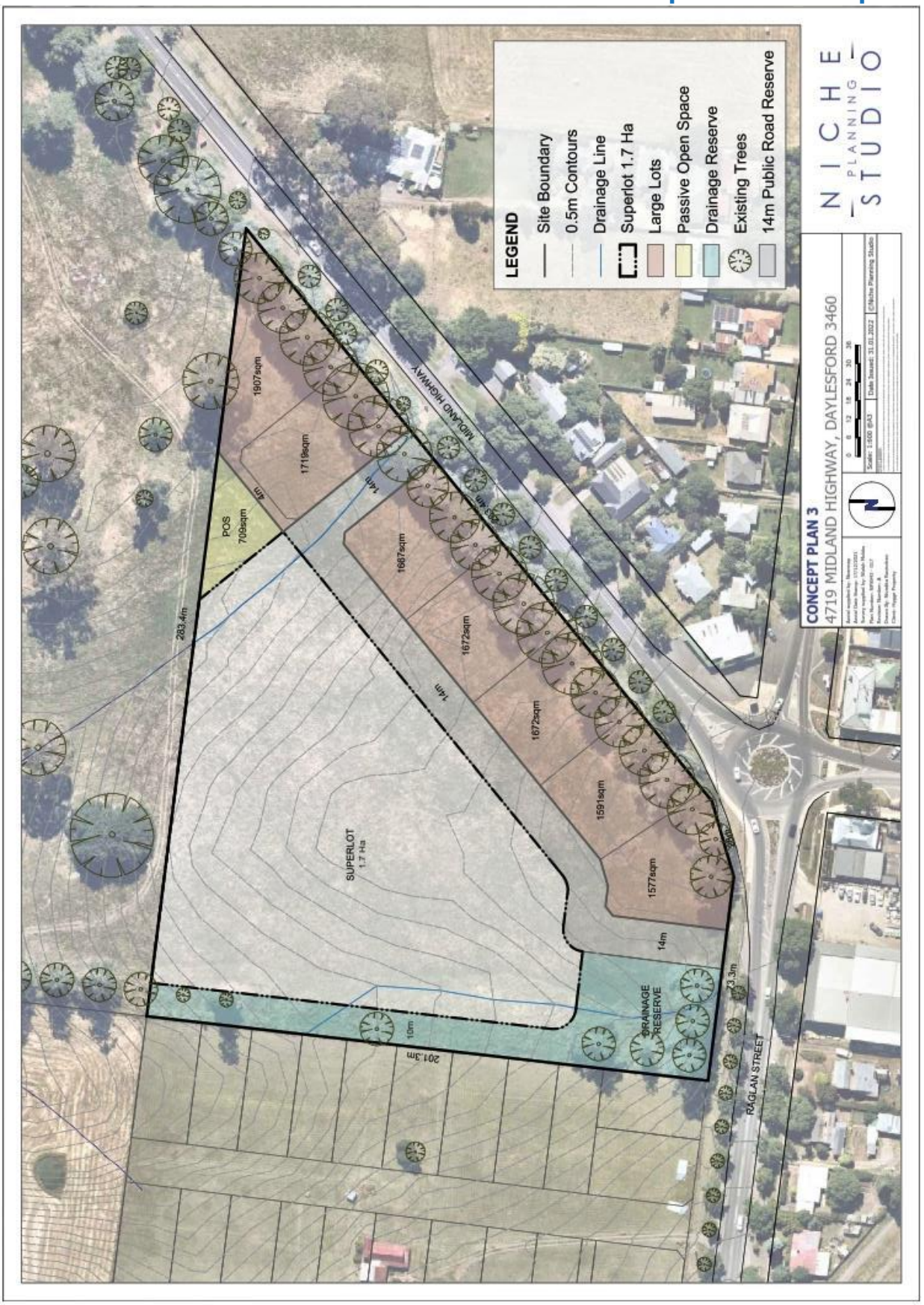
APPENDIX B – Proposed Development



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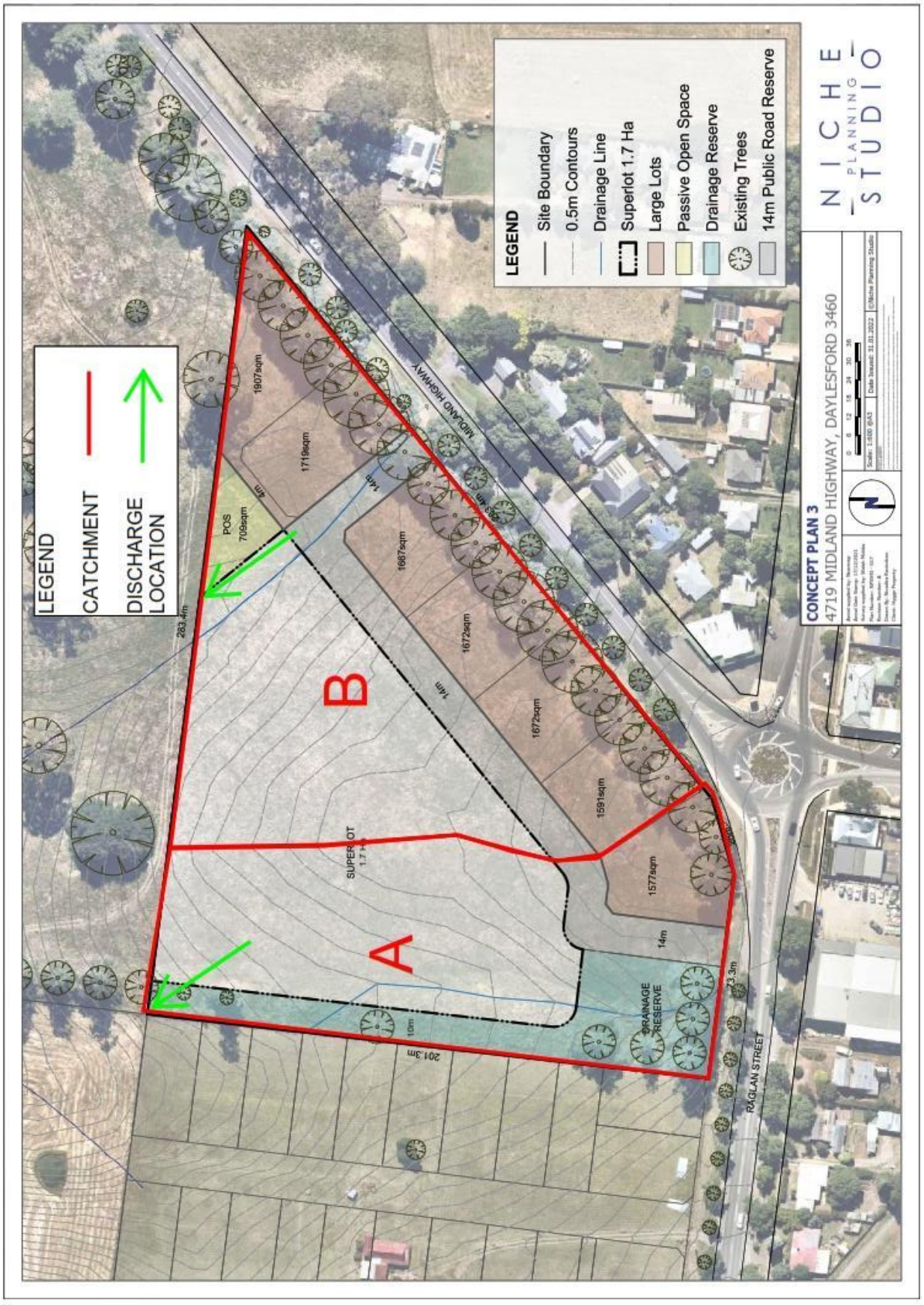
APPENDIX C – Catchment Plan



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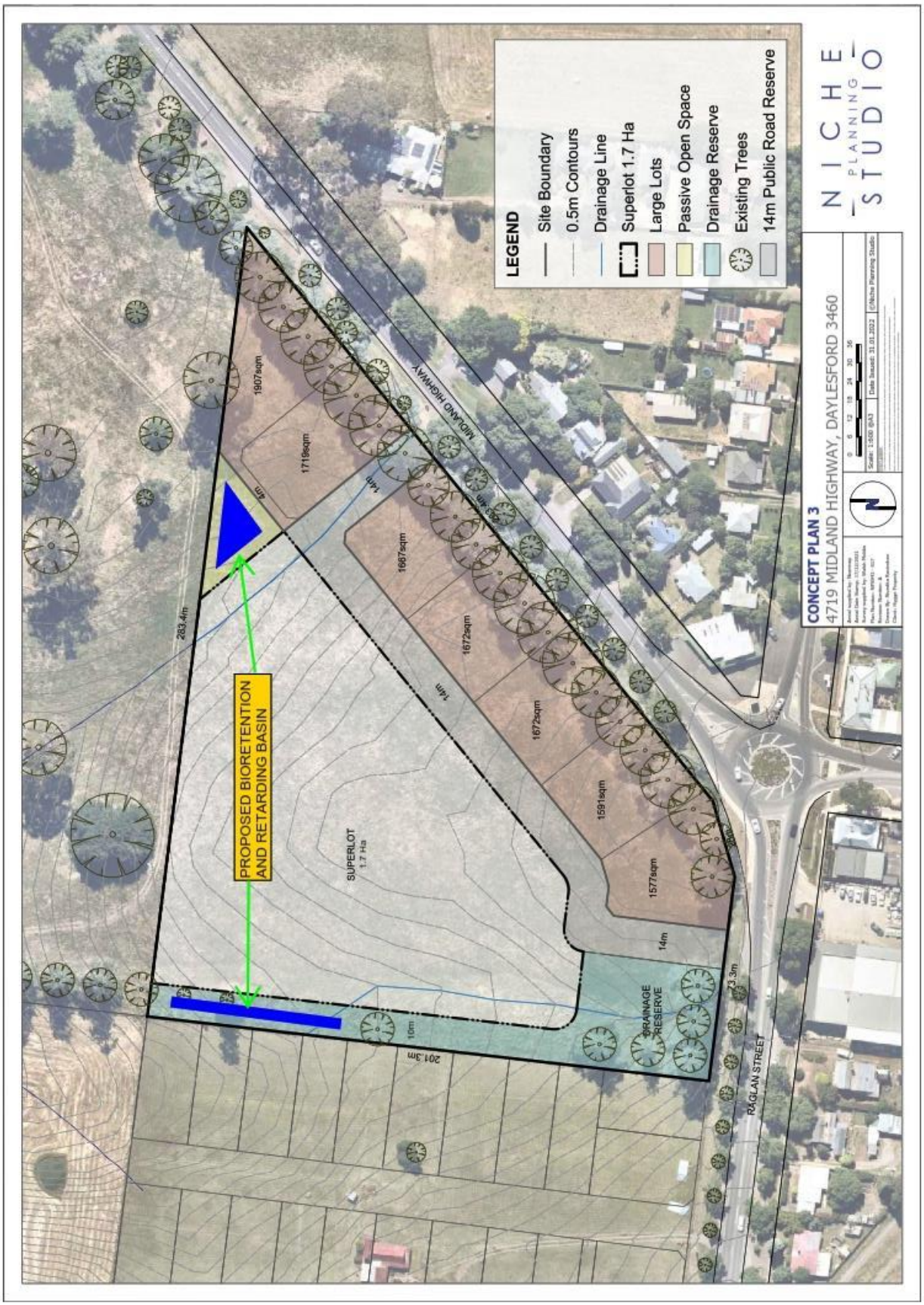
APPENDIX D – Retarding Basin Plan



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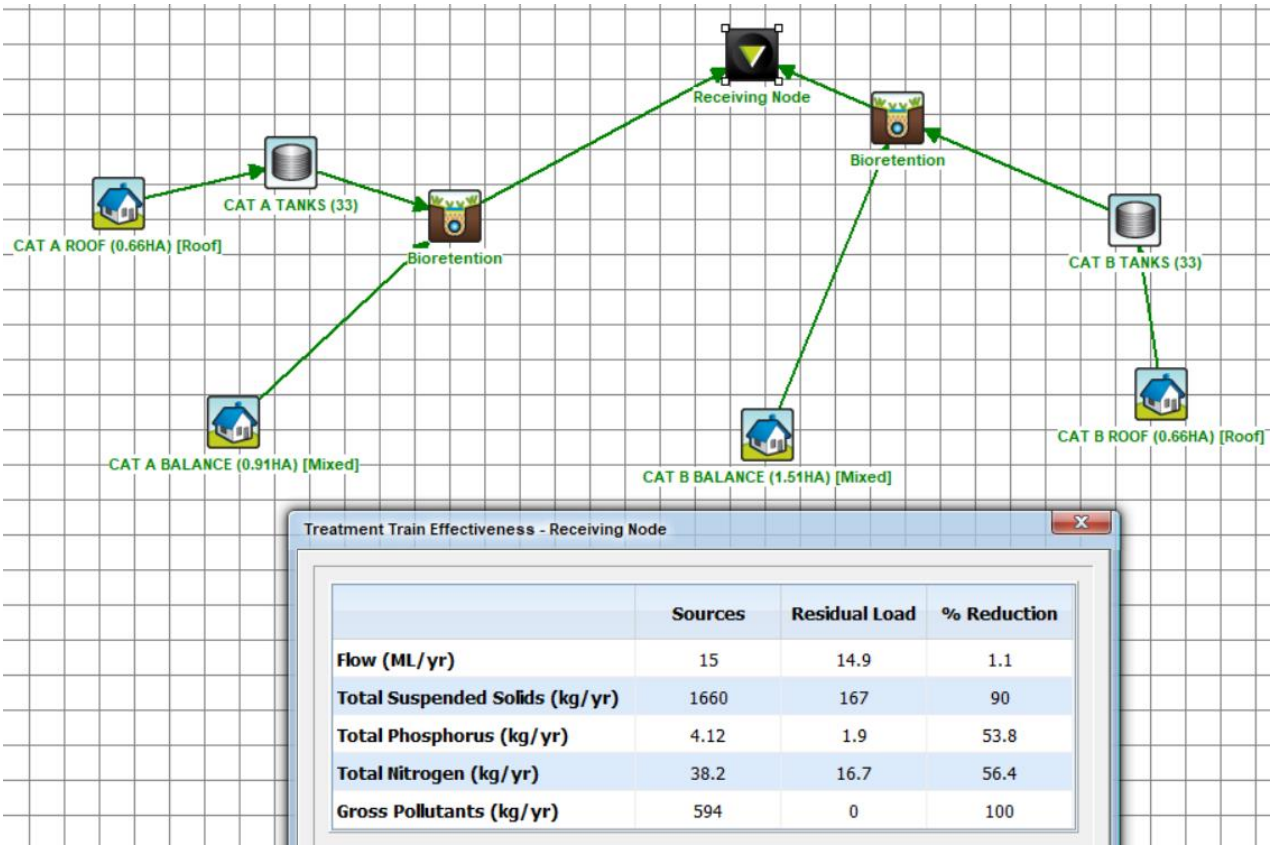
APPENDIX E – MUSIC Model



Treatment Train Effectiveness - Receiving Node

	Sources	Residual Load	% Reduction
Flow (ML/yr)	15	14.9	1.1
Total Suspended Solids (kg/yr)	1660	167	90
Total Phosphorus (kg/yr)	4.12	1.9	53.8
Total Nitrogen (kg/yr)	38.2	16.7	56.4
Gross Pollutants (kg/yr)	594	0	100

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Appendix 7 – Servicing Report

AXIOM CONSULTING ENGINEERS

SERVICING STRATEGY

RESIDENTIAL SUBDIVISION
4719 Midland Highway,
Daylesford

Prepared For
Smith Development Partnership Pty Ltd

Document Reference
984-02

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Issue	Author	Date	Checked	Date	Authorised	Date
A	J Paterson	4/05/22	M Parker	4/05/22	C Coughlan	4/05/22
B	J Paterson	5/05/22	M Parker	5/05/22	C Coughlan	5/05/22

This investigation and report have been authorised by Mr. Chris Coughlan, the Director of Axiom Consulting Engineers Pty Ltd.

Chris Coughlan BEng (Civil), MIEAust

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1 INTRODUCTION

This report investigates the provision of services to the subject subdivision site at 4719 Midland Highway, Daylesford. The site is proposed to be subdivided into 7 low-density residential allotments and a superlot, which will become a medium density development. Infrastructure is to be provided for the provision of roads, stormwater drainage, sewerage, water, electricity, telecommunications, and gas.
For Stormwater Drainage information, refer to the accompanying Stormwater Strategy document Ref: 984-01.

2 ROADS

Responsible Authority: Hepburn Shire Council, Vicroads

The current proposed road reserves can be seen in Appendix A.

Roads shall be constructed in accordance with the Infrastructure Design Manual (a standardised document adopted by most councils in Regional Victoria), and as required by the Stormwater Strategy to convey overland flows.

An accessway can be constructed through the site from Raglan Street to Midland Highway to allow vehicular access to the internal side of lots and the superlot.

3 STORMWATER DRAINAGE

Responsible Authority: Hepburn Shire Council

Refer to Stormwater Strategy document.

4 SEWER RETICULATION

Responsible Authority: Central Highlands Water

As seen in appendix B, existing pressure sewerage is available on Midland Highway and Raglan Street with a pump station on Midland Highway that takes gravity sewer through the site from upstream catchments. Internal sewerage can be designed as 150mmØ gravity sewer and connect into the existing gravity network within the site.

5 WATER RETICULATION

Responsible Authority: Central Highlands Water

As shown in Appendix B, DN100 water main is available along Midland Highway and on the opposite side of the road in Raglan Street. Table 3.2 of WSA03-2011-3.1 provides that a single direction feed can only service up to 40 lots. If the combined number of lot connections on the existing main including the superlot exceeds this number, then water will need to be reticulated from Midland Highway through to Raglan Street via a new 100mmØ water main.

6 ELECTRICITY

Responsible Authority: Powercor

Overhead electrical is available on both the Raglan Street and Midland Highway accesses. Underground electrical supply can be routed from the poles into the site via underground electrical cables located in the proposed road reserve. Layout of the poles can be seen in appendix C.

7 TELECOMMUNICATIONS

Responsible Authority: Telstra, Optus

Optus is available on the north side of the existing roads and Telstra is available on the south. As NBN is available and shares networking with Telstra, NBN will be used for telecommunications on site.

8 NBN

Responsible Authority: NBN

A plan showing the location of NBN is shown in appendix D. It shows a connection is available on the south side of Raglan Street and Midland Highway. As a new development, connection to NBN infrastructure will be required as a planning permit condition and can be connected across the existing road to the site and routed through the road reserve.

9 GAS

Responsible Authority: Ausnet

A plan showing the location of existing gas in proximity to the site is shown in appendix E. Gas is available on the north side of Raglan Street and south side of Midland Highway. As it is a larger main and closer to the site, connection can be made from Raglan Street.

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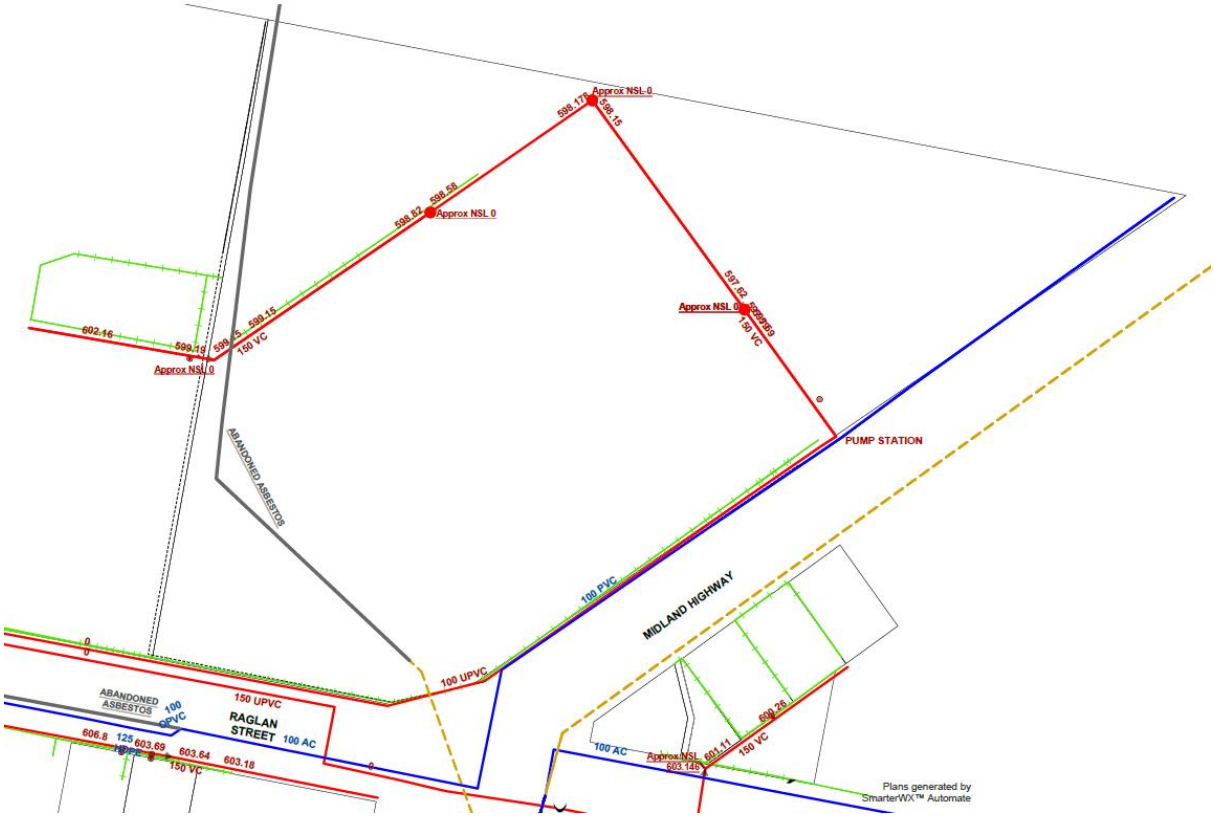
APPENDIX A – Proposed Development Plan

APPENDIX B – Existing Sewer & Water Layout



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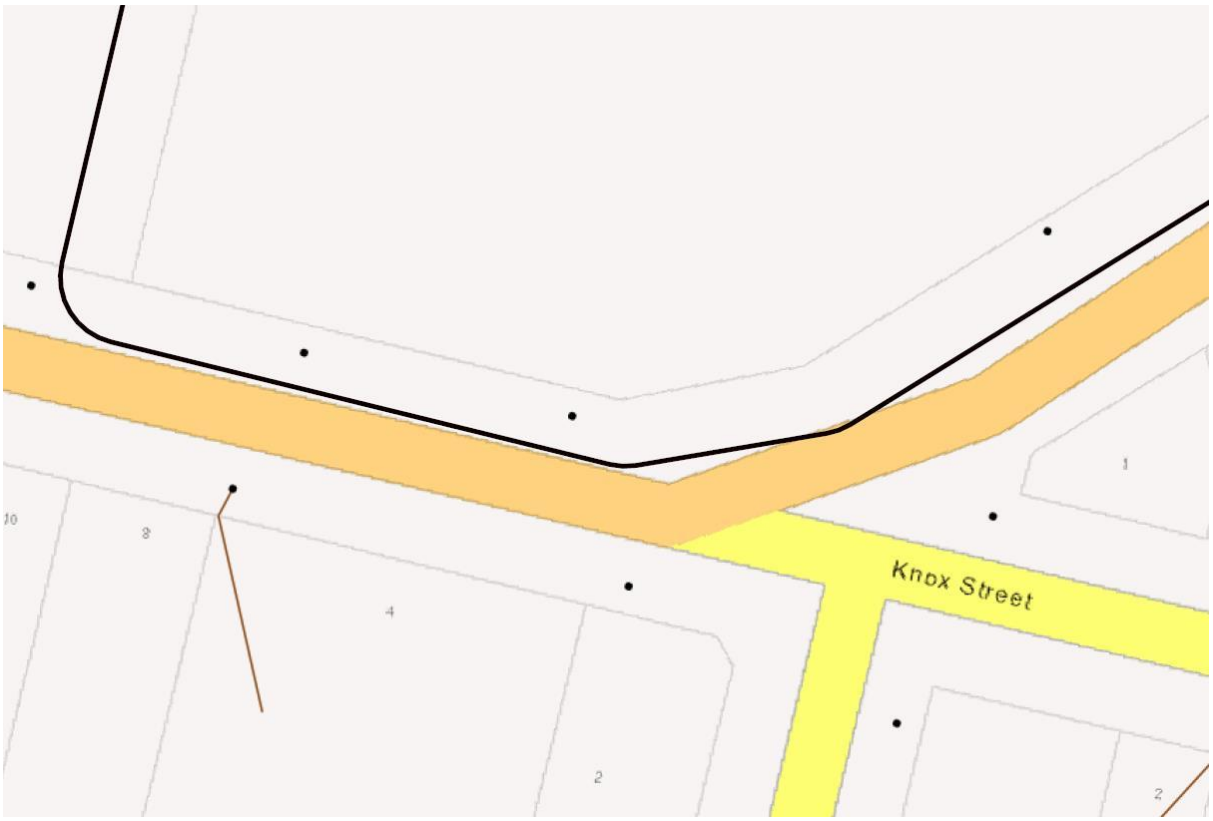
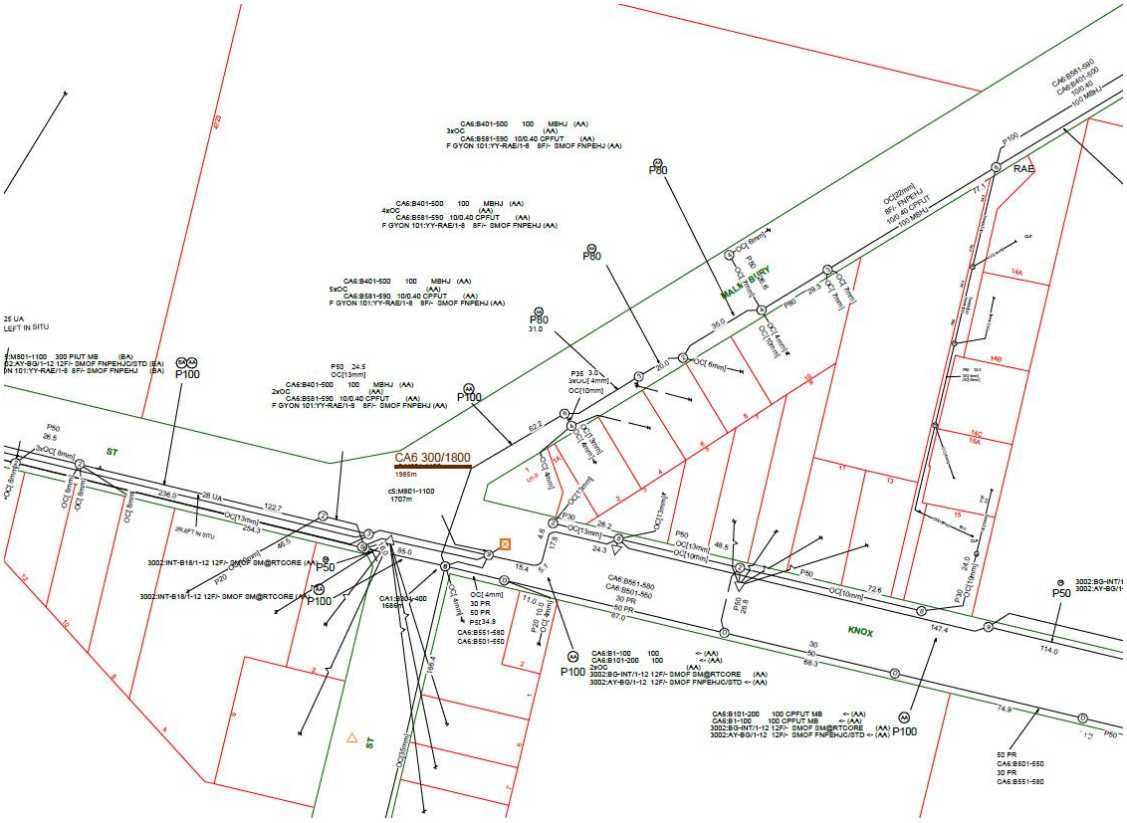
APPENDIX C – Electrical Pole Locations



APPENDIX D – NBN & Telstra Layout



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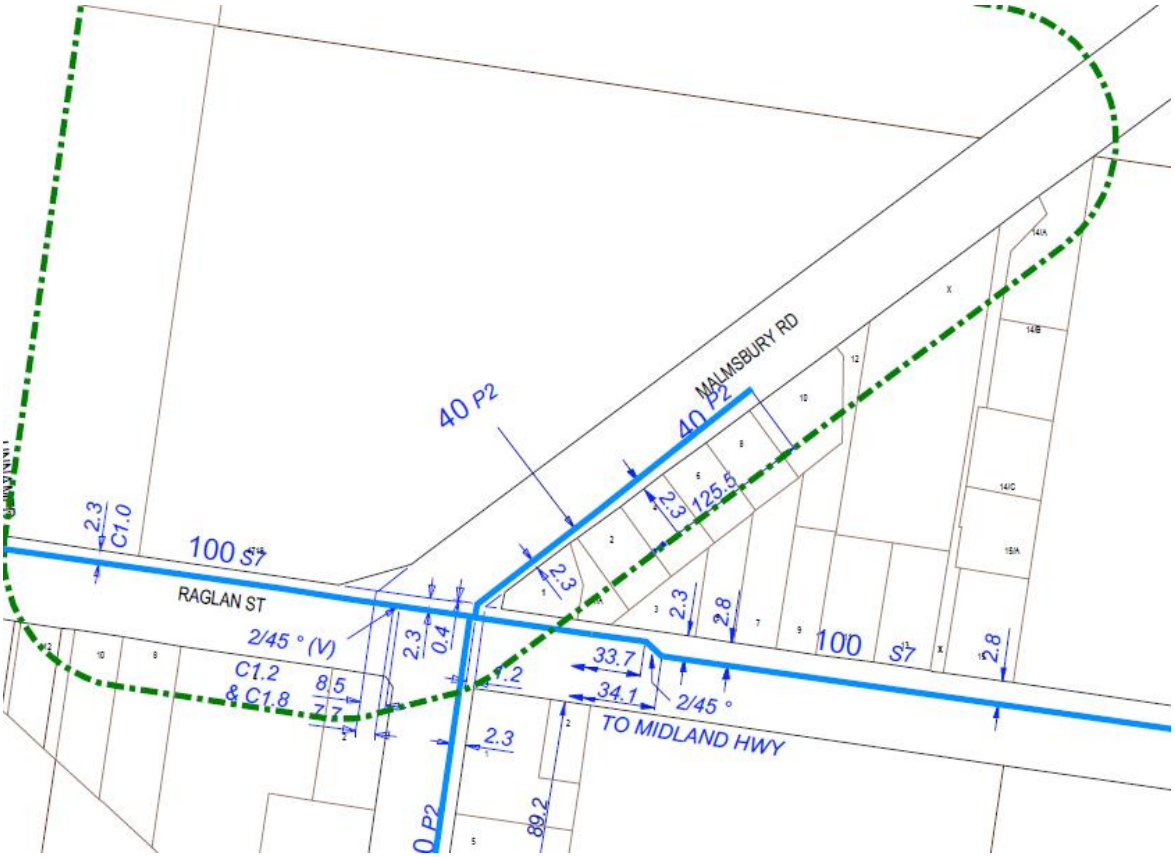
APPENDIX E – Gas Layout



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Appendix 9 – Native Vegetation and Ecology Report

4719 Midland Highway (Wombat Park) Daylesford

Vegetation Assessment

FINAL

Prepared for
Hygge Property

Prepared by:
Mark Trengove **Ecological Services**

April 2022

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Document History

Version	Date	Prepared by
Draft	25 March 2022	Mark Trengove
Final	13 April 2022	Mark Trengove

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1 Introduction

1.1 Project Background

This report was commissioned Hygge Property undertake an ecological assessment for the proposed new residential sub-division at part of 4719 Midland Highway Daylesford.

Under Clause 52.17 of the Victorian Planning Scheme, the State has gazetted the Native Vegetation Permitted Clearing Regulations. The regulations 'introduce a risk based approach to assessing applications to remove native vegetation' (DELWP Website vi). Refer to Section 3.3 for further discussion.

1.2 Aims

The aims of the study are to -

- Determine the extent of any native vegetation that exists in the study area.
- Describe the vegetation of the study area.
- Undertake an assessment of any native vegetation (patch or scattered tree) that may be impacted on by the proposal.
- Respond to relevant legislation (Clause 52.17, EPBC Act, ESO1, ESO2).
- Prescribe offset requirements for the removal of any native vegetation from the study area.

1.3 Study Area

The subject site consists of approximately 3.8 hectares of land located at 4719 Midland Highway Daylesford. The study area is the area as defined at Figure 1.

The study area is located within the Hepburn Shire Council, which is located within in the North Central Catchment Management Authority area. The study area is within the Central Victorian Uplands bioregion (DELWP website i). Under the Hepburn Planning Scheme, the study area is zoned Neighbourhood Residential Zone (NRZ1) and is subject to Environment Significance Overlay 1 (ESO1) and Environment Significance Overlay 2 (ESO2).

The study area includes an ephemeral drainage line that flows from south to north across the north-eastern sector of the property. This drainage line is a tributary of Bund Creek. Bund Creek flows into Spring Creek, through the Hepburn Springs area, and is within the Loddon River catchment. Refer to Figure 2 for the location of Bund Creek drainage lines.

Soil types within the study area are comprised of volcanic clay loams.

The property slopes gently from the south down to the north (to the Bund Creek tributary), with a fall of 16 metres over 200 metres distance.

The vegetation of the study area can be described as follows:

- Disturbed degraded vegetation with exotic plant species (open pasture).
- Planted exotic treed vegetation consisting of a linear plantation adjacent to the Midland Highway consisting of mostly of mature Cedar (*Cedrus* spp) and Fir (*Abies* spp) with a hedge row of Boxthorn (*Lycium f*erocissimum) occurring on the boundary line.

Planted exotic treed vegetation consisting of a linear plantation on the adjacent Midland Highway consists of mature Desert Ash (*Fraxinus angustifolia*) and Chestnut (*Castanea* spp) with an exotic understorey.

Areas of native vegetation dominated by mature Manna Gum (*Eucalyptus viminalis*) occur on the adjacent land to the north. This vegetation is located beyond the impact area and is partially implicated (Table 3 and Figure 3).

Refer to Figure 1 for the location of the study area.

Figure 1. Study area location and proposed sub-division layout.

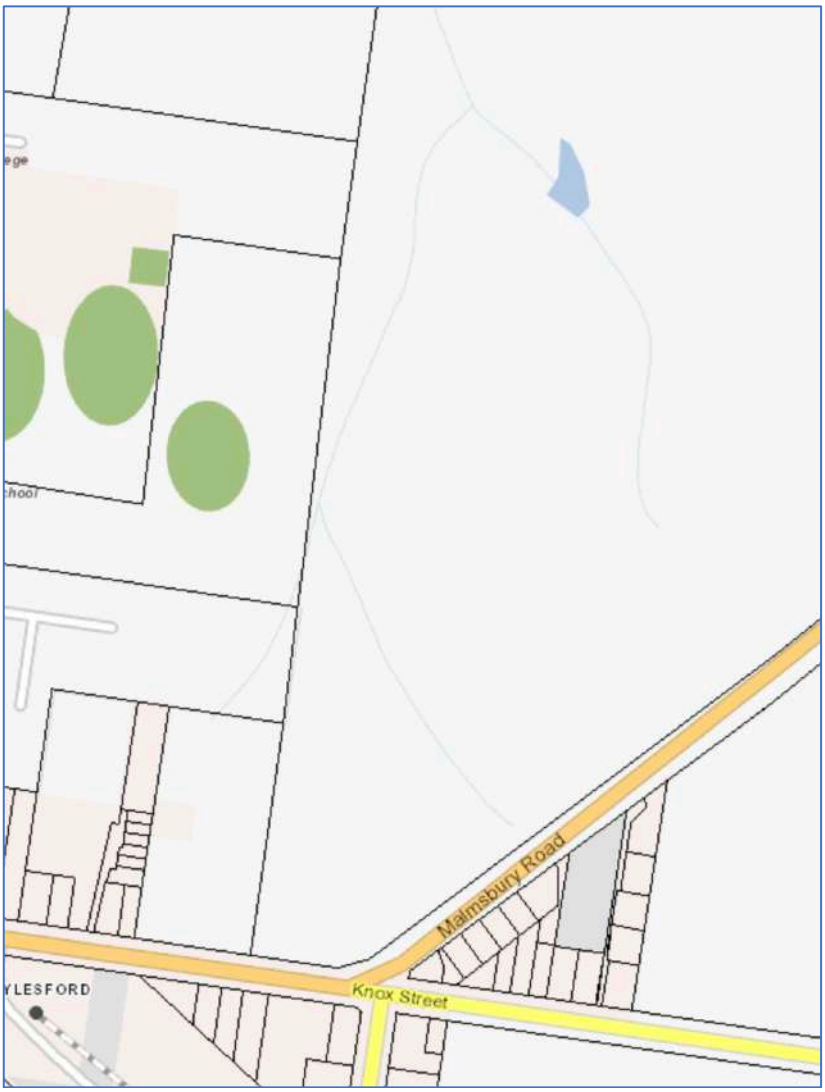

Figure 2. Bund Creek (DELWP NVIM data).

1.4 Potential Impacts

The area of potential impact is comprised of proposed new residential sub-division.

It is assessed that under Clause 52.17 a permit to remove native vegetation will be required. A permit to remove vegetation will be required under ESO1.

2 Survey Methods

2.1 Taxonomy

Scientific names for plants follow the Flora of Victoria (RBG website). Common names for plants follow the Flora of Victoria Vols 2-4 (Walsh and Entwisle 1994-1999).

2.2 Literature and Database Review

Relevant literature, online resources and databases were reviewed to provide an up to date assessment of ecological values associated with the study area and surrounds, including:

- The Victorian Department of Environment, Land, Water and Planning (DELWP) NVIM tool (DELWP website i) for:
    - Modelled data for remnant vegetation patches and habitat for rare or threatened species and
    - the extent of historic and current Ecological Vegetation Classes (EVC)s
- Aerial photography of the study area (Google maps).

2.3 Field methodology vegetation assessment

The site was inspected on foot on the 17th of March 2022. The entire site was traversed. Records were taken of all naturalised vascular plant species. Observations were made of the existing habitat values.

2.4 Limitations

The assessment was conducted during autumn, a time of year that is suitable for the detection of most flora species likely to occur on site. Due to the degraded nature of the study area and the favourable conditions for survey, the site inspection is considered to be sufficient to assess the ecological values of the proposed impact site. As a result, there are not considered to be any significant limitations to the finding of the study.

The survey includes only vascular flora. As Habitat Hectare assessments were not required (*refer to* 3.3) non-vascular flora (mosses, lichens, fungi, etc.) were not recorded. Fauna was not surveyed.

2.5 Defining Vegetation Significance

A number of criteria are applied in order to assess the significance of flora species and vegetation communities. The definition of the criteria is detailed in Appendix 1.

2.6 Defining and Assessing Native Vegetation

Native vegetation in Victoria has been defined by DELWP as belonging to two categories. These are:

Patch native vegetation

Patch native vegetation is either:

- any area of vegetation where at least 25 per cent of the total perennial understorey plant cover is native
- any area with three or more native canopy trees where the canopy foliage cover is overlapping.
- Areas of current wetlands as mapped by DELWP.

Scattered tree native vegetation

Scattered tree native vegetation is:

- a native canopy tree that does not form part of a patch.

Habitat hectares

Habitat hectares (Vegetation Quality Assessment v1.3) is a site-based measure that combines extent and condition of native vegetation. The current condition of native vegetation is assessed against a benchmark for its Ecological Vegetation Class (EVC). EVCs are classifications of native vegetation types. The benchmark for an EVC describes the attributes of the vegetation type in its mature natural state, which reflects the pre-settlement circumstances. The condition score of native vegetation at a site can be determined through undertaking a habitat hectare assessment.

The habitat hectares of native vegetation is calculated by multiplying the current condition of the vegetation (condition score) by the extent of native vegetation. (DELWP Website vi).

3 Results

3.1 Ecological Vegetation Class

Ecological Vegetation Classes (EVCs) are the primary level of classification of vegetation communities within Victoria. An EVC contains one or more plant (floristic) community and represents a grouping of vegetation communities with broadly similar ecological attributes.

The EVC mapping of the study area undertaken by DELWP (DELWP website i) indicates that the study area and immediate surrounds contains vegetation that aligns with the characteristics of EVC 23 Herb-rich Foothill Forest.

The bioregional conservation status of EVC 23 Herb-rich Foothill Forest is 'Depleted'. Depleted is defined as and EVC where between 30-50% of pre-european extent remains.

The current survey recorded no native vegetation that accords with EVC 23 Herb-rich Foothill Forest.

Refer to Figure 3 for the distribution of pre 1750 EVCs (DELWP website i). Refer below (3.3) for further discussion.

Figure 3. Distribution of pre 1750 EVCs (DELWP data).

3.2 Flora

3.2.1 Indigenous Plant Species

No indigenous (native) vascular plant species were recorded for the study area.

Refer to Table 1 for a list of naturalised vascular plant species; including status recorded this survey. Refer to Table 2 for a list of tree species recorded this survey. Refer to Plates 1-5 for photographs of the vegetation existing conditions.

3.2.2 Exotic Plant Species

Table 1 Dominant Naturalised Exotic Plant Species recorded this assessment.

Botanical Name	Common Name	Status
Agrostis capillaris	Creeping Bent-grass	Exotic
Anthoxanthum odoratum	Sweet Vernal Grass	Exotic
Bromus spp.	Brome	Exotic
Cirsuim vulgare	Spear Thistle	Exotic
Cretageus monogyna	Hawthorn	Exotic
Cytisus scoparius	English Broom	Exotic
Dactylis glomeratus	Cock's-foot Grass	Exotic
Holcus lanatus	Yorkshire Fog-grass	Exotic
Hypochaeris radicata	Flatweed	Exotic
Lolium spp.	Rye-grass	Exotic
Lycium ferocissimum	Boxthorn	Exotic
Phalaris aquatica	Canary-grass	Exotic
Rubus laciniatus	Blackberry	Exotic
Rumex crispus	Curled Dock	Exotic
Silybum marinum	Variegated Thistle	Exotic

Table 1. Botanical name, common name, status.

Table 2 Exotic Trees

Tree #	Botanical Name	Common Name	Status	52.17 Implications
Cluster 1	*Cerdus* spp.	Cedar	Exotic	Nil
Cluster 1	*Abies* spp.	Fir	Exotic	Nil

Table 2. Trees, botanical name, common name, status, and implications for Clause 52.17.

Refer to Figure 4 for location of trees.

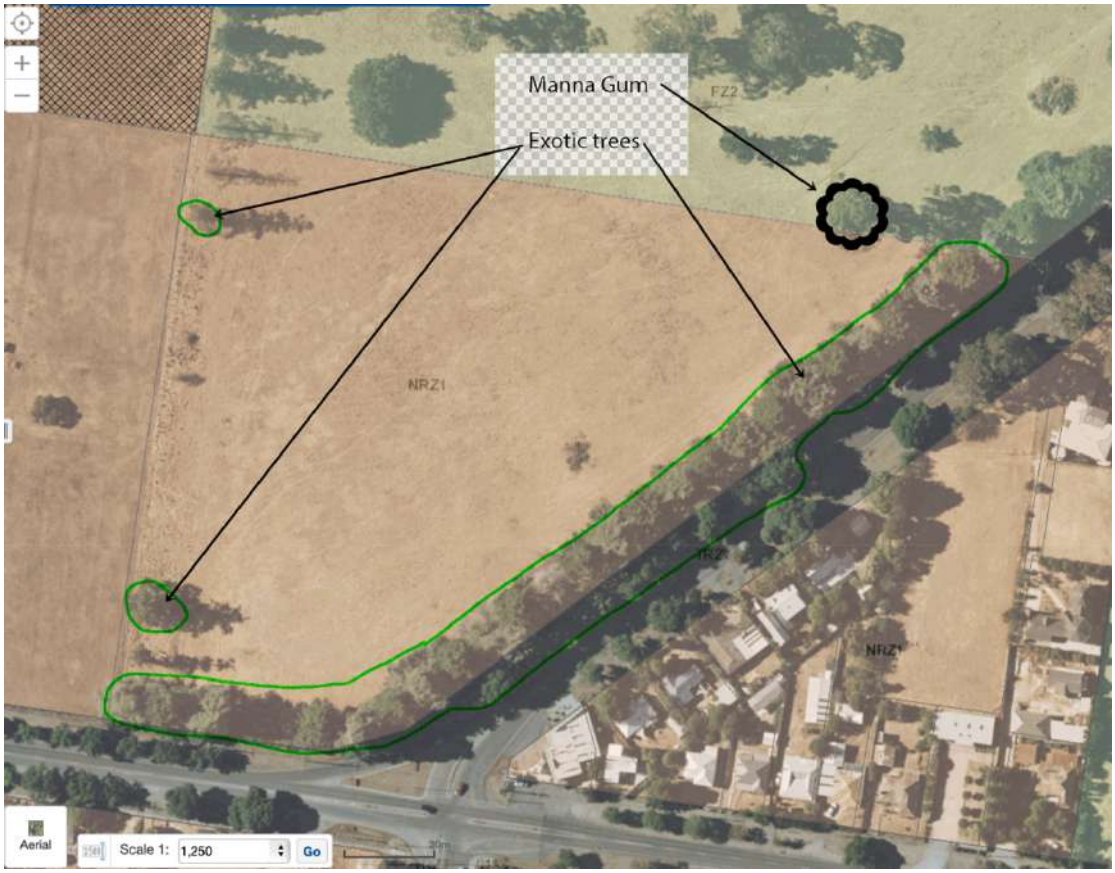

Figure 4. Location of trees. Manna Gum TPZ is located within the impact area. Plantations are mixed exotic species (*Cedrus* spp., *Abies* spp.).

Areas of native vegetation dominated by mature Manna Gum occur on the subject property to the north of the proposed sub-division. This vegetation is located beyond the impact area. However, one tree is implicated as the TPZ for the tree is assessed as being impacted due to the location of the new property boundary. (Table 3 and Figure 4). Refer to Table 3 for native tree data including DBH and TPZ calculations.

Table 3 Native trees beyond the impact area

Tree #	Botanical Name	DBH (cm)	TPZ (m)	Distance form property boundary (m)	Clause 52.17 Impact
A	*Eucalyptus viminalis*	2300	15	6	Yes

Table 3. Native trees, botanical name, diameter at breast height (DBH), tree protection zone (TPZ) and implications for Clause 52.17.

Tree protection zones are calculated in accordance with Australian Standard AS4970-2009 *Protection of trees on development sites.* Refer to Appendix 4.

3.2.3 Significant Plant Species

No native plant species were recorded for the study area. One native tree was recorded for adjacent to the study area. Refer to Table 1, Table 3 and Appendix 1.

3.2.4 Condition of the Vegetation

The vegetation of the study area is described as follows:

- **Relatively degraded exotic vegetation.** This vegetation occurs across the majority of the study area (the former farming land) and is dominated by pasture grasses and ruderal weeds,
- Exotic specimen trees plantations.
- Mature Manna Gum native vegetation occurs to the north of the proposed sub-division.
- Planted exotic treed vegetation consisting of a linear plantation on the adjacent Midland Highway consist of mature Desert Ash and Chestnut with an exotic understorey.

3.3 State Native Vegetation Permitted Clearing Regulations

3.3.1 Description

Under Particular Provision (Native Vegetation Clause 52.17) the State has gazetted the Native Vegetation Permitted Clearing Regulations. The Regulations introduce a risk based approach to assessing applications to remove native vegetation (DELWP website vi).

The objective for the permitted clearing of native vegetation (*refer to* 2.6) is that it results in no net loss. This means permitted clearing has a neutral impact on Victoria's biodiversity.

When native vegetation removal is permitted, an offset must be secured which achieves a no net loss outcome for biodiversity. To achieve this, the offset makes a contribution to Victoria's biodiversity that is equivalent to the contribution made by the native vegetation that was removed. The type and amount of offset required depends on the native vegetation being removed and the contribution it makes to Victoria's biodiversity.

Under the Native Vegetation Permitted Clearing Regulations, any 'patch' or 'scattered tree' native vegetation that is proposed to be removed is subject to protection/and or recruitment offsets, depending upon the characteristics of the site.

Refer to Figure 5 for the distribution of vegetation in the study area according to 'Location'. Implications for the current proposal are discussed as follows.

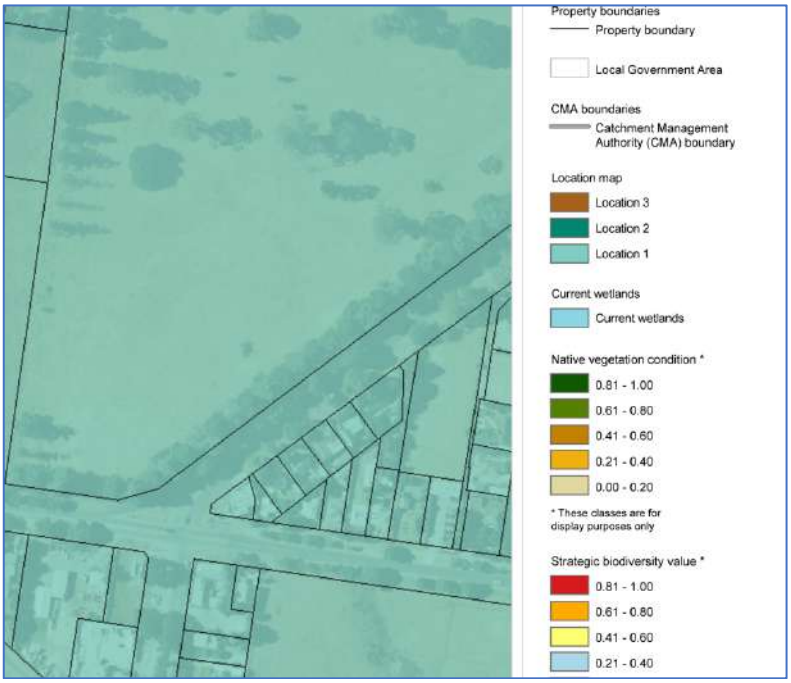

Figure 5. Distribution of vegetation according to 'Location'. Light green equates to 'Location 1' (i.e. least risk) (DELWP Website i). The study area is sited within Location 1.

3.3.2 Patch Native Vegetation

Under the Native Vegetation Permitted Clearing Regulations, any areas of patch native vegetation that are proposed to be removed are subject to protection/and or recruitment offsets, depending upon the characteristics of the site.

No areas of patch native vegetation were recorded for the study area.

3.3.3 Scattered Tree Native Vegetation

Under the Native Vegetation Permitted Clearing Regulations, any scattered native canopy trees that are proposed to be removed are subject to protection/and or recruitment offsets, depending upon the characteristics of the site. Within the CVU bioregion, EVC 23 has *Eucalyptus* spp as 'canopy trees'.

No areas of scattered tree native vegetation were recorded for the study area. One scattered tree (Table 3 and Figures 4 and 6) is recorded beyond the study area, which due to the proximity to the study area and the size of the TPZ, is assessed as being impacted on as it encroaches into the proposed property boundary.

However, it is possible that this tree could be retained.

3.3.4 Implications

The subject land is zoned for residential purposes and is located within the Daylesford Structure Plan's identified township boundary, earmarked for future residential development. The subdivision layout has created lot sizes which align with Council's preferred density of the area, to avoid any detrimental impact upon the Manna Gum trees.

It is assessed that there are implications for the current proposal for Clause 52.17 Native vegetation.

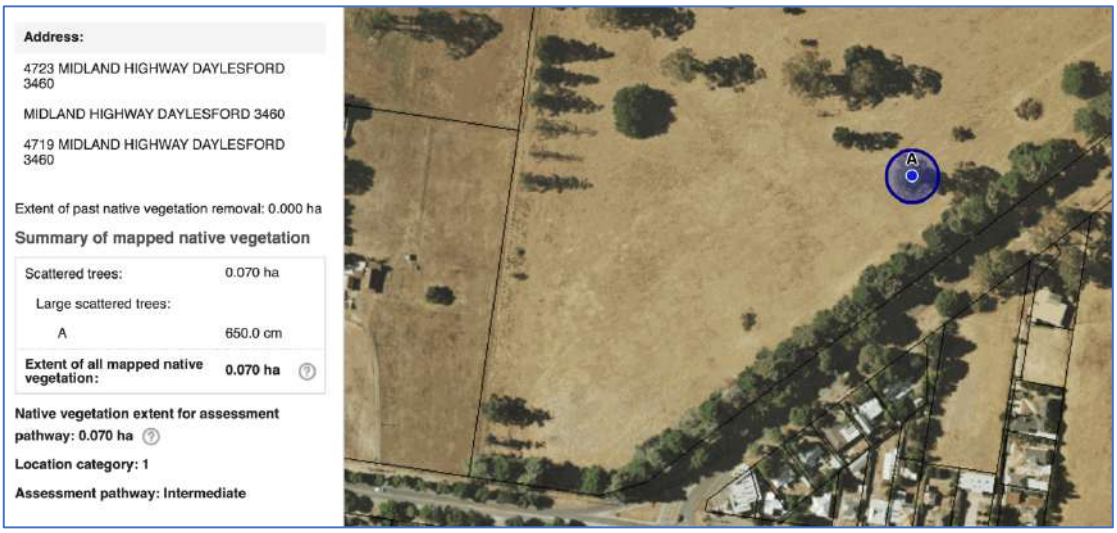

Figure 6. Location of native vegetation impacted on.

Offset type	General offset
Offset amount (general habitat units)	0.021
Offset attributes	
Vicinity	North Central Catchment Management Authority (CMA) or Hepburn Shire Council
Minimum strategic biodiversity value	0.409
Large trees	1 tree(s)

Summary of mapped native vegetation

Assessment pathway	Intermediate
Location category	1
Total extent of native vegetation used to determine assessment pathway	0.070 ha
Total extent of native vegetation mapped to be removed (patches plus extent of scattered trees)	0.070 ha
Total number of large trees	1 tree(s)
Strategic biodiversity value score	0.511
Condition score	0.274

Figure 7. Summary of offset implications.

3.4.5 Avoid and minimise

Areas of degraded native vegetation are exploited, thereby minimizing impacts.

No native vegetation is proposed to be removed. However, due to the proposed boundary one scattered tree native vegetation is assessed as being impacted on.

3.4.6 Offset Implications

As native vegetation is assessed to be impacted on, there are implications for the Native Vegetation Permitted Clearing Regulations.

A total of 0.070 ha of native vegetation is required to be offset. In keeping with the Regulations, the DELWP NVIM tool is utilised to generate a Native vegetation removal report (Report ID 329-20220323-020) to determine offset requirements (refer to Appendix 2). The application is an Intermediate Assessment Pathway application.

Assuming a permit for removal of the above identified native vegetation was granted, the offset requirements for that removal would be the generation of 0.021 general habitat units, with a minimum strategic biodiversity score of 0.409, plus one large tree, to be achieved within the North Central CMA or Hepburn Shire Council region. Refer to Figure 7 for a summary of offset requirements. Refer to Appendix 2 for the Native vegetation removal report.

3.4.7 Achieving offsets.

Vegetation offsets are to be achieved by 3rd party offset purchase. There is reasonable assurance that offset will be available. Refer to Appendix 3 Report on available native vegetation credits.
(https://nvcr.delwp.vic.gov.au/Search/GHU).

3.4 Commonwealth

3.4.1 Environment Protection and Biodiversity Conservation Act (1999)

The Environment Protection and Biodiversity Conservation (EPBC) Act (1999) was **e**stablished to 'promote the conservation of biodiversity by providing strong protection for listed species and communities in the Commonwealth and for protected areas, Ramsar sites, Commonwealth Reserves, conservation zones and World Heritage sites, etc.' No listed EPBC Act ecological communities or species are recorded for the study area.

Implications

The removal of vegetation would not require referral under the EPBC Act as the vegetation is exotic. Consequently, there is not considered to be any implications for the current proposal under the EPBC Act.

3.5 ESO1 Proclaimed Catchment Protection

Statement of environmental significance

Hepburn Shire is situated in the Central Highlands at the source of a number of catchments linked to Port Phillip Bay or the Murray River. Protection of the quality of this water has significant local and regional implications, especially where these catchments provide domestic water supply.

Environmental objective to be achieved

To protect the quality of domestic water supplies within the Shire and the broader region.

To maintain and where practicable enhance the quality and quantity of water within watercourses.

To prevent increased runoff or concentration of surface water leading to erosion or siltation of watercourses.

To prevent erosion of banks, streambeds adjoining land and siltation of watercourses, drains and other features.

To prevent pollution and increased turbidity and nutrient levels of water in natural watercourses, water bodies and storages.

Vegetation

A permit is not required to remove, destroy, or lop vegetation, including dead vegetation unless the removal, destruction or lopping involves:

Any vegetation on site area greater than 1 ha. Vegetation within 30 metres of a waterway.

(http://planningschemes.dpcd.vic.gov.au/schemes/hepburn/ordinance/42_01s01_hepb.pdf)

Implications

The subject land is zoned for residential purposes and is located within the Daylesford Structure Plan's identified township boundary, earmarked for future residential development. The subdivision layout has created lot sizes which align with Council's preferred density of the area, with an effort to avoid any detrimental impact upon the Manna Gums.

Note that all the proposed Lots are to be connected to the deep sewer.

Under ESO1 a permit will be required for the removal of vegetation as the vegetation is more than 1 ha in size and is within 30 from a waterway (Bund Creek).

3.5 ESO2 Mineral Springs and Groundwater Protection

Statement of environmental significance

The mineral springs that occur within the Hepburn Shire have natural, cultural and economic significance. The protection of the springs, their aquifers and their environs from the impacts of waste disposal and drainage is a fundamental component of the future management of this asset.

Environmental objective to be achieved

To protect the mineral springs, their aquifers and their environs from the impacts of effluent and drainage.

To protect water bores that provide town water supply.

(http://planningschemes.dpcd.vic.gov.au/schemes/hepburn/ordinance/42_01s02_hepb.pdf)

Implications

The subject land is zoned for residential purposes and is located within the Daylesford Structure Plan's identified township boundary, earmarked for future residential development. The subdivision layout has created lot sizes which align with Council's preferred density of the area, with an effort to avoid any detrimental impact upon the Manna Gums.

It is assessed that the removal of vegetation, as proposed, is unlikely to impact upon the values of ESO2.

4 Conclusions

The subject site consists of approximately 3.8 hectares of land located at 4719 Midland Highway Daylesford.

This report finds that the study area is comprised of naturalised exotic vegetation (pasture) as well as planted exotic trees. One mature native Manna Gum tree occurs in proximity to the proposed sub-division. It is assessed that this tree is impacted on, although it is possible the tree can be retained.

Under Clause 52.17, a planning permit to remove native vegetation would be required from the Hepburn Shire Council for the impacts upon one mature Manna Gum tree.

Assuming a permit for removal of the above identified native vegetation was granted, the offset requirements for that removal would be the generation of 0.021 general habitat units, with a minimum strategic biodiversity score of 0.409, plus one large tree, to be achieved within the North Central CMA or Hepburn Shire Council region. Refer to Figure 7 for a summary of offset requirements. Refer to Appendix 2 for the Native vegetation removal report.

Removal of the vegetation of the study area would not have implications for the relevant Commonwealth (i.e., EPBC Act) legislation.

A permit for the removal of vegetation will be required under ESO1 from the Hepburn Shire Council.

There are no significant limitations to the findings of this report.

5 References

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DELWP. Victorian Biodiversity Atlas: Interactive map. https://vba.dse.vic.gov.au/vba/.. Victorian Department of Land, Water and Planning, Melbourne, VIC.

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DELWP. https://www.environment.vic.gov.au/native-vegetation/native-vegetation Department of Department of Land, Environment Water and Planning, Melbourne, VIC.

http://planningschemes.dpcd.vic.gov.au/schemes/hepburn

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Walsh, N G & Entwisle, T (1994-1999): 'Flora of Victoria Vol 2-4' Inkata Press, Melbourne.

Oates, A. & Taranto, M. (2001). 'Vegetation Mapping of the Port Phillip & Westernport Region' Arthur Rylah Institute for Environmental Research, DNRE, Victoria.

Parkes, D., Newell, G. & Cheal, D. (2003). 'Assessing the Quality of Indigenous Vegetation: The Habitat Hectares Approach' Parks, Flora & Fauna Division, DNRE, Victoria.

Standards Australia (2009). *Protection of trees on development sites.* AS4970-2009. Standards Australia Ltd Sydney.

Appendix 1 - Assessing conservation significance

Conservation significance is assessed at a range of scales, including national, state, regional and local. Criteria used for determining the conservation significance of flora at national to local scales are presented below for botanical conservation significance.

Botanical Significance

National botanical significance applies to an area when it supports one or more of the following attributes:

a population of at least one nationally threatened plant species listed by Briggs and Leigh (1996) or plant species listed on the schedules to the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*.

A nationally threatened ecological community listed on the schedules of the *Environment Protection and Biodiversity Conservation Act 1999*.

State botanical significance applies to an area when it supports one or more of the following attributes:

A population of at least one plant species on the schedules to the Victorian *Flora and Fauna Guarantee Act 1988*.

An ecological community considered threatened in Victoria through its listing on the schedules of the *Flora and Fauna Guarantee Act 1988*.

Regional botanical significance applies to an area that supports one or more of the following attributes:

Supports a population of one or more regionally depleted species defined in a valid regional assessment of biodiversity (eg. Regional Native Vegetation Plan, Environment Conservation Council Report or Comprehensive Regional Assessment documents).

An ecological vegetation class that is considered endangered or vulnerable in a particular bioregion (based on Conn 1993 and the Regional Native Vegetation Plan).

An ecological vegetation class that is considered depleted in a particular bioregion (based on Conn 1993 and the Regional Native Vegetation Plan).

Local botanical significance applies to all remnant native vegetation that does not meet the above criteria. In much of Victoria native vegetation has been so depleted by past clearing and disturbance that all remaining vegetation must be considered to be of at least local conservation significance.

Appendix 2 Native vegetation removal report

Native vegetation removal report

A report to support an application to remove, destroy or lop native vegetation in the **Intermediate** Assessment Pathway using the modelled condition score

This report provides information to support an application to remove native vegetation in accordance with the *Guidelines for the removal, destruction or lopping of native vegetation*. The report is not an assessment by DELWP or local council of the proposed native vegetation removal. Biodiversity information and offset requirements have been calculated using modelled condition scores contained in the *Native vegetation condition map*.

Date and time: **23 March 2022 16:36 PM**

Lat./Long.: -37.3392111703265,144.157579905701

Native vegetation report ID: 329-20220323-020

Address: 4723 MIDLAND HIGHWAY DAYLESFORD 3460
MIDLAND HIGHWAY DAYLESFORD 3460
4719 MIDLAND HIGHWAY DAYLESFORD 3460

Assessment pathway

The assessment pathway and reason for the assessment pathway

Assessment pathway	**Intermediate Assessment Pathway**
Extent of past plus proposed native vegetation removal	0.070 hectares
No. large trees	1 large tree(s)
Location category	Location 1 The native vegetation is not in an area mapped as an endangered Ecological Vegetation Class, sensitive wetland or coastal area. Removal of less than 0.5 hectares will not have a significant impact on any habitat for a rare or threatened species.

Offset requirement

The offset requirement that will apply if the native vegetation is approved to be removed

Offset type	General offset
Offset amount	0.021 general habitat units
Offset attributes	
Vicinity	North Central Catchment Management Authority (CMA) or Hepburn Shire Council
Minimum strategic biodiversity value score	0.409
Large trees	1 large tree(s)

Native vegetation removal report – report ID 329-20220323-020

Native vegetation removal report

Biodiversity information about the native vegetation

Description of any past native vegetation removal
Any native vegetation that was approved to be removed, or was removed without the required approvals, on the same property or on contiguous land in the same ownership, in the five year period before the application to remove native vegetation is lodged is detailed below.

Permit/PIN number	Extent of native vegetation (hectares)
None entered	0 hectares

Description of the native vegetation proposed to be removed

Extent of all mapped native vegetation	0.070 hectares
Condition score of all mapped native vegetation	0.274
Strategic biodiversity value score of all mapped native vegetation	0.511
Extent of patches native vegetation	0.000 hectares
Extent of scattered trees	0.070 hectares
No. large trees within patches	0 large tree(s)
No. large scattered trees	1 large tree(s)
No. small scattered trees	0 small tree(s)

Additional information about trees to be removed, shown in Figure 1

Tree ID	Tree circumference (cm)	Benchmark circumference (cm)	Scattered / Patch	Tree size
A	650	220	Scattered	Large

Native vegetation removal report – report ID 329-20220323-020

Native vegetation removal report

Other information

Applications to remove, destroy or lop native vegetation must include all the below information. If an appropriate response has not been provided the application is not complete.

Photographs of the native vegetation to be removed
Recent, dated photographs of the native vegetation to be removed must be provided with the application. All photographs must be clear, show whether the vegetation is a patch of native vegetation or scattered trees, and identify any large trees. If the area of native vegetation to be removed is large, provide photos that are indicative of the native vegetation.

Ensure photographs are attached to the application. If appropriate photographs have not been provided the application is not complete.

Topographical and land information

Description of the topographic and land information relating to the native vegetation to be removed, including any ridges, crests and hilltops, wetlands and waterways, slopes of more than 20 percent, drainage lines, low lying areas, saline discharge areas, and areas of existing erosion, as appropriate. This may be represented in a map or plan. **This is an application requirement and your application will be incomplete without it.**

relatively flat land no drainage lines

Avoid and minimise statement

This statement describes what has been done to avoid the removal of, and minimise impacts on the biodiversity and other values of native vegetation. **This is an application requirement and your application will be incomplete without it.**

Avoided as possible tree is to be retained

Defendable space statement

Where the removal of native vegetation is to create defendable space, a written statement explaining why the removal of native vegetation is necessary. This statement must have regard to other available bushfire risk mitigation measures. This statement is not required if your application also includes an application under the Bushfire Management Overlay.

N/A

Offset statement

An offset statement that demonstrates that an offset is available and describes how the required offset will be secured. **This is an application requirement and your application will be incomplete without it.**

3rd party offset

Native vegetation removal report – report ID 329-20220323-020

Native vegetation removal report

Next steps

Applications to remove, destroy or lop native vegetation must address all the application requirements specified in *Guidelines for the removal, destruction or lopping of native vegetation*.If you wish to remove the mapped native vegetation you are required to apply for a permit from your local council. This *Native vegetation removal report*must be submitted with your application and meets most of the application requirements. The following needs to be added as applicable.

Property Vegetation Plan

Landowners can manage native vegetation on their property in the longer term by developing a Property Vegetation Plan (PVP) and entering in to an agreement with DELWP.

If an approved PVP applies to the land, ensure the PVP is attached to the application.

Applications under Clause 52.16

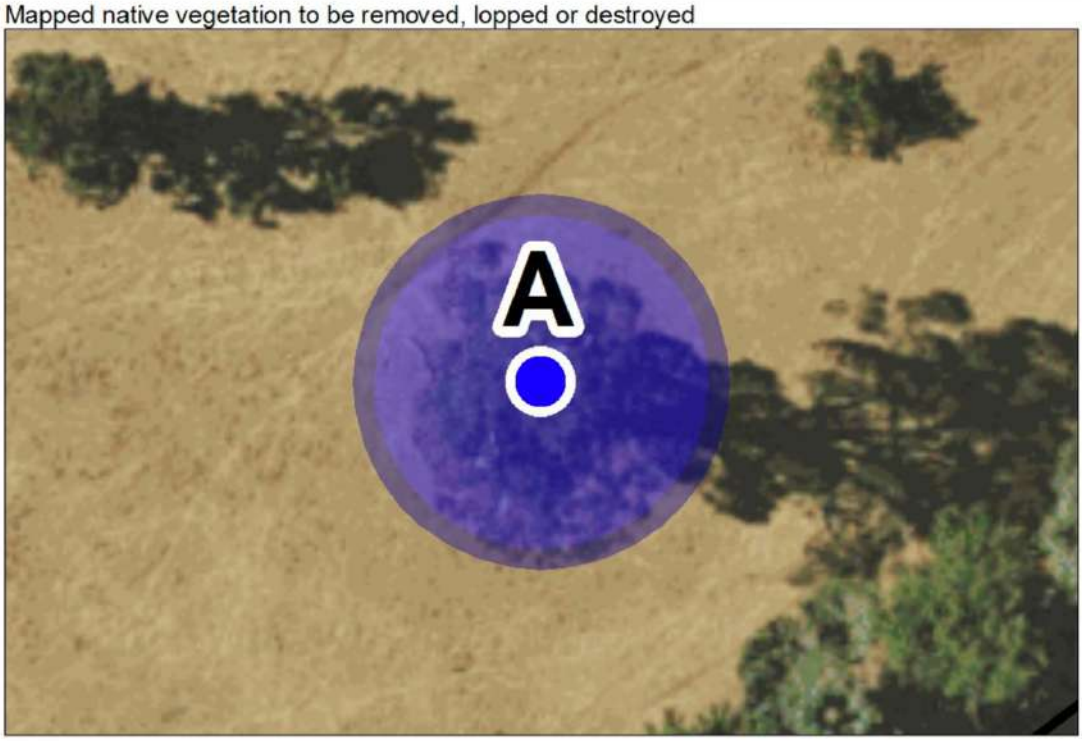
An application to remove, destroy or lop native vegetation is under Clause 52.16 if a Native Vegetation Precinct Plan (NVPP) applies to the land, and the proposed native vegetation removal is not in accordance with the relevant NVPP. If this is the case, a statement that explains how the proposal responds to the NVPP considerations must be provided.

If the application is under Clause 52.16, ensure a statement that explains how the proposal responds to the NVPP considerations is attached to the application.

Native vegetation removal report

Figure 1 – Map of native vegetation to be removed, destroyed or lopped

Mapped native vegetation to be removed, lopped or destroyed



Legend

Mapped native vegetation

Property boundary

N

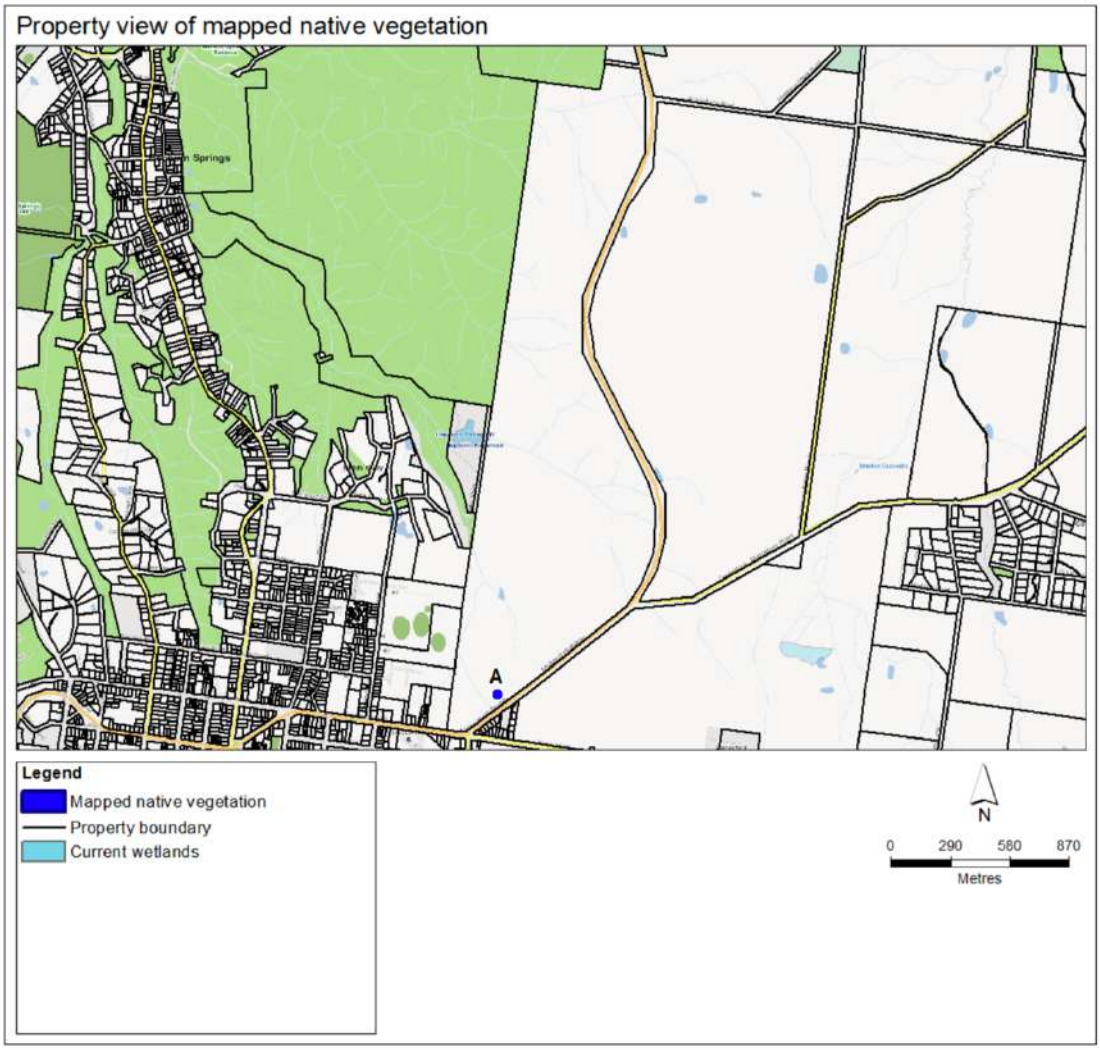
0 5 10 15

Metres

Native vegetation removal report – report ID 329-20220323-020

Native vegetation removal report

Figure 2 – Map of property in context

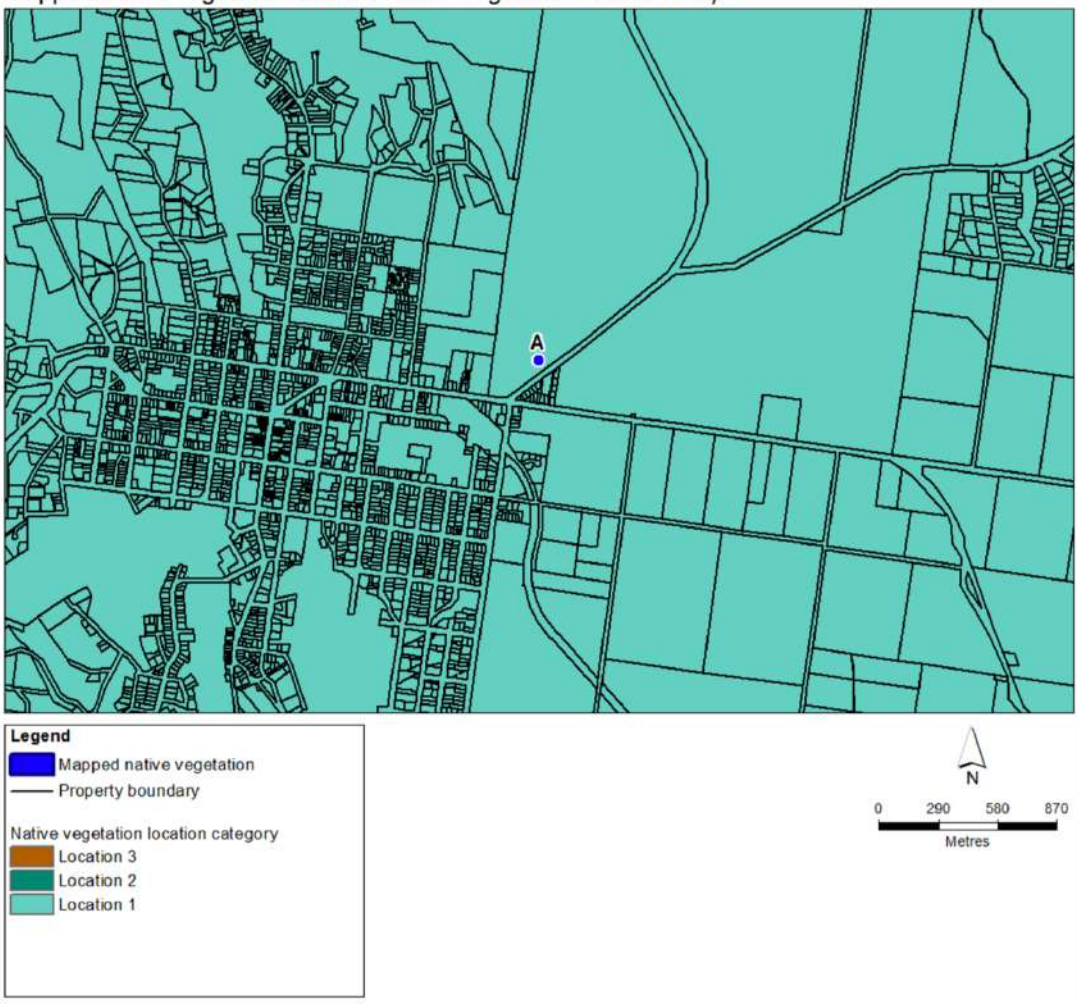


Native vegetation removal report – report ID 329-20220323-020

Native vegetation removal report

Figure 3 – Biodiversity information maps

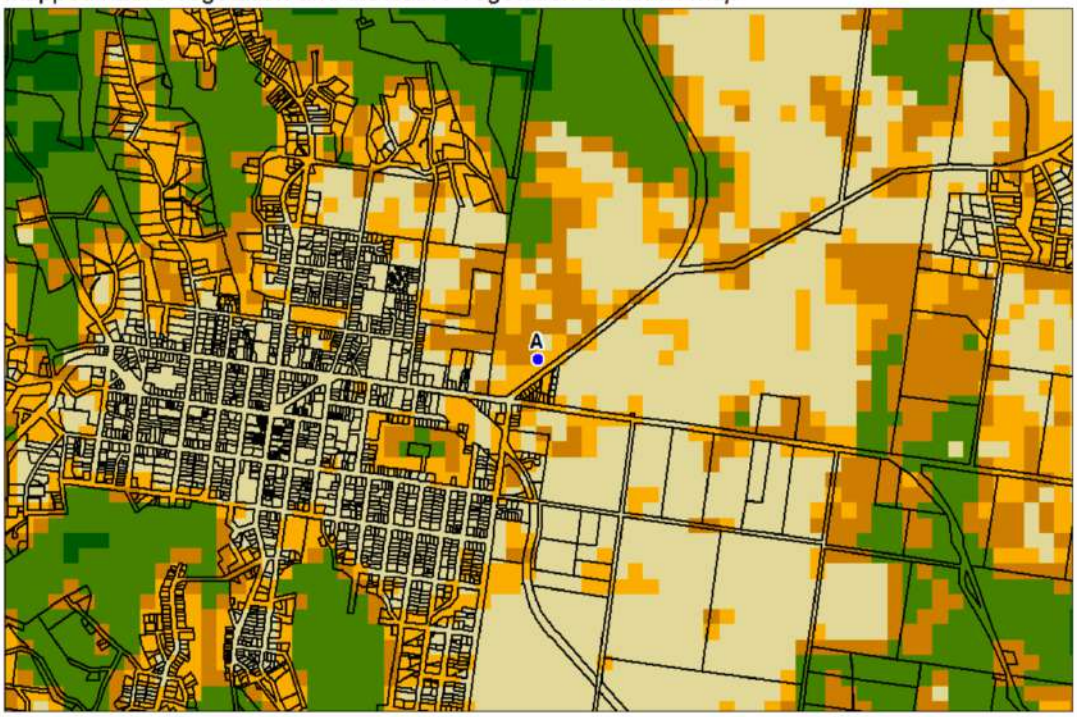
Mapped native vegetation and the *Native vegetation location map*



Native vegetation removal report – report ID 329-20220323-020

Native vegetation removal report

Mapped native vegetation and the *Native vegetation condition map*



Legend

Mapped native vegetation

Property boundary

Native vegetation condition*

0.81 - 1.00

0.61 - 0.80

0.41 - 0.60

0.21 - 0.40

0.00 - 0.20

* These classes are for display purposes only

N

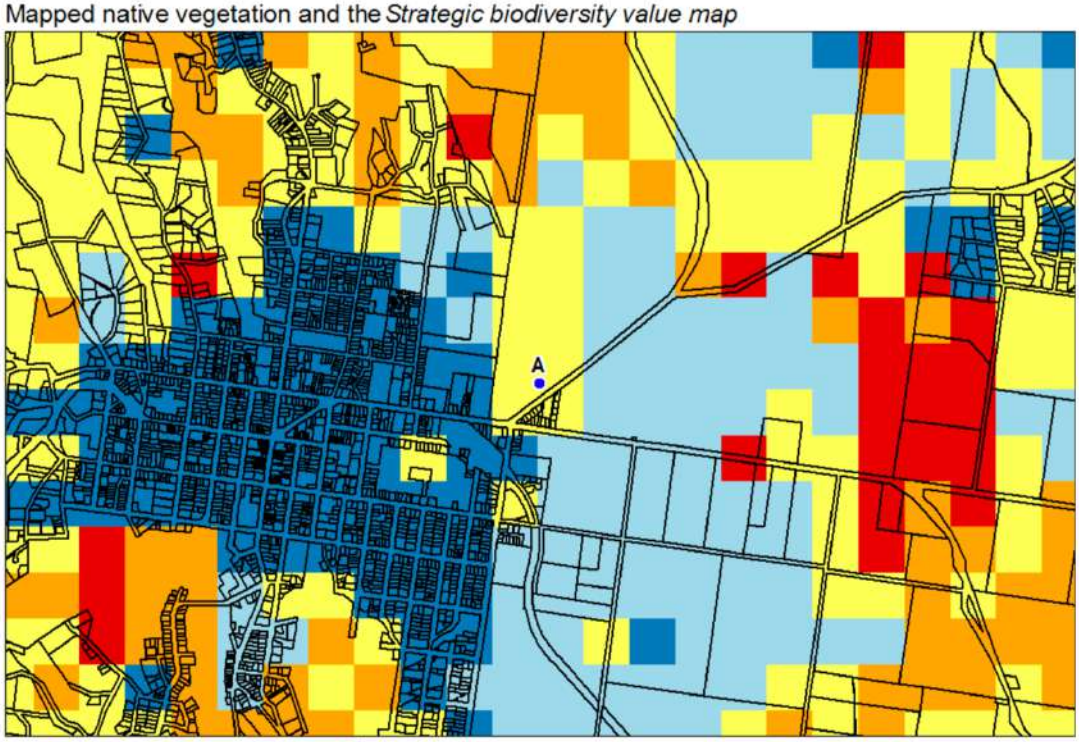
0 290 580 870

Metres

Native vegetation removal report – report ID 329-20220323-020

Native vegetation removal report

Mapped native vegetation and the *Strategic biodiversity value map*



Legend

Mapped native vegetation

Property boundary

Strategic biodiversity value*

0.81 - 1.00

0.61 - 0.80

0.41 - 0.60

0.21 - 0.40

0.00 - 0.20

* These classes are for display purposes only

N

0 290 580 870

Metres

Native vegetation removal report – report ID 329-20220323-020

Native vegetation removal report

Appendix 1 - Details of offset requirements

Native vegetation to be removed

Extent of all mapped native vegetation (for calculating habitat hectares)	0.070	The area of land covered by a patch of native vegetation and/or a scattered tree, measured in hectares. Where the mapped native vegetation includes scattered trees, each tree is assigned a standard extent and converted to hectares. A small scattered tree is assigned a standard extent defined by a circle with a 10 metre radius and a large scattered tree a circle with a 15 metre radius. The extent of all mapped native vegetation is an input to calculating the habitat hectares.
Condition score*	0.274	The condition score of native vegetation is a site-based measure that describes how close native vegetation is to its mature natural state. The condition score is the weighted average condition score of the mapped native vegetation calculated using the *Native vegetation condition map*.
Habitat hectares	0.019	Habitat hectares is a site-based measure that combines extent and condition of native vegetation. It is calculated by multiplying the extent of native vegetation by the condition score: ***Habitat hectares = extent x condition score***
Strategic biodiversity value score	0.511	The strategic biodiversity value score represents the complementary contribution to Victoria's biodiversity of a location, relative to other locations across the state. This score is the weighted average strategic biodiversity value score of the mapped native vegetation calculated using the *Strategic biodiversity value map*.
General landscape factor	0.756	The general landscape factor is an adjusted strategic biodiversity value score. It has been adjusted to reduce the influence of landscape scale information on the general habitat score.
General habitat score	0.014	The general habitat score combines site-based and landscape scale information to obtain an overall measure of the biodiversity value of the native vegetation. The general habitat score is calculated as follows: ***General habitat score = habitat hectares x general landscape factor***

* **Offset requirements for partial removal:** If your proposal is to remove parts of the native vegetation in a patch (for example only understorey plants) the condition score must be adjusted. This will require manual editing of the condition score and an update to the calculations that the native vegetation removal tool has provided: habitat hectares, general habitat score and offset amount.

Offset requirements

Offset type	General offset	A general offset is required when the removal of native vegetation does not have a significant impact on any habitat for rare or threatened species. All proposals in the Basic and Intermediate assessment pathways will only require a general offset.
Offset multiplier	1.5	This multiplier is used to address the risk that the predicted outcomes for gain will not be achieved, and therefore will not adequately compensate the biodiversity loss from the removal of native vegetation.
Offset amount (general habitat units)	0.021	The general habitat units are the amount of offset that must be secured if the application is approved. This offset requirement will be a condition to any permit or approval for the removal of native vegetation. ***General habitat units required = general habitat score x 1.5***
Minimum strategic biodiversity value score	0.409	The offset site must have a strategic biodiversity value score of at least 80 per cent of the strategic biodiversity value score of the native vegetation to be removed. This is to ensure offsets are located in areas with a strategic biodiversity value that is comparable to the native vegetation to be removed.
Vicinity	North Central CMA or Hepburn Shire Council	The offset site must be located within the same Catchment Management Authority boundary or municipal district as the native vegetation to be removed.
Large trees	1 large tree (s)	The offset site must protect at least one large tree for every large tree removed. A large tree is a native canopy tree with a Diameter at Breast Height greater than or equal to the large tree benchmark for the local Ecological Vegetation Class. A large tree can be either a large scattered tree or a large patch tree.

Native vegetation removal report – report ID 329-20220323-020

Appendix 3 Report of available native vegetation credits

Report of available native vegetation credits

This report lists native vegetation credits available to purchase through the Native Vegetation Credit Register.

This report is **not evidence** that an offset has been secured. An offset is only secured when the units have been purchased and allocated to a permit or other approval and an allocated credit extract is provided by the Native Vegetation Credit Register.

Date and time: 23/03/2022 05:28 **Report ID: 13308**

What was searched for?

General offset

General habitat units	Strategic biodiversity value	Large trees	Vicinity (Catchment Management Authority or Municipal district)	
0.021	0.409	1	CMA	North Central
			or LGA	Hepburn Shire

Details of available native vegetation credits on 23 March 2022 05:28

These sites meet your requirements for general offsets.

Credit Site ID	GHU	LT	CMA	LGA	Land owner	Trader	Fixed price	Broker(s)
BBA-0074	0.088	1	North Central	Northern Grampians Shire	Yes	Yes	No	VegLink
BBA-0737	0.173	15	North Central	Northern Grampians Shire	Yes	Yes	No	Bio Offsets
BBA-0771	0.212	1	North Central	Loddon Shire	Yes	Yes	No	VegLink
BBA-1053	4.267	33	North Central	Gannawarra Shire	Yes	Yes	No	Contact NVOR
BBA-2389	0.132	1	North Central	Loddon Shire	Yes	Yes	No	VegLink
BBA-2606	0.056	11	North Central	Campaspe Shire	Yes	Yes	No	VegLink
BBA-3006	17.401	3	North Central	Greater Bendigo City	No	Yes	No	Ethos
BBA-3006	17.401	3	North Central	Greater Bendigo City	No	Yes	No	Contact NVOR
BBA-3031	9.299	174	North Central	Pyrenees Shire	Yes	Yes	No	VegLink
BBA-3052_01	12.980	269	North Central	Northern Grampians Shire	Yes	Yes	No	VegLink
TFN-C1640	0.854	3	North Central	Hepburn Shire	Yes	Yes	No	VegLink
TFN-C1702	16.952	16	North Central	Gannawarra Shire	Yes	Yes	No	TFN
VC_CFL-3071_01	3.299	148	North Central	Loddon Shire	Yes	Yes	No	VegLink
VC_CFL-3076_01	9.227	49	North Central	Pyrenees Shire	Yes	Yes	No	Bio Offsets
VC_CLO-2451_01	14.782	130	North Central	Greater Bendigo City	No	Yes	No	Contact NVOR
VC_CLO-3046_01	0.395	55	North Central	Greater Bendigo City	No	Yes	No	Contact NVOR

These sites meet your requirements using alternative arrangements for general offsets.

Credit Site ID	GHU	LT	CMA	LGA	Land owner	Trader	Fixed price	Broker(s)

There are no sites listed in the Native Vegetation Credit Register that meet your offset requirements when applying the alternative arrangements as listed in section 11.2 of the Guidelines for the removal, destruction or lopping of native vegetation.

These potential sites are not yet available, land owners may finalise them once a buyer is confirmed.

Credit Site ID	GHU	LT	CMA	LGA	Land owner	Trader	Fixed price	Broker(s)
VC_CFL-0771_03	8.345	19	North Central	Loddon Shire	Yes	Yes	No	VegLink
VC_CFL-3701_01	10.574	18	Goulburn Broken, North Central	Greater Bendigo City	Yes	Yes	No	Bio Offsets

LT - Large Trees *CMA - Catchment Management Authority* *LGA - Municipal District or Local Government Authority*

Next steps

If applying for approval to remove native vegetation
Attach this report to an application to remove native vegetation as evidence that your offset requirement is currently available.

If you have approval to remove native vegetation
Below are the contact details for all brokers. Contact the broker(s) listed for the credit site(s) that meet your offset requirements. These are shown in the above tables. If more than one broker or site is listed, you should get more than one quote before deciding which offset to secure.

Broker contact details

Broker Abbreviation	Broker Name	Phone	Email	Website
Abezco	Abzeco Pty. Ltd.	(03) 9431 5444	offsets@abzeco.com.au	www.abzeco.com.au
Baw Baw SC	Baw Baw Shire Council	(03) 5624 2411	bawbaw@bawbawshire.vic.gov.au	www.bawbawshire.vic.gov.au
Bio Offsets	Biodiversity Offsets Victoria	0452 161 013	info@offsetsvictoria.com.au	www.offsetsvictoria.com.au
Contact NVOR	Native Vegetation Offset Register	136 186	nativevegetation.offsetregister@delwp.vic.gov.au	www.environment.vic.gov.au/native-vegetation
Ecocentric	Ecocentric Environmental Consulting	0410 564 139	ecocentric@me.com	Not avaliable
Ethos	Ethos NRM Pty Ltd	(03) 5153 0037	offsets@ethosnrm.com.au	www.ethosnrm.com.au
Nillumbik SC	Nillumbik Shire Council	(03) 9433 3316	offsets@nillumbik.vic.gov.au	www.nillumbik.vic.gov.au
TFN	Trust for Nature	8631 5888	offsets@tfn.org.au	www.trustfornature.org.au
VegLink	Vegetation Link Pty Ltd	(03) 8578 4250 or 1300 834 546	offsets@vegetationlink.com.au	www.vegetationlink.com.au
Yarra Ranges SC	Yarra Ranges Shire Council	1300 368 333	biodiversityoffsets@yarraranges.vic.gov.au	www.yarraranges.vic.gov.au

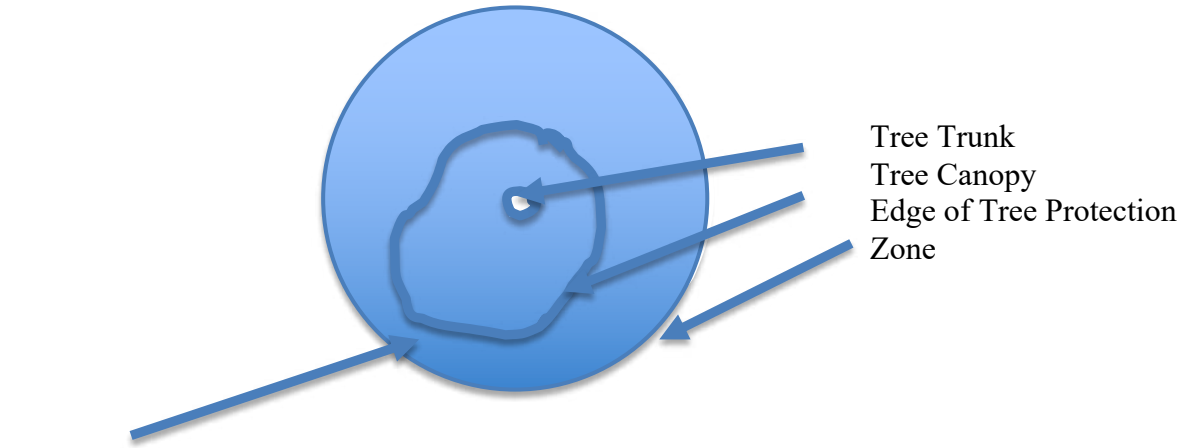
Appendix 4 Determining the Tree Protection Zone

Determining the Tree Protection Zone (TPZ)
The radium of the TPZ is calculated for each tree by multiplying its DBH x 12. TPZ = DBH x 12 (Australian Standard AS4970-2009 *Protection of trees on development sites)*
Where
DBH = trunk diameter measured at 1.4 metres above ground.
Radius is measured from the centre of the stem at ground level.

A TPZ should not be less than 2 metres no greater than 15 metres (except where crown protection is required.). Some instances may require variations to the TPZ.

A tree is deemed to be impacted upon if greater than 10% of the TPZ area is to be disturbed.

Indicative Size of Tree Protection Zone



Plates 1–5 Vegetation existing conditions

Plate 1. Planted Cedar and Fir. Exotic vegetation, typical conditions.

Plate 2. Midland Highway Planted Ash. Exotic vegetation, typical conditions

Plate 3. Exotic vegetation, typical conditions. Bund Creek drainage line.

Plate 4. Planted Cedar and Fir. Exotic vegetation, typical conditions.

Plate 5. Native Manna Gum (Tree A in Table 3) located on property beyond the study area and proximity to fence.

Appendix 6 – Heritage Report

JBA
John Briggs Architect
And Conservation Consultant
331A Bay Street
Port Melbourne 3207
Mobile 0411 228 515
Phone 9681 9924

HERITAGE IMPACT STATEMENT

Place:	4719 Midland Highway, Daylesford
Date:	4 February 2022
For:	Hygge Property

Figure 1 View of the southern Raglan Street frontage of the property opposite the Mitre 10 store

Introduction

This heritage impact statement assesses the likely heritage impacts of the proposed subdivision of the land for construction of houses. The property is located partially within the Railway Precinct HO 698 at the northeast corner of the precinct and is land associated in the Wombat Park Estate which is covered by HO619, and which abuts the north boundary of the subject land.

In assessing the impact on the heritage place of the proposed development I have had regard to Clause 15.03-1S, *Heritage Conservation*, in the Hepburn Planning Scheme with its policy guidelines in The Burra Charter. No local heritage policy is provided under Clause 22 or at 15.03-1L of the Hepburn Planning Scheme and so the most pertinent heritage provisions are those of Claus 43.01, Heritage Overlay. Whilst not heritage policy the Hepburn Planning Scheme at Clause 22.08 and 22.13 provides policy in relation to the Preferred Neighbourhood Character particularly of Character Precinct Eleven in which the subject site is located.

Description of Site and Surrounds

The rectangular block of land is located on the north side of Raglan Street and the Midland Highway intersection. The property itself is open that has been land included in the Wombat Park Estate but which has been on a separate title since the land sales of 1854. The distant view to the farmland looking north from Hill Street and Frazer Street over the railway goods shed are limited by trees on the verges along Raglan Street and

views from Wombat Hill itself. The trees along Ragland Street and the Midland highway are a regular plantation of mature Conifers planted along the frontage of the Wombat Park Estate. Views of the open undulating land are possible from between these trees.

Figure 2 Aerial view of the subject property at the corner of Raglan Street and the Midland Highway

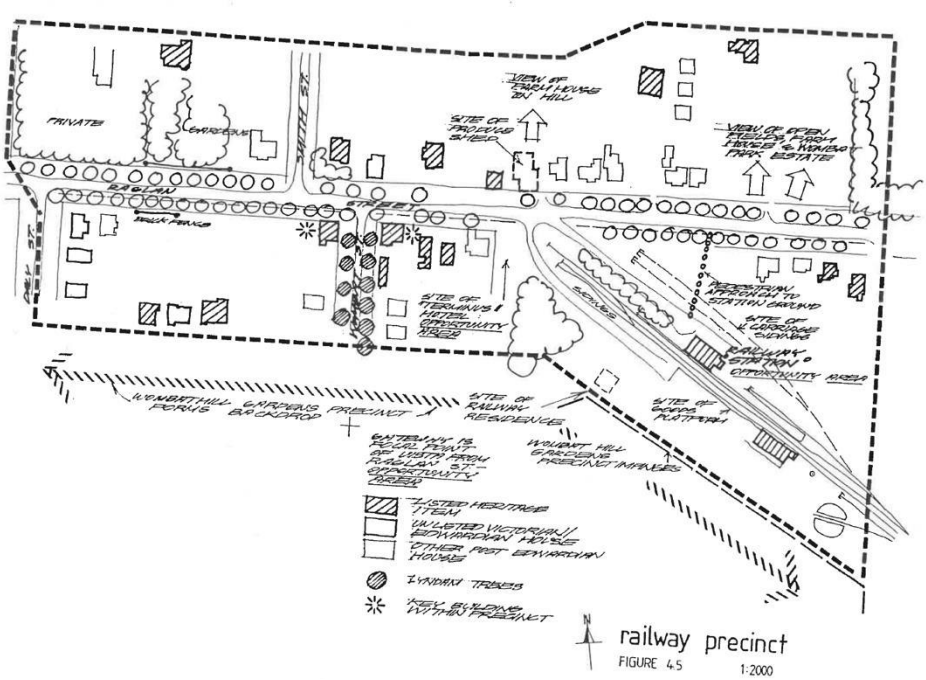


Figure 3 Map of the Railway Heritage Precinct - Daylesford and Hepburn Springs Conservation Study, 1985

Heritage Significance

The Citation for the Railway Precinct (appended) shows the return of Confiers at the east side of the citation map. The heritage citation for the Railway Precinct is provided in the Daylesford and Hepburn Springs Conservation Study by Perrott Lyon Mathieson Pty Ltd and Andrew Ward in 1985. It may be noted that the boundary of the Railway Precinct passes just north of the house on the adjacent land to the west and that the east boundary of the Railway Precinct is located just to the east of the conifers and the west boundary of land associated with the Wombat Park Estate. Presumably for mapping simplicity with the application of the Heritage Overlay at the turn of this century the east boundary of the Heritage Overlays appears to have been extended north of the Raglan Street Midland Highway junction to meet the tile boundary of the Wombat Park Estate.

Figure 4 Extract of the Heritage Overlay Map with the subject site outlined in red

As is generally the practice the mapping of the Heritage Overlay has taken in the whole of the adjacent property, extending to the north boundary beyond the 1985 mapping of the Railway Precinct. Whilst the subject property shares the southern boundary of the title to the Wombat Park Estate, which is covered by the Heritage OverlayHO619, and whilst the triangular section of the subject having frontage to the Midland Highway is not included in either Heritage Overlay, almost the whole of the subject property other than land covering the trees along the west boundary was not included in the Railway Heritage Precinct as mapped in 1985.

On the Railway Precinct Map in conjunction with arrows pointing north over the subject property and that of the neighbour are the words: "*View of open fields, farm house and Wombat Park Estate*". This note could be taken to indicate that the 'view' is itself and element that is contributory to the heritage value of the Railway Precinct. However even with that interpretation the mapping of the 'Precinct' having heritage value excluded the body of the subject property.

Figure 5 Aerial view overlaid by the map of the Railway Precinct from the 1985 Conservation Study

The Citation for the Railway Precinct is as follows:

Development

The land upon which the station ground is situated was subdivided by the Crown following completion of Frazer's survey in 1854 and sold off almost completely during the period commencing in the mid 1850's and concluding during the early 1870's. With the coming of the railway, however in 1880 it was resumed by the Crown and resulted in the closure of Church Street and the diversion of Frazer and Hill Streets through a number of building allotments and the north-east corner of the Botanical Gardens Reserve. Thus a substantial proportion of the early buildings within the precinct actually predate the railway and in case of the Athens Hotel and the grocery opposite, not doubt have thrived because of it.

…

Description and Significance

This precinct is linked visually and was formerly linked functionally with the railway station which forms its south boundary at the Frazer Street end. Commencing at the south-west corner of the Wombat Park Estate, which is encircled by mature conifers, the entire precinct is tied together by the treed avenue which runs from the cemetery in the east to Wills Square in the west. To the north, distant

views of early farm houses may be obtained whilst there has been considerable residential development in recent years in the vicinity of the station yard.

The pedestrian entrance to the station is marked by cast iron lamp standards relocated from other points in the town and fitted with "Hoor Avenue" signs in lieu of lanterns. At this point, the station building itself is visible and the embankments carrying the former carriage siding and running lines appear to intrude into the Raglan Street reservation. A solitary produce shed, the adjoining sheds having been demolished during the currency of this survey, faces the buffer stops and the site of the former Terminus Hotel. Beyond to the south, the Hill Street cottages overlook the precinct and form the edge to the Wombat Hill gardens. Further to the west, important elements include Densem's grocery building and the Victorian and Edwardian villas surrounding it. Together with the "Athens" Hotel, situated at the Wombat Street intersection, they form the heart of the precinct. Here, the avenue of Linden trees in Wombat Street focusses attention on the northern entrance to the Botanical Gardens. West of Smith Street, extensive private gardens dominate the north side of Raglan Street and façade three early cottages, set well back from the roadway.

Management

The importance of this precinct hinges particularly on its role as main access route from Castlemaine and Woodend and also as an area of historic interest for the future patrons of the Central Highlands Tourist Railway who will congregate at this point.

Its amenity will be heightened by the encouragement of works which are sympathetic to its historical character and might include the gradual replacement of modern fencing with forms appropriate to its principal era of growth. The stone faced culverts and the bridges should be retained and consideration given to effective landscape management within the station ground, softening the impact of parked cars and heightening the presence of the tourist railway. Any works within the station ground should accurately demonstrate departmental practice at the turn of the century and will incorporate the precise restoration of the station building itself. In this role, bearing in mind that it is at present one of only six registered historic buildings within the township.

The precinct should be designated an area of special significance within the Council's planning scheme, having regard to its historic importance.

The above citation, now over three decades old, does not comply with current practice as set out in Planning Practice Note 1 – Applying the Heritage Overlay. This is particularly and with regards to format or heritage criterion applied to statements of significance today and that the citation is vague regarding what are the elements of the place that are considered to have heritage importance or contribute to the heritage importance of the Precinct.

The subject property and land on the north side of Raglan Street has been zoned with a General Residential Zoning with confirmation that there is intent that the land be developed with housing. With such practical and statutory confirmation of the expected use of the land any claim that the 'distant views' to open fields might

be interpreted to be an 'element' that is contributory to the importance of the Railway Precinct can only be considered to be mutually exclusive of the gazetted zoning of the land. Without the 1985 Conservation Study , or a latter heritage review, having provided unequivocal demonstration that the views to open paddock have heritage value and without any basis to distinguish views to the subject paddocks from any other it is my assessment that views over the subject land are not contributory to the heritage importance of the Railway Precinct or to HO698. This is particularly the case as the HO appears to have been extended over the subject land either in error or indecently but not as a result of any particular intent that could be seen to be in accordance with Planning Practice Note 1.

Figure 6 View looking northeast across the subject land from the Raglan Street Midland Highway corner

Figure 7 View looking northeast up the Midland Highway with the subject land on the left

Figure 8 View looking back across the subject land from the Midland Highway

Heritage and Character Controls

As there are no local heritage provisions and the applicable heritage controls those of Clause 15.03, *Heritage Conservation*, and the *Purpose* and *Decisions Guidelines* provided at Clause 43.01, *Heritage Overlay* as follows:

Clause 15.03-1S

Strategies

Identify, assess and document places of natural and cultural heritage significance as a basis for their inclusion in the planning scheme.

Provide for the protection of natural heritage sites and man-made resources.

Provide for the conservation and enhancement of those places that are of aesthetic, archaeological, architectural, cultural, scientific or social significance.

Encourage appropriate development that respects places with identified heritage values.

Retain those elements that contribute to the importance of the heritage place.

Encourage the conservation and restoration of contributory elements of a heritage place.

Ensure an appropriate setting and context for heritage places is maintained or enhanced.

Support adaptive reuse of heritage buildings where their use has become redundant.

Consider whether it is appropriate to require the restoration or reconstruction of a heritage building in a Heritage Overlay that has been unlawfully or unintentionally demolished in order to retain or interpret the cultural heritage significance of the building, streetscape or area.

Clause 43.01

Purpose

To implement the Municipal Planning Strategy and the Planning Policy Framework.

To conserve and enhance heritage places of natural or cultural significance.

To conserve and enhance those elements which contribute to the significance of heritage places.

To ensure that development does not adversely affect the significance of heritage places.

To conserve specified heritage places by allowing a use that would otherwise be prohibited if this will demonstrably assist with the conservation of the significance of the heritage place.

Clause 43.01-8 Decision Guidelines

Before deciding on an application, in addition to the decision guidelines in Clause 65, the responsible authority must consider, as appropriate:

- *The Municipal Planning Strategy and the Planning Policy Framework.*
- *The significance of the heritage place and whether the proposal will adversely affect the natural or cultural significance of the place.*
- *Any applicable statement of significance (whether or not specified in the schedule to this overlay), heritage study and any applicable conservation policy.*
- *Any applicable heritage design guideline specified in the schedule to this overlay.*
- *Whether the location, bulk, form or appearance of the proposed building will adversely affect the significance of the heritage place.*
- *Whether the location, bulk, form and appearance of the proposed building is in keeping with the character and appearance of adjacent buildings and the heritage place.*

- *Whether the demolition, removal or external alteration will adversely affect the significance of the heritage place.*
- *Whether the proposed works will adversely affect the significance, character or appearance of the heritage place.*
- *Whether the proposed subdivision will adversely affect the significance of the heritage place.*
- *Whether the proposed subdivision may result in development which will adversely affect the significance, character or appearance of the heritage place.*
- *Whether the proposed sign will adversely affect the significance, character or appearance of the heritage place.*
- *Whether the lopping or development will adversely affect the health, appearance or significance of the tree.*
- *Whether the location, style, size, colour and materials of the proposed solar energy system will adversely affect the significance, character or appearance of the heritage place.*

Character Controls

Whilst there are no local heritage provisions the Hepburn planning scheme provides local Neighbourhood Character Controls, including for the local area essentially overlaying the area of potential development within the Railway Heritage Precinct. This area is Character Area 11 shown below.

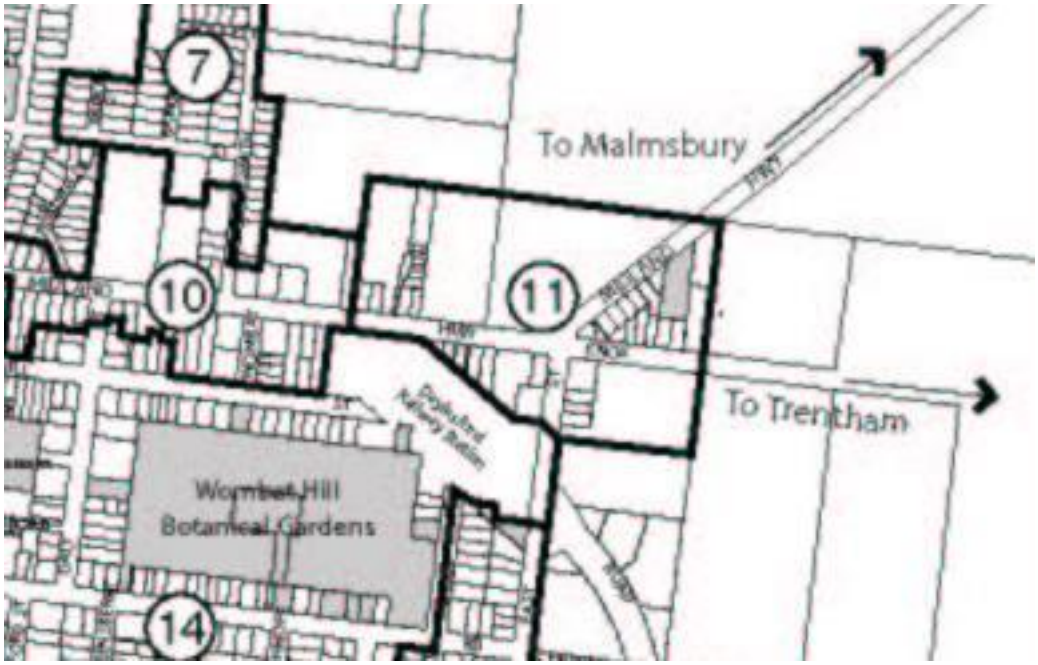


Figure 9 Extract of the Neighbour Character Precinct Map

Clause 22.013 applies particularly to the Neighbourhood Character Precinct Eleven:

Statement of neighbourhood character

Current character statement

The precinct is distinct for its flat topography and predominantly post-war to recent housing stock with a number of older heritage listed buildings. The consistently large dwelling setbacks and low front fences add to the spaciousness of the area. The area forms the link between the open pastoral landscape beyond and the formal avenue planting of The Avenue of Honour at the entrance to the town which extends to Malmsbury along the Midland Highway. In contrast to this spacious context, the intersection of the highway with the local streets is partially delineated by historic buildings built to the boundary.

Key existing characteristics

The following elements contribute to the current character:

- *Architectural styles are mixed with many post war (1950s and 60s) and some 1980s dwellings.*
- *Building materials are mixed.*
- *Front setbacks are generally 3-4 or 5-7 metres and 3-4 metres on both side setbacks.*
- *Front fences are low-average otherwise open style.*
- *Private gardens are generally low level otherwise mixed styles.*
- *Roads are sealed with no kerbs.*
- *Large verges have predominantly no footpaths.*
- *Large exotic avenue of street trees on both sides of the road.*
- *Topography is flat with a light slope.*
- *There are some partial views to Wombat Hill and to the north to the surrounding pastoral landscape.*

Preferred neighbourhood character statement

The spaciousness of the dwelling settings will be maintained and the definition of the entrance way to the town will be strengthened by:

- *Encouraging the development of buildings to better define the highway intersection, and provide a sense of entrance to the town.*
- *Encouraging low front fences.*
- *Maintaining and enhancing the avenue planting.*

Objectives

- *To maintain and strengthen the garden settings of the dwellings.*
- *To maintain the rhythm of dwelling spacing.*
- *To use materials and finishes that harmonise with the surrounding Daylesford Township setting.*
- *To maintain the openness of the streetscape.*

Policy

Exercising discretion

Where a permit is required for development it is policy to:

- *Encourage landscaping that includes exotic and native trees.*
- *Retain large, established native trees and understorey and provide new native trees where*
- *possible.*
- *Use timber or other non-masonry cladding materials where possible, or earthy toned building*
- *materials and finishes, in streetscapes where weatherboard predominates.*

Proposal

It is proposed to subdivide the land to provide housing lots for future development.

Conclusion

It is my assessment that the subject property whist in part covered by the Heritage Overlay has been include without evident appropriate justification and is not land that exhibits elements or characteristics that have been demonstrated to contribute to the heritage significance of the Railway Precinct Heritage Overlay. It cannot be overlooked that when the Railway Precinct was recognized as a heritage place in 1985 that subject land was excluded from the mapped area. The notation that intermittent and partial view of open fields and farmhouse that may be obtained from Raglan Street looking to the north does not constitute clear justification,

demonstration, or explanation of what views are important to the heritage significance of the Railway Precinct or how the limited views are important. Inspection shows that views are indeed limited and are not distinguished or differentiated from may other views not considered to be of any heritage value worthy of consideration for heritage protections.

The views of the subject land to the north of Raglan Street and the Midland Highway are effectively screened by the mature conifers along the frontage as viewed from rising ground to the south within the area of the former Railway and up Wombat Hill such that no open view of the subject property is available.

The recent zoning of the land as general residential land clearly provides for the subdivision of the subject land and development of houses that will replace the current open fields.

Given the historical development along Raglan Street the particular existence of open pasture on the subject land views over this pasture cannot, in my assessment, be construed to be feature or item that contributes to heritage significance of the Railway Precinct, HO698 such that the general residential zoning of the land can be shown to have been in error.

Accordingly, it is my assessment that the proposed subdivision is acceptable with regards to the heritage provisions of the Hepburn Planning Scheme.

John Briggs

John Briggs Architects Pty Ltd

HO 698

4.5 RAILWAY PRECINCT

4.5.1 Location

The location of this precinct is indicated on figure 4.1 and described in more detail in figure 4.5. It occupies the north-east corner of the 1854 township survey plan and focusses on Raglan Street which forms part of the Midland Highway at this point.

4.5.2 Development

The land upon which the station ground is situated was sub-divided by the Crown following completion of Frazer's survey in 1854 and sold off almost completely during the period commencing in the mid 1850's and concluding during the early 1870's. With the coming of the railway, however, in 1880 it was resumed by the Crown and resulted in the closure of Church Street and the diversion of Frazer and Hill Streets through a number of building allotments and the north-east corner of the Botanical Gardens reserve. Thus a substantial proportion of the early buildings within the precinct actually predate the railway and in the case of the Athens Hotel and the grocery opposite, no doubt have thrived because of it.

In recent years, the gradual decline in railway traffic leading eventually to its extinction with the closure of the line in 1978, has contributed to the passing of the Terminus Hotel formerly located at the entrance to the goods yard and to the cessation of trading of produce merchants opposite. Today recent development has not only taken the form of houses, but petrol filling stations, and has increased traffic movement causing a decline in residential amenity. The management of the future development of the railway station environment will continue to have a strong bearing upon the amenity of this precinct.

4.5.3 Description and Significance

This precinct is linked visually and was formerly linked functionally with the railway station which forms its southern boundary at the Frazer Street end. Commencing at the south-west corner of the Wombat Park estate, which is encircled by mature conifers, the entire precinct is tied together by the treed avenue, which runs from the cemetery in the east to Wills Square in the west. To the north, distant views of early farm houses may be obtained whilst there has been considerable residential development in recent years in the vicinity of the station yard.

63.

The pedestrian entrance to the station is marked by cast iron lamp standards, relocated from other points in the town and fitted with "Honour Avenue" signs in lieu of lanterns. At this point, the station building itself is visible and the embankments carrying the former carriage siding and running lines appear to intrude into the Raglan Street reservation. A solitary produce shed, the adjoining shed having been demolished during the currency of this survey, faces the buffer stops and the site of the former Terminus Hotel. Beyond to the south, the Hill Street cottages overlook the precinct and form the edge to the Wombat Hill gardens. Further to the west, important elements include Densem's grocery building and the Victorian and Edwardian villas surrounding it. Together with the former "Athens" Hotel, situated at the Wombat Street intersection, they form the heart of the precinct. Here, the avenue of Linden trees in Wombat Street focusses attention on the northern entrance to the Botanical Gardens. West of Smith Street, extensive private gardens dominate the north side of Raglan Street and face three early cottages, set well back from the roadway.

Throughout the precinct, a stone faced culvert runs along the southern shoulder of the roadway and is bridged, where necessary, to facilitate pedestrian and vehicular movement.

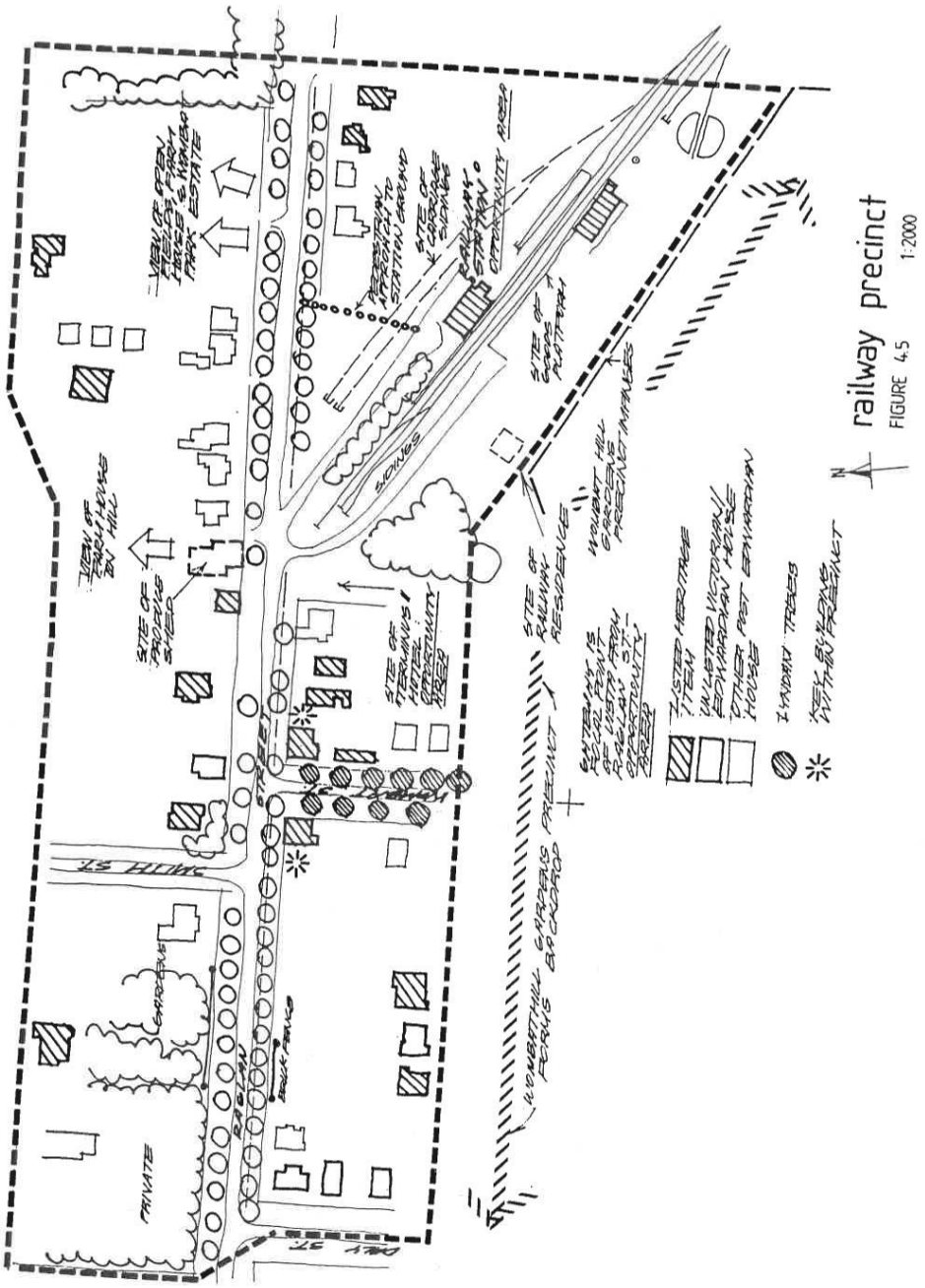
4.5.4 Management

The importance of this precinct hinges particularly on its role as a main access route from Castlemaine and Woodend and also as an area of historic interest for the future patrons of the Central Highlands Tourist Railway who will congregate at this point.

Its amenity will be heightened by the encouragement of works which are sympathetic to its historic character and might include the gradual replacement of modern fencing with forms appropriate to its principal era of growth. The stone faced culverts and bridges should be retained and consideration given to effective landscape management within the station ground, softening the impact of parked cars and heightening the presence of the tourist railway. Any works within the station ground should accurately demonstrate departmental practice at the turn of the century and will incorporate the precise restoration of the station building itself. In this respect, Council, as the lessee, will have a role, bearing in mind that it is at present one of only six(30) registered historic buildings within the township.

The precinct should be designated an area of special significance within the Council's planning scheme, having regard to its historic importance.

65.


railway precinct
FIGURE 4.5
1:2000
N
SITE OF RAILWAY RESIDENCES
HOUSES
PRIVATE
RAGLAN
ST

Appendix 10 – Cultural Heritage

Department of Premier and Cabinet

Process List

Project Name: VR_Midland Hygge

Project Location: 4719 Midland Highway Daylesford

Date: 26-Apr-2022

	QUESTION	ANSWER
Question 1	Is the proposed activity , or all the proposed activities, exempt?	No
Question 2	Are you undertaking a High Impact Activity as listed in the Aboriginal Heritage Regulations?	Yes
Question 3	Does your activity include significant ground disturbance?	Yes
Question 4	Does your activity area include areas of a registered cultural heritage place (regardless of significant ground disturbance) or cultural heritage sensitivity that have not previously been subject to significant ground disturbance?	No
Answer:	ON THE BASIS OF THE ANSWERS YOU HAVE ENTERED YOU ARE NOT REQUIRED BY THE REGULATIONS TO PREPARE A CULTURAL HERITAGE MANAGEMENT PLAN FOR THIS PROJECT	
	This process list is for information purposes only; the result must not be relied upon by a statutory authority in deciding whether a cultural heritage management plan is required for a proposed activity.	

Appendix 8 – Arborist report

Hygge Property – Preliminary Arboricultural Tree Assessment Report

Location: Wombat Park, 4719 Midland Hwy, Daylesford
Client: Hygge Property
Date: 18 February 2022

Xylem TreeCare Pty Ltd
Level 1 / 7 Ocean St, Maroochydore QLD 4556
Phone: 07 5443 1704 / E-mail: admin@xylemtrees.com.au

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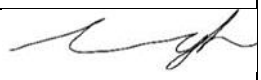
1. Quality Information

Document: Wombat Park, 4719 Midland Hwy, Daylesford, Tree Assessment
Date: 18 February 2022
Prepared by: Marty Waugh
Reviewed by: Sam Bianchi

Table 1- Revision History

Revision	Revision Date	Details	Authorised	
			Name/Position	Signature
1	18/02/2022	Reviewed	Sam Bianchi Senior Consulting Arborist	
2	18/02/2022	Draft report sent to the client	Marty Waugh Consulting Arborist	

2. Disclaimer

Xylem TreeCare (including its subsidiaries and the directors, officers, employees, representatives, servants or agents of Xylem TreeCare and its subsidiary) ("**Xylem TreeCare**") is in the business of advising on matters of Environmental, Arboricultural and Vegetation Management ("**the Expertise**"). Xylem TreeCare has been engaged by Hygge Property ("**the Client**") to prepare a Tree Assessment Report ("**the Subject**") to identify trees within the subject area and to provide a current tree assessment based on tree health and structure. ("**the Purpose**"). Xylem TreeCare has prepared such a report which is dated 18th February 2022 ("**the Report**").

This Disclaimer is given by Xylem TreeCare in relation to the following matters:

- The Expertise.
- Xylem TreeCare's instructions as to the Subject of the Report.
- Xylem TreeCare's instructions as to the Purpose of the Report.
- Xylem TreeCare's instructions as to the identity of the Client.
- The use by the Client of the Report.
- Reliance on the Report by the Client.

Reference in this disclaimer to the Client incorporates any entity, director, officer, representative, employee, servant or agent of the Client insofar as, where any such person or entity seeks to or does act in reliance on the Report, such reliance is made with an express acceptance and acknowledgment of the following disclaimers and conditions:

1. It is expressly acknowledged by the Client that the Report, and any other material or advice provided to the Client by Xylem TreeCare:

- Is selective in that it is current only at the time of preparation or provision, relevant only to the Subject and the Purpose and based on instructions provided by the Client to Xylem TreeCare and may be subject to updating, expansion, revision, correction and amendment upon the provision of further or different instructions or through the lapse of time.

- The Report does not or may not purport to be the sole basis for any decision-making process embarked upon by the Client who should, wherever necessary, seek independent professional advice on legal, financial, or other relevant matters not within the Expertise.
- Xylem TreeCare has not independently reviewed, verified or audited any of the material in the instructions provided by the Client to Xylem TreeCare, and the Client acknowledges that insofar as the findings of the Report are reliant on instructions provided by the Client to Xylem TreeCare, no representation nor warranty, express or implied, as to the accuracy, reasonableness or completeness of the Report is made by Xylem TreeCare, which expressly disclaims any and all liability for or based upon or relating to any use of the instructions provided by the Client to Xylem TreeCare.
- Where the Report contains or refers to information or advice provided by third parties, obtained by way of instructions from the Client or otherwise, no representation or warranty, express or implied, is made in relation to the accuracy, reasonableness or completeness of such information.
- Insofar as the Report makes any forward-looking statements or predictions, the Client acknowledges that such statements or predictions are the subjects of inherent uncertainty, and the Client will make its independent assessment of the Report or such statements, in terms of reliance to be placed thereon.
- Is confidential and for the Client's use only and not to be supplied to any third party under any circumstances without the prior written permission of Xylem TreeCare.
- Is not to be electronically stored or transmitted in any form without the prior written permission of Xylem TreeCare.
- It is further expressly acknowledged that:
- In no circumstances, may the Client use the Report for anything other than the Purpose, or rely on it in any way other than in relation to the Subject unless the prior written permission of Xylem TreeCare is obtained.
- Notwithstanding the generality of any of the preceding disclaimers, acknowledgments and conditions, the Client expressly acknowledges that it will not use the Report in relation to any court or other legal proceedings of any kind without first obtaining the prior written consent to do so of Xylem TreeCare.
- The Client carries out its independent investigations in relation to any reliance to be placed on the Report be that reliance of a commercial, financial, developmental, environmental, or other types of reliance.

The client's receipt of the report, information, or other material in relation to the report is an express acknowledgment and acceptance of the foregoing.

3. Executive Summary

Xylem TreeCare has been engaged by Jason Webster – Development Manager, to conduct a tree survey and document all trees within the proposed subdivision envelope at 4719 Midland Hwy, Daylesford. On the 9th February and 11th February 2022, a site inspection was undertaken by a Xylem TreeCare representative. Vegetation was assessed for arboricultural value including Useful Life Expectancy (ULE) and tree origin. Recommendations were made with considerations in maintaining and protecting local biodiversity. All trees within the subject area, except for one native *Eucalyptus viminalis*, were identified and assessed as being exotic species and not endemic to Australia and therefore do not support local biodiversity. Twenty *Fraxinus angustifolia subsp. angustifolia* and three *Castanea sativa* form part of an existing honour planting, and although not native is considered highly significant and all attempts to minimise impacts and long-term health to these trees must be implemented in design phases.

4. Purpose

The purpose of this report is to undertake a review of the existing trees within the subject area before future development. At the time of the assessment, the type of future construction and potential impacts from such construction are unknown to Xylem TreeCare Pty Ltd. It is recommended that a subsequent Arboriculture Impact Assessment (AIA) be undertaken once construction designs have been established and before construction.

4.1. Project requirements

Undertake an audit of all trees within the subject area.

- Spatially locate and GPS plot all individual trees and provide a unique identifier (Tree ID)
- Provide the current condition of each tree.
- Provide general information i.e., Botanical name, dimensions i.e., height, canopy spread and DBH
- Calculate the Tree Protection Zones (TPZ) and Structural Root Zones (SRZ) of individual trees
- Identify tree origin
- Identify tree significance

4.2 Site Information

The site is located to the North of the Midland Highway (A300) and Raglan Street is adjacent to the South. Much of the Southern part of the subject area is relatively flat and is lined by an Avenue of honour planting. The Western section of the subject area has a minor to moderate slope and is the location of the proposed drainage reserve. The site consists of mostly mature exotic species endemic to the Northern hemisphere. Figure 1 shows the boundaries of the subject areas.

Figure 1, Subject Area – Supplied by Niche Planning Studio

5. Method

This assessment has been undertaken using a ground-based visual assessment. An Eos Arrow 100 GNSS receiver and range finder were utilised to increase data accuracy when required. The trees have been assessed for arboricultural value using tree attributes and assessing the overall condition.

5.1 Limitation of Assignment

- Information obtained from publicly available databases has been used in the preparation of this report. The accuracy of information obtained from such sources cannot be guaranteed and has not been verified.
- The hybridisation of flora species can cause an intermediate or incomplete form of morphological features and thereby affect the accuracy of field identification.
- Seasonal variation influences the presence of flowering and fruiting in flora species and thereby can affect the accuracy of field identification. Seasonal variation was not captured during the field assessment due to the short duration of the assessment.
- At the time of assessment, no information has been made available regarding existing and/ or proposed underground services other than those visible above ground.

- Xylem TreeCare has not undertaken any of the following items which may impact tree health
  - Soil analysis
  - Below-ground root analysis
  - Aerial inspection

5.2 Consulting Arborist

Table 2- Staff qualifications

Staff Member	Qualifications	Experience	Project Involvement
Marty Waugh **Consulting Arborist**	Graduate Certificate in Arboriculture – Melbourne University	Marty has been working within the Horticulture and Arboriculture industries for 12 years; 4 years as Consulting Arborist	Marty will be responsible for compiling reports and drawings to client specifications.
Phillip Nahed **Consulting Arborist**	Graduate Certificate in Arboriculture – Melbourne University	Phillip has been working within the tree industry for the past 7 years and has been a Consulting Arborist for the past 4 years.	Phillip will be responsible for undertaking on-site assessments.

6. Observations

Wombat Park

Tree ID	Species	Common Name	Height (m)	Spread (m)	Health	Structure	TPZ (m)	SRZ (m)
4	*Eucalyptus viminalis*	Manna Gum	35	20	Fair	Good	15	4.8
5	*Cedrus atlantica*	Atlas Cedar	25	17	Good	Good	15	4.1
6	*Cedrus deodara*	Himalayan Cedar	29	15	Good	Good	15	3.9
7	*Cedrus atlantica*	Atlas Cedar	26	23	Good	Good	15	4.0
8	*Cedrus deodara*	Himalayan Cedar	27	23	Good	Good	15	4.0
9	*Cedrus atlantica*	Atlas Cedar	20	23	Fair	Good	15	4.1
10	*Cedrus deodara*	Himalayan Cedar	27	15	Good	Good	15	4.0
11	*Cedrus atlantica*	Atlas Cedar	21	27	Good	Good	15	4.2
12	*Cedrus deodara*	Himalayan Cedar	22	19	Good	Good	15	3.9
13	*Cedrus atlantica*	Atlas Cedar	19	17	Good	Good	15	4.2
14	*Cedrus deodara*	Himalayan Cedar	22	15	Fair	Good	13.9	3.6
15	*Cedrus atlantica*	Atlas Cedar	22	20	Good	Good	15	3.9
16	*Cedrus deodara*	Himalayan Cedar	24	14	Good	Good	15	4.0
17	*Cedrus atlantica*	Atlas Cedar	24	19	Good	Good	15	4.0
18	*Cedrus deodara*	Himalayan Cedar	23	16	Good	Good	15	4.1
19	*Cedrus deodara*	Himalayan Cedar	30	17	Good	Good	15	4.1
20	*Cedrus atlantica*	Atlas Cedar	21	17	Fair	Fair	15	4.3
21	*Cedrus deodara*	Himalayan Cedar	26	18	Good	Good	15	3.8
22	*Cedrus atlantica*	Atlas Cedar	22	25	Good	Fair	15	4.2
23	*Cedrus deodara*	Himalayan Cedar	22	20	Good	Good	15	3.8
24	*Cedrus atlantica*	Atlas Cedar	24	20	Good	Fair	15	4.1
25	*Cedrus deodara*	Himalayan Cedar	26	15	Good	Good	15	3.9
26	*Cedrus atlantica*	Atlas Cedar	25	19	Good	Good	15	4.0
27	*Cedrus deodara*	Himalayan Cedar	27	15	Good	Good	15	4.1
28	*Cedrus atlantica*	Atlas Cedar	22	21	Good	Good	15	4.1
29	*Pseudotsuga menziesii*	Douglas Fir	19	7	Poor	Good	10.6	3.3
30	*Pseudotsuga menziesii*	Douglas Fir	24	18	Fair	Good	14	3.5
31	*Pseudotsuga menziesii*	Douglas Fir	24	11	Fair	Good	11	3.3
32	*Pseudotsuga menziesii*	Douglas Fir	3	1	Good	Good	2	1.5

Midland Highway Avenue of Honour

Tree ID	Species	Common Name	Height (m)	Spread (m)	Health	Structure	TPZ (m)	SRZ (m)
1	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	9	10	Good	Fair	6.6	2.7
2	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	7	5	Good	Fair	4	2.2
3	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	11	11	Good	Good	6.5	2.8
33	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	12	8	Good	Good	2.9	2.0
34	*Castanea sativa*	Sweet Chestnut	7	8	Good	Good	3.1	2.2
35	*Castanea sativa*	Sweet Chestnut	8	7	Good	Fair	8	3.0
36	*Castanea sativa*	Sweet Chestnut	7	7	Fair	Good	5.3	2.6
37	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	11	10	Good	Good	4.7	2.5
38	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	19	20	Good	Good	13.1	2.5
39	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	11	9	Fair	Good	6.2	2.5
40	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	16	17	Good	Good	10.4	3.1
41	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	11	13	Good	Good	5.9	2.5
42	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	12	17	Good	Good	8	2.9
43	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	13	8	Fair	Good	5.5	2.6
44	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	9	8	Good	Good	5.8	2.5
45	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	11	10	Good	Good	5.9	2.5
46	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	14	15	Good	Good	8.6	3.0
47	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	8	6	Good	Good	6	2.5
48	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	8	6	Fair	Good	5.2	2.5
49	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	9	10	Good	Good	7.3	2.6
50	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	9	10	Good	Good	6.8	2.5
51	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	10	11	Good	Good	7.6	2.7
52	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	7	8	Good	Good	7.2	2.6

6.1. Tree Condition

There are 52 individual trees within the subject area, 29 within Wombat Park and 23 along Midland Highway Avenue of Honour. Figure 2 show a total of five individual genera within the impacted subject area. For additional tree information, refer to APPENDIX A and APPENDIX B.

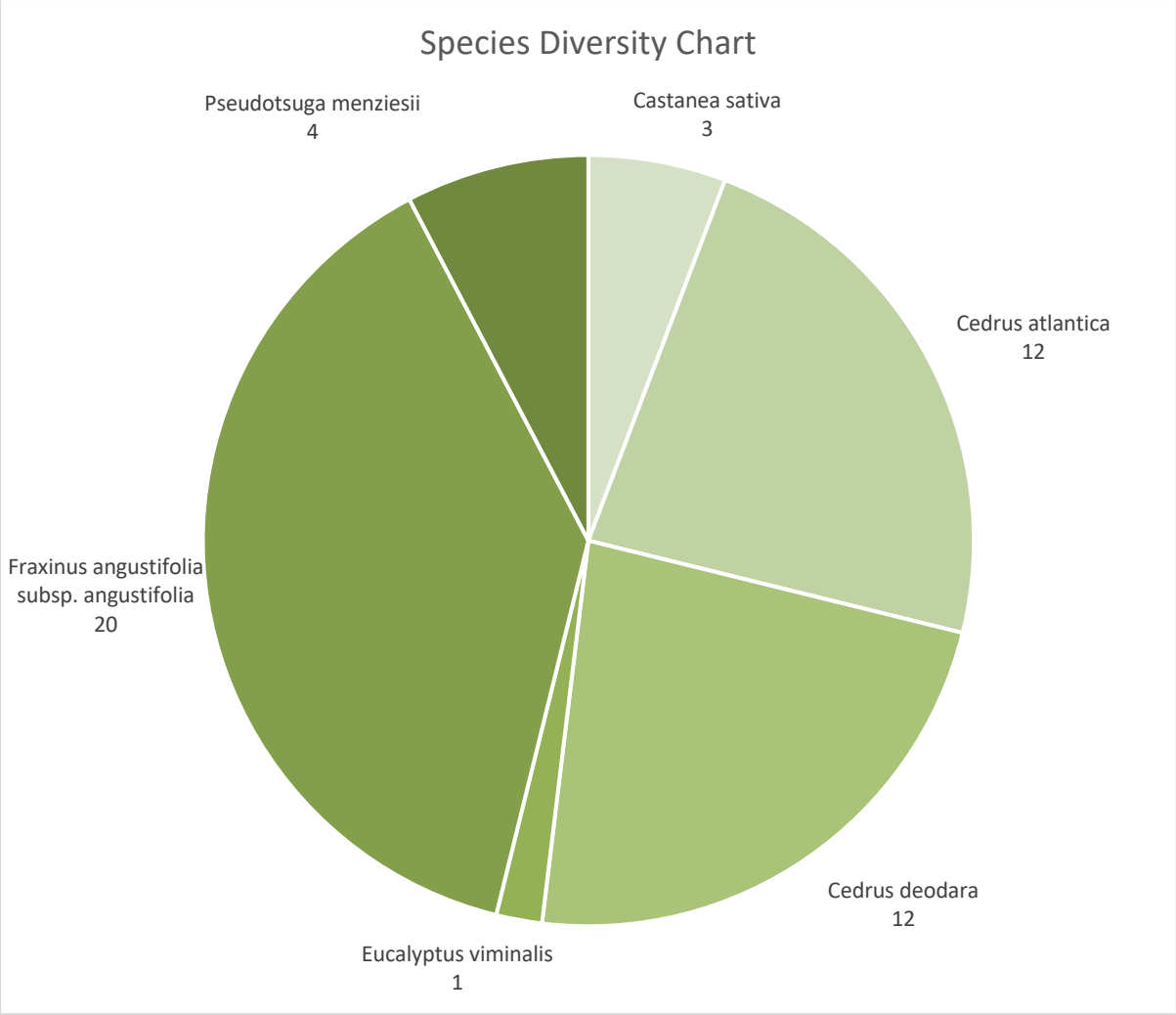


Figure 2, Tree Species Diversity within the subject area

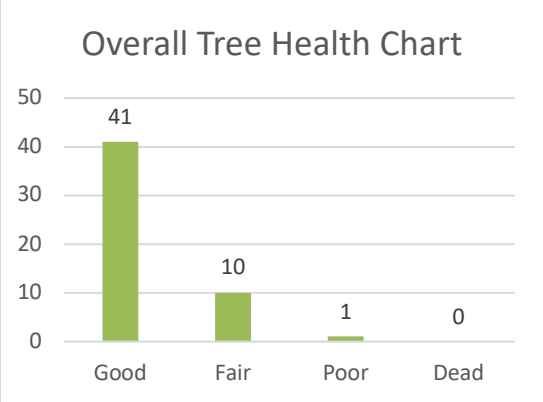


Figure 3, Tree Health Graph within the subject area

The current health of the tree population is considered good (41) with ten trees being considered fair and 1 being poor.

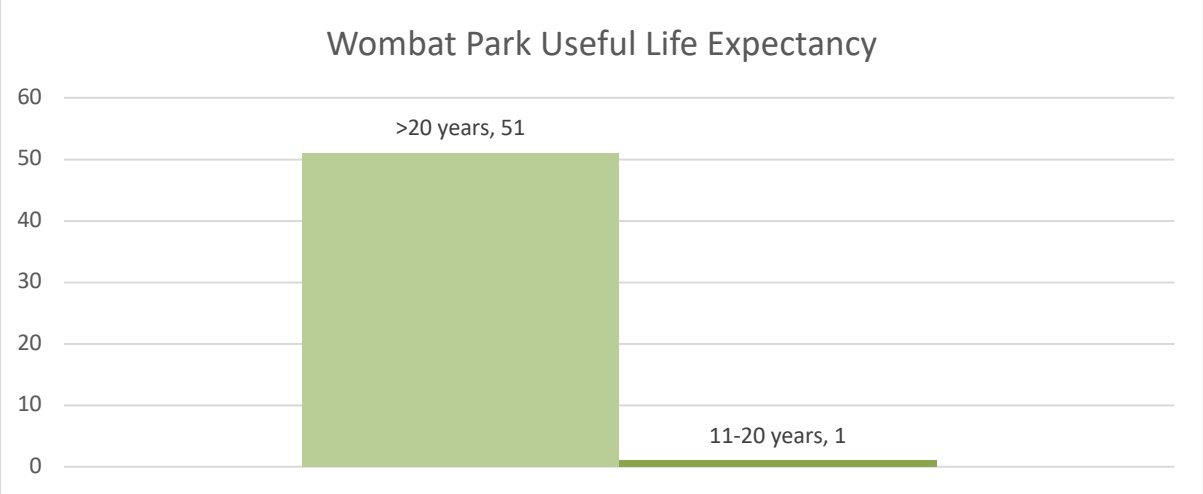


Figure 4, Tree ULE within the subject area

The Useful Life Expectancy (ULE) of the tree population shows 51 trees with a ULE of >20years, and one tree with a ULE between 11-20 years.

7. Recommendations

It is recommended that if development impacts on any retained tree TPZ's, an Arboricultural Impact Assessment (AIA) and an associated Tree Management Plan (TMP) be developed once construction plans are finalised to minimise impact to the current tree population and provide the best tree management techniques to ensure long term tree viability.

7.1 Wombat Park Recommendations

Tree 11

Tree 11 (*Cedrus deodara*) is proposed for removal to accommodate a site entrance and 14m wide public access road. The mature exotic species is in good health with good structure and has a useful life expectancy of >20 years. The contractors undertaking the removal should hold a minimum AQF level 3 in arboriculture and be under the supervision of an AQF level 5 or higher arborist.

Trees 10, 12 and 38

Specific design considerations should be made to the proposed site entrance and 14m wide public access road to ensure trees 10, 12 *(Cedrus atlantica)* and tree 38 (*Fraxinus angustifolia subsp. angustifolia*) are not adversely affected by the removal of tree 11 (*Cedrus deodara*) and the construction of the access road. All excavation should be avoided by building up the soil and constructing above natural grade. If construction is required within the tree protection zones of the subject trees, a maximum of 10% encroachment into the TPZ would be allowed but an offset must be demonstrated per AS 4970-2009 (refer to APPENDIX A for TPZ dimensions). Tree sensitive construction techniques such as an air-spade or hydro vacuum excavation can only be undertaken under project arborist direction and at a pressure not greater than 400psi to ensure root cambium remains intact.

Tree 4
This *Eucalyptus viminalis* is a mature native species, assessed to have no major defects visible. This specimen provides significant canopy cover and is a dominant tree in the landscape and should be retained.

Trees 29-31
These three mature *Pseudotsuga menziesii* specimens are assessed as being in fair and poor health, however, they all have a good structure with some deadwood and hangers throughout their canopies, these trees should be retained.

Trees 33-52
a) These trees, a mixture of *Fraxinus angustifolia subsp. angustifolia* and *Castanea sativa* specimens form part of the Avenue of Honour on Midland Highway frontage, these trees are to be retained. A project arborist should be on-site to supervise and provide advice for all works undertaken within the stated tree protection zone of these subject trees.

In addition, the following activities are not to be undertaken within TPZs:

Activities restricted within the TPZ
AS4970-2009 Protection of trees on development sites, Section 4 Tree Protection Measures outlines that the following activities are to be avoided within the TPZ:

- Machine excavation including trenching.
- Excavation for silt fencing.
- Cultivation.
- Storage.
- Preparation of chemicals, including preparation of cement products.
- Heavy vehicles and plant.
- Refuelling.
- Dumping of waste.
- Washdown and clearing of equipment.
- Placement of fill.
- The lighting of fires.
- Soil level changes.
- Temporary or permanent installation of utilities and signs, and
- Physical damage to the tree.

8. Conclusion

Careful consideration must be given to the recommendation throughout this document. All recommendations have been derived by applying the tree protection measures per Australian Standards, AS4970-2009 Protection of Trees on Development Sites. Any alterations of this plan must be approved by the site Arborist or a minimum AQF level 5 consultant or equivalent.

9. References

Australian Standards. (2010). AS 4970 - 2009, Protection of trees on development sites. *Amendment No.1 (March 2010)*. Sydney, New South Wales, Australia: Standards Australia.

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Hepburn Shire Council - Planning permit PA 2504 - 15 July 2021

10.1 APPENDIX A – Tree Data Detailed

Tree ID: 1
Botanical Name: *Fraxinus angustifolia subsp. angustifolia*
Common Name: Narrow-leaved Ash
Easting: 144.154198
Northing: -37.340755
Datum: GDA1994 MGA Zone 55

Height (m): 9
Spread (m): 10
Tree Protection Zone (m): 6.60
Structural Root Zone (m): 2.69
DBH (mm): 550

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Structure: Fair
Comment: Trunk damage and heartwood decay.

Tree ID: 2
Botanical Name: *Fraxinus angustifolia subsp. angustifolia*
Common Name: Narrow-leaved Ash
Easting: 144.154094
Northing: -37.340750
Datum: GDA1994 MGA Zone 55

Height (m): 7
Spread (m): 5
Tree Protection Zone (m): 4.00
Structural Root Zone (m): 2.18
DBH (mm): 330

Age: Semi Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Structure: Fair
Comment: Trunk damage and heartwood decay.

Tree ID: 3
Botanical Name: *Fraxinus angustifolia subsp. angustifolia*
Common Name: Narrow-leaved Ash
Easting: 144.153924
Northing: -37.340725
Datum: GDA1994 MGA Zone 55

Height (m): 11
Tree Protection Zone (m): 6.50
DBH (mm): 540

Spread (m): 11
Structural Root Zone (m): 2.78

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Comment: Minor heartwood decay.

Structure: Good

Tree ID: 4
Botanical Name: *Eucalyptus viminalis*
Common Name: Manna Gum
Easting: 144.157590
Northing: -37.339229
Datum: GDA1994 MGA Zone 55

Height (m): 35
Spread (m): 20
Tree Protection Zone (m): 15.00
Structural Root Zone (m): 4.84
DBH (mm): 2280

Age: Mature
Useful Life Expectancy: >20 years
Origin: Native

Health: Fair
Structure: Good
Comment: No major defects visible

Tree ID: 5
Botanical Name: *Cedrus atlantica*
Common Name: Atlas Cedar
Easting: 144.158110
Northing: -37.339285
Datum: GDA1994 MGA Zone 55

Height (m): 25
Spread (m): 17
Tree Protection Zone (m): 15.00
Structural Root Zone (m): 4.12
DBH (mm): 1680

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Structure: Good
Comment: Mulitple hangers and deadwood throughout canopy

Tree ID: 6
Botanical Name: *Cedrus deodara*
Common Name: Himalayan Cedar
Easting: 144.157988
Northing: -37.339368
Datum: GDA1994 MGA Zone 55

Height (m): 29
Spread (m): 15
Tree Protection Zone (m): 15.00
Structural Root Zone (m): 3.90
DBH (mm): 1340

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

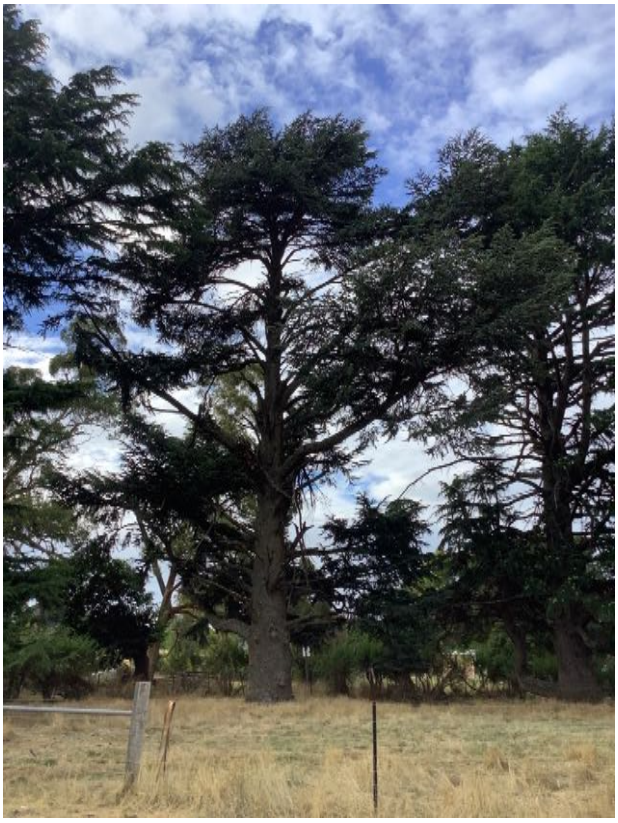
Health: Good
Structure: Good
Comment: Mulitple hangers and deadwood throughout canopy

Tree ID: 7
Botanical Name: *Cedrus atlantica*
Common Name: Atlas Cedar
Easting: 144.157850
Northing: -37.339442
Datum: GDA1994 MGA Zone 55

Height (m): 26
Spread (m): 23
Tree Protection Zone (m): 15.00
Structural Root Zone (m): 4.04
DBH (mm): 1550

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Structure: Good
Comment: Mulitple hangers and deadwood throughout canopy



Tree ID: 8
Botanical Name: *Cedrus deodara*
Common Name: Himalayan Cedar
Easting: 144.157744
Northing: -37.339528
Datum: GDA1994 MGA Zone 55

Height (m): 27
Spread (m): 23
Tree Protection Zone (m): 15.00
Structural Root Zone (m): 3.96
DBH (mm): 1460

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Structure: Good
Comment: Mulitple hangers and deadwood throughout canopy

Tree ID: 9
Botanical Name: *Cedrus atlantica*
Common Name: Atlas Cedar
Easting: 144.157630
Northing: -37.339597
Datum: GDA1994 MGA Zone 55

Height (m): 20
Spread (m): 23
Tree Protection Zone (m): 15.00
Structural Root Zone (m): 4.06
DBH (mm): 1560

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Fair
Structure: Good
Comment: Mulitple hangers and deadwood throughout canopy

Tree ID: 10
Botanical Name: *Cedrus deodara*
Common Name: Himalayan Cedar
Easting: 144.157503
Northing: -37.339669
Datum: GDA1994 MGA Zone 55

Height (m): 27
Spread (m): 15
Tree Protection Zone (m): 15.00
Structural Root Zone (m): 3.99
DBH (mm): 1430

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Structure: Good
Comment: Mulitple hangers and deadwood throughout canopy

Tree ID: 11
Botanical Name: *Cedrus atlantica*
Common Name: Atlas Cedar
Easting: 144.157387
Northing: -37.339740
Datum: GDA1994 MGA Zone 55

Height (m): 21
Spread (m): 27
Tree Protection Zone (m): 15.00
Structural Root Zone (m): 4.24
DBH (mm): 1800

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Structure: Good
Comment: Mulitple hangers and deadwood throughout canopy

Tree ID: 12
Botanical Name: *Cedrus deodara*
Common Name: Himalayan Cedar
Easting: 144.157262
Northing: -37.339827
Datum: GDA1994 MGA Zone 55

Height (m): 22
Spread (m): 19
Tree Protection Zone (m): 15.00
Structural Root Zone (m): 3.89
DBH (mm): 1320

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Structure: Good
Comment: Mulitple hangers and deadwood throughout canopy

Tree ID: 13
Botanical Name: *Cedrus atlantica*
Common Name: Atlas Cedar
Easting: 144.157139
Northing: -37.339885
Datum: GDA1994 MGA Zone 55

Height (m): 19
Spread (m): 17
Tree Protection Zone (m): 15.00
Structural Root Zone (m): 4.18
DBH (mm): 1630

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Structure: Good
Comment: Mulitple hangers and deadwood throughout canopy

Tree ID: 14
Botanical Name: *Cedrus deodara*
Common Name: Himalayan Cedar
Easting: 144.157003
Northing: -37.339981
Datum: GDA1994 MGA Zone 55

Height (m): 22
Spread (m): 15
Tree Protection Zone (m): 13.90
Structural Root Zone (m): 3.63
DBH (mm): 1160

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Fair
Structure: Good
Comment: Mulitple hangers and deadwood throughout canopy

Tree ID: 15
Botanical Name: *Cedrus atlantica*
Common Name: Atlas Cedar
Easting: 144.156905
Northing: -37.340040
Datum: GDA1994 MGA Zone 55

Height (m): 22
Spread (m): 20
Tree Protection Zone (m): 15.00
Structural Root Zone (m): 3.86
DBH (mm): 1320

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Structure: Good
Comment: Mulitple hangers and deadwood throughout canopy

Tree ID: 16
Botanical Name: *Cedrus deodara*
Common Name: Himalayan Cedar
Easting: 144.156768
Northing: -37.340122
Datum: GDA1994 MGA Zone 55

Height (m): 24
Spread (m): 14
Tree Protection Zone (m): 15.00
Structural Root Zone (m): 3.98
DBH (mm): 1390

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Structure: Good
Comment: Mulitple hangers and deadwood throughout canopy

Tree ID: 17
Botanical Name: *Cedrus atlantica*
Common Name: Atlas Cedar
Easting: 144.156637
Northing: -37.340197
Datum: GDA1994 MGA Zone 55

Height (m): 24
Spread (m): 19
Tree Protection Zone (m): 15.00
Structural Root Zone (m): 4.02
DBH (mm): 1480

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Structure: Good
Comment: Mulitple hangers and deadwood throughout canopy

Tree ID: 18
Botanical Name: *Cedrus deodara*
Common Name: Himalayan Cedar
Easting: 144.156533
Northing: -37.340270
Datum: GDA1994 MGA Zone 55

Height (m): 23
Tree Protection Zone (m): 15.00
DBH (mm): 1460

Spread (m): 16
Structural Root Zone (m): 4.14

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Structure: Good
Comment: Mulitple hangers and deadwood throughout canopy

Tree ID: 19
Botanical Name: *Cedrus deodara*
Common Name: Himalayan Cedar
Easting: 144.156287
Northing: -37.340420
Datum: GDA1994 MGA Zone 55

Height (m): 30
Spread (m): 17
Tree Protection Zone (m): 15.00
Structural Root Zone (m): 4.07
DBH (mm): 1430

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Structure: Good
Comment: Mulitple hangers and deadwood throughout canopy

Tree ID: 20
Botanical Name: *Cedrus atlantica*
Common Name: Atlas Cedar
Easting: 144.156160
Northing: -37.340492
Datum: GDA1994 MGA Zone 55

Height (m): 21
Spread (m): 17
Tree Protection Zone (m): 15.00
Structural Root Zone (m): 4.33
DBH (mm): 1700

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Fair
Structure: Fair
Comment: Multiple hangers and large dead branches thoughtout canopy

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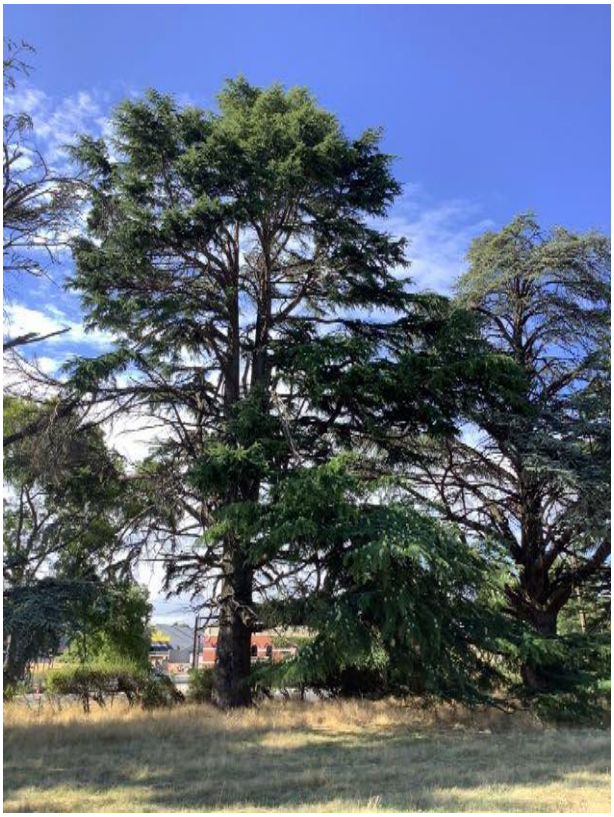
Tree ID: 21
Botanical Name: *Cedrus deodara*
Common Name: Himalayan Cedar
Easting: 144.156038
Northing: -37.340570
Datum: GDA1994 MGA Zone 55

Height (m): 26
Spread (m): 18
Tree Protection Zone (m): 15.00
Structural Root Zone (m): 3.83
DBH (mm): 1290

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Structure: Good
Comment: Mulitple hangers and deadwood throughout canopy



Tree ID: 22
Botanical Name: *Cedrus atlantica*
Common Name: Atlas Cedar
Easting: 144.155907
Northing: -37.340637
Datum: GDA1994 MGA Zone 55

Height (m): 22
Spread (m): 25
Tree Protection Zone (m): 15.00
Structural Root Zone (m): 4.19
DBH (mm): 1690

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Structure: Fair
Comment: Multiple hangers and large dead branches thoughtout canopy

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Tree ID: 23
Botanical Name: *Cedrus deodara*
Common Name: Himalayan Cedar
Easting: 144.155789
Northing: -37.340715
Datum: GDA1994 MGA Zone 55

Height (m): 22
Spread (m): 20
Tree Protection Zone (m): 15.00
Structural Root Zone (m): 3.75
DBH (mm): 1350

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Structure: Good
Comment: Mulitple hangers and deadwood throughout canopy

Tree ID: 24
Botanical Name: *Cedrus atlantica*
Common Name: Atlas Cedar
Easting: 144.155672
Northing: -37.340796
Datum: GDA1994 MGA Zone 55

Height (m): 24
Spread (m): 20
Tree Protection Zone (m): 15.00
Structural Root Zone (m): 4.09
DBH (mm): 1660

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Structure: Fair
Comment: Multiple hangers and large dead branches thoughtout canopy

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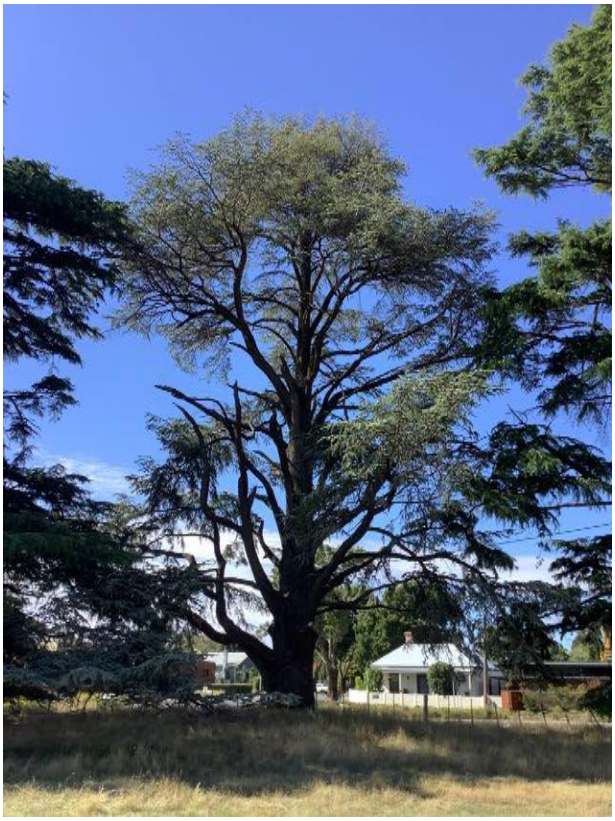


Tree ID: 25
Botanical Name: *Cedrus deodara*
Common Name: Himalayan Cedar
Easting: 144.155536
Northing: -37.340778
Datum: GDA1994 MGA Zone 55

Height (m): 26
Spread (m): 15
Tree Protection Zone (m): 15.00
Structural Root Zone (m): 3.89
DBH (mm): 1480

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Structure: Good
Comment: Mulitple hangers and deadwood throughout canopy

Tree ID: 26
Botanical Name: *Cedrus atlantica*
Common Name: Atlas Cedar
Easting: 144.155073
Northing: -37.340728
Datum: GDA1994 MGA Zone 55

Height (m): 25
Spread (m): 19
Tree Protection Zone (m): 15.00
Structural Root Zone (m): 3.96
DBH (mm): 1500

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Structure: Good
Comment: Mulitple hangers and deadwood throughout canopy

Tree ID: 27
Botanical Name: *Cedrus deodara*
Common Name: Himalayan Cedar
Easting: 144.154947
Northing: -37.340705
Datum: GDA1994 MGA Zone 55

Height (m): 27
Spread (m): 15
Tree Protection Zone (m): 15.00
Structural Root Zone (m): 4.13
DBH (mm): 1650

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Structure: Good
Comment: Mulitple hangers and deadwood throughout canopy

Tree ID: 28
Botanical Name: *Cedrus atlantica*
Common Name: Atlas Cedar
Easting: 144.154822
Northing: -37.340698
Datum: GDA1994 MGA Zone 55

Height (m): 22
Spread (m): 21
Tree Protection Zone (m): 15.00
Structural Root Zone (m): 4.13
DBH (mm): 1560

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Structure: Good
Comment: Mulitple hangers and deadwood throughout canopy

Tree ID: 29
Botanical Name: *Pseudotsuga menziesii*
Common Name: Douglas Fir
Easting: 144.154825
Northing: -37.340561
Datum: GDA1994 MGA Zone 55

Height (m): 19
Tree Protection Zone (m): 10.60
DBH (mm): 880

Spread (m): 7
Structural Root Zone (m): 3.31

Age: Mature
Useful Life Expectancy: 11-20 years
Origin: Exotic

Health: Poor
Comment: Deadwood throughout canopy

Structure: Good

Tree ID: 30
Botanical Name: *Pseudotsuga menziesii*
Common Name: Douglas Fir
Easting: 144.154867
Northing: -37.340420
Datum: GDA1994 MGA Zone 55

Height (m): 24
Spread (m): 18
Tree Protection Zone (m): 14.00
Structural Root Zone (m): 3.53
DBH (mm): 1170

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Fair
Structure: Good
Comment: Psyllid infestation and deadwood throughout canopy

Tree ID: 31
Botanical Name: *Pseudotsuga menziesii*
Common Name: Douglas Fir
Easting: 144.155092
Northing: -37.339213
Datum: GDA1994 MGA Zone 55

Height (m): 24
Spread (m): 11
Tree Protection Zone (m): 11.00
Structural Root Zone (m): 3.27
DBH (mm): 920

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Fair
Structure: Good
Comment: Deadwood throughout canopy

Tree ID: 32
Botanical Name: *Pseudotsuga menziesii*
Common Name: Douglas Fir
Easting: 144.155069
Northing: -37.339353
Datum: GDA1994 MGA Zone 55

Height (m): 3
Tree Protection Zone (m): 2.00
DBH (mm): 50

Spread (m): 1
Structural Root Zone (m): 1.50

Age: Young
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Comment: Juvenille tree in good health.

Structure: Good

Tree ID: 33
Botanical Name: *Fraxinus angustifolia subsp. angustifolia*
Common Name: Narrow-leaved Ash
Easting: 144.156839
Northing: -37.340176
Datum: GDA1994 MGA Zone 55

Height (m): 12
Tree Protection Zone (m): 2.90
DBH (mm): 240

Spread (m): 8
Structural Root Zone (m): 2.00

Age: Semi Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Comment: No major defects visible

Structure: Good

Tree ID: 34
Botanical Name: *Castanea sativa*
Common Name: Sweet Chestnut
Easting: 144.158300
Northing: -37.339331
Datum: GDA1994 MGA Zone 55

Height (m): 7
Tree Protection Zone (m): 3.10
DBH (mm): 260

Spread (m): 8
Structural Root Zone (m): 2.15

Age: Semi Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Comment: No major defects visible

Structure: Good

Tree ID: 35
Botanical Name: *Castanea sativa*
Common Name: Sweet Chestnut
Easting: 144.157979
Northing: -37.339552
Datum: GDA1994 MGA Zone 55

Height (m): 8
Spread (m): 7
Tree Protection Zone (m): 8.00
Structural Root Zone (m): 2.98
DBH (mm): 670

Age: Over-mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Structure: Fair
Comment: Hollow stem. Minimal crown sail effect. Appears stuctually sound currently.

Tree ID: 36
Botanical Name: *Castanea sativa*
Common Name: Sweet Chestnut
Easting: 144.157844
Northing: -37.339635
Datum: GDA1994 MGA Zone 55

Height (m): 7
Tree Protection Zone (m): 5.30
DBH (mm): 440

Spread (m): 7
Structural Root Zone (m): 2.55

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Fair
Comment: No major defects visible

Structure: Good

Tree ID: 37
Botanical Name: *Fraxinus angustifolia subsp. angustifolia*
Common Name: Narrow-leaved Ash
Easting: 144.157771
Northing: -37.339643
Datum: GDA1994 MGA Zone 55

Height (m): 11
Tree Protection Zone (m): 4.70
DBH (mm): 390

Spread (m): 10
Structural Root Zone (m): 2.51

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Comment: No major defects visible

Structure: Good

Tree ID: 38
Botanical Name: *Fraxinus angustifolia subsp. angustifolia*
Common Name: Narrow-leaved Ash
Easting: 144.157279
Northing: -37.339967
Datum: GDA1994 MGA Zone 55

Height (m): 19
Tree Protection Zone (m): 13.10
DBH (mm): 1090

Spread (m): 20
Structural Root Zone (m): 2.46

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Comment: No major defects visible

Structure: Good

Tree ID: 39
Botanical Name: *Fraxinus angustifolia subsp. angustifolia*
Common Name: Narrow-leaved Ash
Easting: 144.157155
Northing: -37.340049
Datum: GDA1994 MGA Zone 55

Height (m): 11
Tree Protection Zone (m): 6.20
DBH (mm): 520

Spread (m): 9
Structural Root Zone (m): 2.53

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Fair
Comment: No major defects visible

Structure: Good

Tree ID: 40
Botanical Name: *Fraxinus angustifolia subsp. angustifolia*
Common Name: Narrow-leaved Ash
Easting: 144.157022
Northing: -37.340139
Datum: GDA1994 MGA Zone 55

Height (m): 16
Tree Protection Zone (m): 10.40
DBH (mm): 870

Spread (m): 17
Structural Root Zone (m): 3.12

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Comment: No major defects visible

Structure: Good

Tree ID: 41
Botanical Name: *Fraxinus angustifolia subsp. angustifolia*
Common Name: Narrow-leaved Ash
Easting: 144.156874
Northing: -37.340218
Datum: GDA1994 MGA Zone 55

Height (m): 11
Tree Protection Zone (m): 5.90
DBH (mm): 490

Spread (m): 13
Structural Root Zone (m): 2.53

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Comment: No major defects visible

Structure: Good

Tree ID: 42
Botanical Name: *Fraxinus angustifolia subsp. angustifolia*
Common Name: Narrow-leaved Ash
Easting: 144.156727
Northing: -37.340307
Datum: GDA1994 MGA Zone 55

Height (m): 12
Spread (m): 17
Tree Protection Zone (m): 8.00
Structural Root Zone (m): 2.92
DBH (mm): 670

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Structure: Good
Comment: Historic tearout, appears stuctually sound

Tree ID: 43
Botanical Name: *Fraxinus angustifolia subsp. angustifolia*
Common Name: Narrow-leaved Ash
Easting: 144.156583
Northing: -37.340398
Datum: GDA1994 MGA Zone 55

Height (m): 13
Spread (m): 8
Tree Protection Zone (m): 5.50
Structural Root Zone (m): 2.59
DBH (mm): 460

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Fair
Structure: Good
Comment: No major defects visible

Tree ID: 44
Botanical Name: *Fraxinus angustifolia subsp. angustifolia*
Common Name: Narrow-leaved Ash
Easting: 144.156441
Northing: -37.340485
Datum: GDA1994 MGA Zone 55

Height (m): 9
Tree Protection Zone (m): 5.80
DBH (mm): 480

Spread (m): 8
Structural Root Zone (m): 2.49

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Comment: No major defects visible

Structure: Good

Tree ID: 45
Botanical Name: *Fraxinus angustifolia subsp. angustifolia*
Common Name: Narrow-leaved Ash
Easting: 144.156322
Northing: -37.340558
Datum: GDA1994 MGA Zone 55

Height (m): 11
Spread (m): 10
Tree Protection Zone (m): 5.90
Structural Root Zone (m): 2.47
DBH (mm): 490

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Structure: Fair
Comment: Trunk wound with associated decay.

Tree ID: 46
Botanical Name: *Fraxinus angustifolia subsp. angustifolia*
Common Name: Narrow-leaved Ash
Easting: 144.156207
Northing: -37.340636
Datum: GDA1994 MGA Zone 55

Height (m): 14
Spread (m): 15
Tree Protection Zone (m): 8.60
Structural Root Zone (m): 3.01
DBH (mm): 720

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Structure: Good
Comment: Basal wound with some decay but adequated callusing visible.

Tree ID: 47
Botanical Name: *Fraxinus angustifolia subsp. angustifolia*
Common Name: Narrow-leaved Ash
Easting: 144.154371
Northing: -37.340769
Datum: GDA1994 MGA Zone 55

Height (m): 8
Spread (m): 6
Tree Protection Zone (m): 6.00
Structural Root Zone (m): 2.53
DBH (mm): 500

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Structure: Good
Comment: No major defects visible

Tree ID: 48
Botanical Name: *Fraxinus angustifolia subsp. angustifolia*
Common Name: Narrow-leaved Ash
Easting: 144.154516
Northing: -37.340797
Datum: GDA1994 MGA Zone 55

Height (m): 8
Tree Protection Zone (m): 5.20
DBH (mm): 430

Spread (m): 6
Structural Root Zone (m): 2.47

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Fair
Comment: No major defects visible

Structure: Good

Tree ID: 49
Botanical Name: *Fraxinus angustifolia subsp. angustifolia*
Common Name: Narrow-leaved Ash
Easting: 144.154659
Northing: -37.340807
Datum: GDA1994 MGA Zone 55

Height (m): 9
Tree Protection Zone (m): 7.30
DBH (mm): 610

Spread (m): 10
Structural Root Zone (m): 2.59

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Comment: No major defects visible

Structure: Good

Tree ID: 50
Botanical Name: *Fraxinus angustifolia subsp. angustifolia*
Common Name: Narrow-leaved Ash
Easting: 144.154772
Northing: -37.340830
Datum: GDA1994 MGA Zone 55

Height (m): 9
Spread (m): 10
Tree Protection Zone (m): 6.80
Structural Root Zone (m): 2.49
DBH (mm): 570

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Structure: Good
Comment: Heavily pruned for powerline clearances

Tree ID: 51
Botanical Name: *Fraxinus angustifolia subsp. angustifolia*
Common Name: Narrow-leaved Ash
Easting: 144.154926
Northing: -37.340834
Datum: GDA1994 MGA Zone 55

Height (m): 10
Spread (m): 11
Tree Protection Zone (m): 7.60
Structural Root Zone (m): 2.65
DBH (mm): 630

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Structure: Good
Comment: Heavily pruned for powerline clearances.

Tree ID: 52
Botanical Name: *Fraxinus angustifolia subsp. angustifolia*
Common Name: Narrow-leaved Ash
Easting: 144.155044
Northing: -37.340848
Datum: GDA1994 MGA Zone 55

Height (m): 7
Tree Protection Zone (m): 7.20
DBH (mm): 600

Spread (m): 8
Structural Root Zone (m): 2.63

Age: Mature
Useful Life Expectancy: >20 years
Origin: Exotic

Health: Good
Comment: No major defects visible

Structure: Good

10.2 APPENDIX B – Tree Data

Tree ID	Species	Common Name	Origin	Height (m)	Spread (m)	DBH (mm)	Age	ULE	TPZ (m)	SRZ (m)	Health	Structure	Defects	Retain or remove	X	Y
1	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	Exotic	9	10	550	Mature	>20 years	6.6	2.7	Good	Fair	Trunk damage and heartwood decay.	Retain	144.1542	-37.34076
2	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	Exotic	7	5	330	Semi Mature	>20 years	4	2.2	Good	Fair	Trunk damage and heartwood decay.	Retain	144.15409	-37.34075
3	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	Exotic	11	11	540	Mature	>20 years	6.5	2.8	Good	Good	Minor heartwood decay.	Retain	144.15392	-37.34073
4	*Eucalyptus viminalis*	Manna Gum	Native	35	20	2280	Mature	>20 years	15	4.8	Fair	Good	No major defects visible	Retain	144.15759	-37.33923
5	*Cedrus atlantica*	Atlas Cedar	Exotic	25	17	1680	Mature	>20 years	15	4.1	Good	Good	Multiple hangers and deadwood throughout the canopy	Retain	144.15811	-37.33929
6	*Cedrus deodara*	Himalayan Cedar	Exotic	29	15	1340	Mature	>20 years	15	3.9	Good	Good	Multiple hangers and deadwood throughout the canopy	Retain	144.15799	-37.33937
7	*Cedrus atlantica*	Atlas Cedar	Exotic	26	23	1550	Mature	>20 years	15	4.0	Good	Good	Multiple hangers and deadwood throughout the canopy	Retain	144.15785	-37.33944

Tree ID	Species	Common Name	Origin	Height (m)	Spread (m)	DBH (mm)	Age	ULE	TPZ (m)	SRZ (m)	Health	Structure	Defects	Retain or remove	X	Y
8	*Cedrus deodara*	Himalayan Cedar	Exotic	27	23	1460	Mature	>20 years	15	4.0	Good	Good	Multiple hangers and deadwood throughout canopy	Retain	144.15774	-37.33953
9	*Cedrus atlantica*	Atlas Cedar	Exotic	20	23	1560	Mature	>20 years	15	4.1	Fair	Good	Multiple hangers and deadwood throughout the canopy	Retain	144.15763	-37.3396
10	*Cedrus deodara*	Himalayan Cedar	Exotic	27	15	1430	Mature	>20 years	15	4.0	Good	Good	Multiple hangers and deadwood throughout the canopy	Retain	144.1575	-37.33967
11	*Cedrus atlantica*	Atlas Cedar	Exotic	21	27	1800	Mature	>20 years	15	4.2	Good	Good	Multiple hangers and deadwood throughout the canopy	Remove	144.15739	-37.33974
12	*Cedrus deodara*	Himalayan Cedar	Exotic	22	19	1320	Mature	>20 years	15	3.9	Good	Good	Multiple hangers and deadwood throughout the canopy	Retain	144.15726	-37.33983
13	*Cedrus atlantica*	Atlas Cedar	Exotic	19	17	1630	Mature	>20 years	15	4.2	Good	Good	Multiple hangers and deadwood throughout the canopy	Retain	144.15714	-37.33989
14	*Cedrus deodara*	Himalayan Cedar	Exotic	22	15	1160	Mature	>20 years	13.9	3.6	Fair	Good	Multiple hangers and deadwood throughout the canopy	Retain	144.157	-37.33998
15	*Cedrus atlantica*	Atlas Cedar	Exotic	22	20	1320	Mature	>20 years	15	3.9	Good	Good	Multiple hangers and deadwood throughout the canopy	Retain	144.15691	-37.34004

Tree ID	Species	Common Name	Origin	Height (m)	Spread (m)	DBH (mm)	Age	ULE	TPZ (m)	SRZ (m)	Health	Structure	Defects	Retain or remove	X	Y
16	*Cedrus deodara*	Himalayan Cedar	Exotic	24	14	1390	Mature	>20 years	15	4.0	Good	Good	Multiple hangers and deadwood throughout the canopy	Retain	144.15677	-37.34012
17	*Cedrus atlantica*	Atlas Cedar	Exotic	24	19	1480	Mature	>20 years	15	4.0	Good	Good	Multiple hangers and deadwood throughout the canopy	Retain	144.15664	-37.3402
18	*Cedrus deodara*	Himalayan Cedar	Exotic	23	16	1460	Mature	>20 years	15	4.1	Good	Good	Multiple hangers and deadwood throughout the canopy	Retain	144.15653	-37.34027
19	*Cedrus deodara*	Himalayan Cedar	Exotic	30	17	1430	Mature	>20 years	15	4.1	Good	Good	Multiple hangers and deadwood throughout the canopy	Retain	144.15629	-37.34042
20	*Cedrus atlantica*	Atlas Cedar	Exotic	21	17	1700	Mature	>20 years	15	4.3	Fair	Fair	Multiple hangers and large dead branches thought-out canopy	Retain	144.15616	-37.34049
21	*Cedrus deodara*	Himalayan Cedar	Exotic	26	18	1290	Mature	>20 years	15	3.8	Good	Good	Multiple hangers and deadwood throughout the canopy	Retain	144.15604	-37.34057
22	*Cedrus atlantica*	Atlas Cedar	Exotic	22	25	1690	Mature	>20 years	15	4.2	Good	Fair	Multiple hangers and large dead branches thought-out canopy	Retain	144.15591	-37.34064
23	*Cedrus deodara*	Himalayan Cedar	Exotic	22	20	1350	Mature	>20 years	15	3.8	Good	Good	Multiple hangers and deadwood throughout the canopy	Retain	144.15579	-37.34072

Tree ID	Species	Common Name	Origin	Height (m)	Spread (m)	DBH (mm)	Age	ULE	TPZ (m)	SRZ (m)	Health	Structure	Defects	Retain or remove	X	Y
24	*Cedrus atlantica*	Atlas Cedar	Exotic	24	20	1660	Mature	>20 years	15	4.1	Good	Fair	Multiple hangers and large dead branches thought-out canopy	Retain	144.15567	-37.3408
25	*Cedrus deodara*	Himalayan Cedar	Exotic	26	15	1480	Mature	>20 years	15	3.9	Good	Good	Multiple hangers and deadwood throughout the canopy	Retain	144.15554	-37.34078
26	*Cedrus atlantica*	Atlas Cedar	Exotic	25	19	1500	Mature	>20 years	15	4.0	Good	Good	Multiple hangers and deadwood throughout the canopy	Retain	144.15507	-37.34073
27	*Cedrus deodara*	Himalayan Cedar	Exotic	27	15	1650	Mature	>20 years	15	4.1	Good	Good	Multiple hangers and deadwood throughout the canopy	Retain	144.15495	-37.34071
28	*Cedrus atlantica*	Atlas Cedar	Exotic	22	21	1560	Mature	>20 years	15	4.1	Good	Good	Multiple hangers and deadwood throughout the canopy	Retain	144.15482	-37.3407
29	*Pseudotsuga menziesii*	Douglas Fir	Exotic	19	7	880	Mature	11-20 years	10.6	3.3	Poor	Good	Deadwood throughout canopy	Retain	144.15483	-37.34056
30	*Pseudotsuga menziesii*	Douglas Fir	Exotic	24	18	1170	Mature	>20 years	14	3.5	Fair	Good	Psyllid infestation and deadwood throughout the canopy	Retain	144.15487	-37.34042
31	*Pseudotsuga menziesii*	Douglas Fir	Exotic	24	11	920	Mature	>20 years	11	3.3	Fair	Good	Deadwood throughout canopy	Retain	144.15509	-37.33921

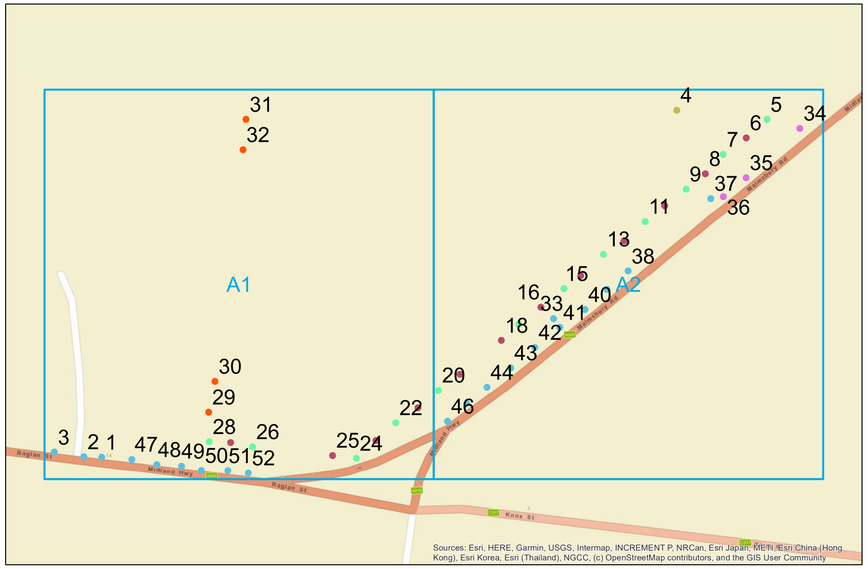
Tree ID	Species	Common Name	Origin	Height (m)	Spread (m)	DBH (mm)	Age	ULE	TPZ (m)	SRZ (m)	Health	Structure	Defects	Retain or remove	X	Y
32	*Pseudotsuga menziesii*	Douglas Fir	Exotic	3	1	50	Young	>20 years	2	1.5	Good	Good	Deadwood throughout canopy	Retain	144.15507	-37.33935
33	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	Exotic	12	8	240	Semi Mature	>20 years	2.9	2.0	Good	Good	No major defects visible	Retain	144.15684	-37.34018
34	*Castanea sativa*	Sweet Chestnut	Exotic	7	8	260	Semi Mature	>20 years	3.1	2.2	Good	Good	No major defects visible	Retain	144.1583	-37.33933
35	*Castanea sativa*	Sweet Chestnut	Exotic	8	7	670	Over-mature	>20 years	8	3.0	Good	Fair	Hollow stem	Retain	144.15798	-37.33955
36	*Castanea sativa*	Sweet Chestnut	Exotic	7	7	440	Mature	>20 years	5.3	2.6	Fair	Good	No major defects visible	Retain	144.15784	-37.33964
37	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	Exotic	11	10	390	Mature	>20 years	4.7	2.5	Good	Good	No major defects visible	Retain	144.15777	-37.33964
38	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	Exotic	19	20	1090	Mature	>20 years	13.1	2.5	Good	Good	No major defects visible	Retain	144.15728	-37.33997
39	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	Exotic	11	9	520	Mature	>20 years	6.2	2.5	Fair	Good	No major defects visible	Retain	144.15716	-37.34005

Tree ID	Species	Common Name	Origin	Height (m)	Spread (m)	DBH (mm)	Age	ULE	TPZ (m)	SRZ (m)	Health	Structure	Defects	Retain or remove	X	Y
40	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	Exotic	16	17	870	Mature	>20 years	10.4	3.1	Good	Good	No major defects visible	Retain	144.15702	-37.34014
41	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	Exotic	11	13	490	Mature	>20 years	5.9	2.5	Good	Good	No major defects visible	Retain	144.15687	-37.34022
42	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	Exotic	12	17	670	Mature	>20 years	8	2.9	Good	Good	No major defects visible	Retain	144.15673	-37.34031
43	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	Exotic	13	8	460	Mature	>20 years	5.5	2.6	Fair	Good	No major defects visible	Retain	144.15658	-37.3404
44	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	Exotic	9	8	480	Mature	>20 years	5.8	2.5	Good	Good	No major defects visible	Retain	144.15644	-37.34049
45	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	Exotic	11	10	490	Mature	>20 years	5.9	2.5	Good	Good	No major defects visible	Retain	144.15632	-37.34056
46	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	Exotic	14	15	720	Mature	>20 years	8.6	3.0	Good	Good	No major defects visible	Retain	144.15621	-37.34064
47	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	Exotic	8	6	500	Mature	>20 years	6	2.5	Good	Good	No major defects visible	Retain	144.15437	-37.34077

Tree ID	Species	Common Name	Origin	Height (m)	Spread (m)	DBH (mm)	Age	ULE	TPZ (m)	SRZ (m)	Health	Structure	Defects	Retain or remove	X	Y
48	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	Exotic	8	6	430	Mature	>20 years	5.2	2.5	Fair	Good	No major defects visible	Retain	144.15452	-37.3408
49	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	Exotic	9	10	610	Mature	>20 years	7.3	2.6	Good	Good	No major defects visible	Retain	144.15466	-37.34081
50	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	Exotic	9	10	570	Mature	>20 years	6.8	2.5	Good	Good	No major defects visible	Retain	144.15477	-37.34083
51	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	Exotic	10	11	630	Mature	>20 years	7.6	2.7	Good	Good	No major defects visible	Retain	144.15493	-37.34083
52	*Fraxinus angustifolia subsp. angustifolia*	Narrow-leaved Ash	Exotic	7	8	600	Mature	>20 years	7.2	2.6	Good	Good	No major defects visible	Retain	144.15504	-37.34085

10.3 APPENDIX C – Detailed Maps

The map below accurately depicts the Tree Protection Zones (yellow circles) and Structural Root Zones (red circles) of all trees within the proposed development area. Any construction work (including the movement of machinery) within the yellow circles should be avoided unless directed by the Project Arborist. Approved tree protection fencing should be erected at the perimeterof retained trees TPZ's. If excavation is required within TPZ's, construction techniques such as vacuum excavation or air spade may be undertaken under the direction of the Project Arborist. Incursions of up to 10% should be allowed by the discretion of the Project Arborist if an offset can be demonstrated per AS4970-2009. Any excavation and construction within the red circles of the SRZ can structurally compromise tree stability and long-term tree health and may require removal if the design cannot avoid incursion into these areas.



0 20 40 80 Meters

Overview Map

0 10 20 40 60 80 Meters

Detailed Map

Botanical Name

- Castanea sativa
- Cedrus atlantica
- Cedrus deodara
- Eucalyptus viminalis
- Fraxinus angustifolia subsp. angustifolia
- Pseudotsuga menziesii
- HyggeProperty_Daylesford_WombatPark_SRZ
- HyggeProperty_Daylesford_WombatPark_TPZ
- HyggeProperty_Daylesford_WombatPark_Grids
- World Imagery

hygge property

Wombat Park

Tree Management Project

Xylem TreeCare Pty Ltd
A.B.N: 13 640 958 532
Floor 1, 7 Ocean Street
Maroochydore QLD 4558

Ph: 1300 550 953
www.xylemtrees.com

Coordinate System: GDA 1994 MGA Zone 55
Projection: Transverse Mercator
Datum: GDA 1994
False Easting: 500,000.0000
False Northing: 10,000,000.0000
Central Meridian: 147.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter

4719 Midland Highway Daylesford

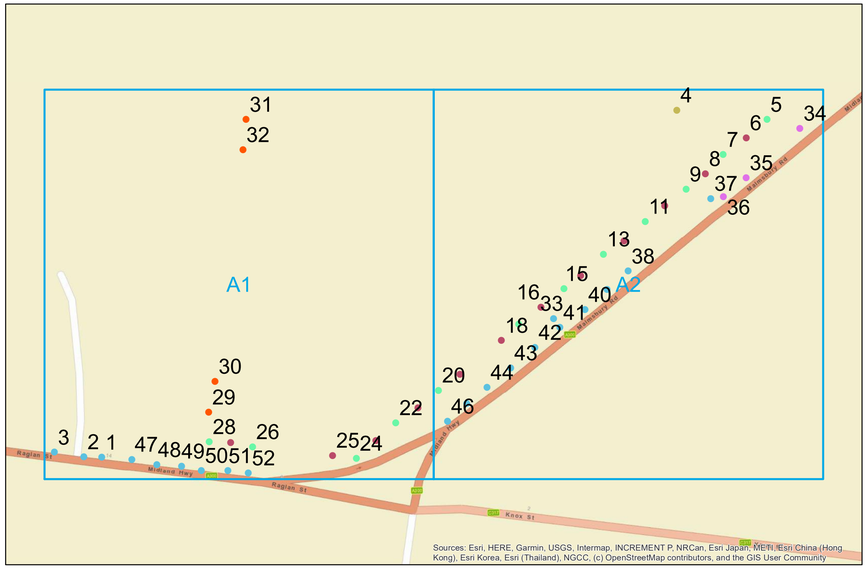
Drawn By: Nikita Starcevich

Checked by: Sam Bianchi

Date: 16th February 2022

Sheet No.

Overview Map



Overview Map

0 20 40 80 Meters

Detailed Map

0 5 10 20 30 40 Meters

Botanical Name

- Castanea sativa
- Cedrus atlantica
- Cedrus deodara
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hygge property

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Central Meridian: 147.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter

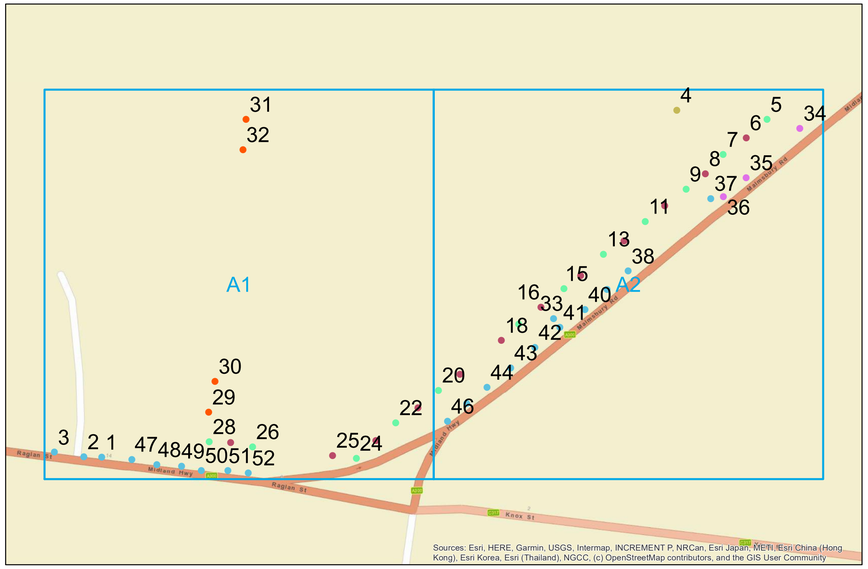
Sheet No.
Map A1

4719 Midland Highway Daylesford

Drawn By: Nikita Starcevich

Checked by: Sam Bianchi

Date: 16th February 2022



Overview Map

Detailed Map

Botanical Name

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- Cedrus atlantica
- Cedrus deodara
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- HyggeProperty_Daylesford_WombatPark_Grids
- World Imagery

hygge property

Wombat Park

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Datum: GDA 1994
False Easting: 500,000.0000
False Northing: 10,000,000.0000
Central Meridian: 147.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter

Sheet No.
Map A2

4719 Midland Highway Daylesford

Drawn By: Nikita Starcevich

Checked by: Sam Bianchi

Date: 16th February 2022

10.4 APPENDIX D – Tree Protection Guidelines- AS4970-2009 Protection of Trees on Development Sites

Tree preservation during construction

Tree Root Systems

It is important to understand the extent of root development of an average tree growing in optimum growing conditions, to be able to establish the requirements of the individual tree during the construction activity. As with all things growing in nature there are exceptions to the rule however as a generalisation the majority of growth is contained within the top 600mm of soil with the majority of their absorbing roots being in the upper 150mm of soil (Harris 2004).

A common misconception is that root systems only grow to the extent of the trees dripline; Zimmermann and Brown, 1971; Perry, 1982 state; roots of trees in the open often extend two to three times the radius of the crown, therefore consideration for the extent of a root system and the potential impact caused by excavation be given well outside the trees dripline.

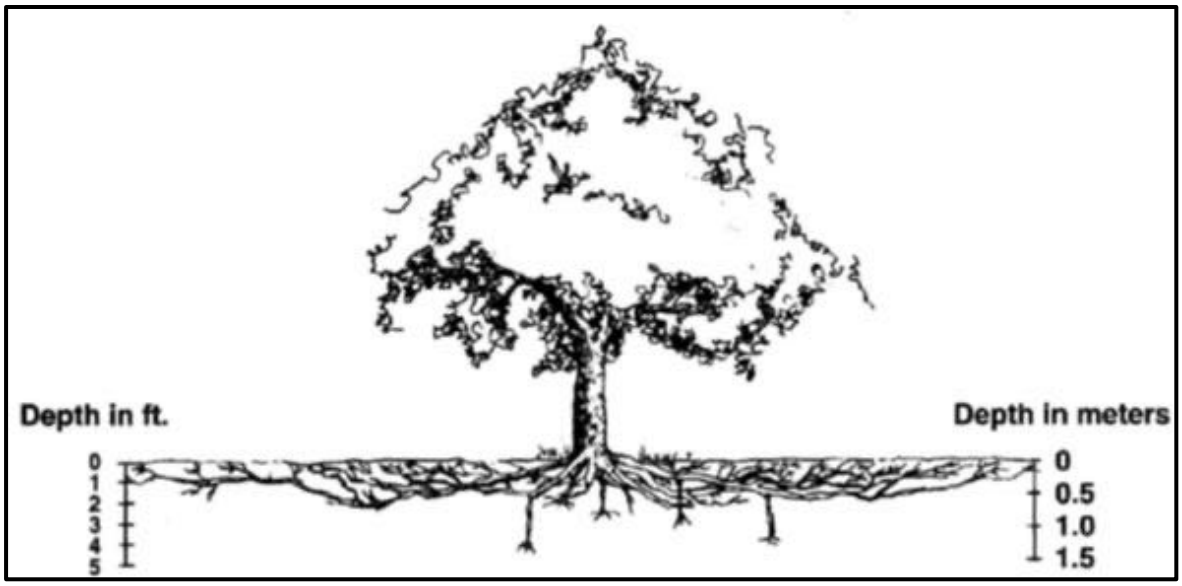


Figure 1- ***Theoretical model of a typical root system. (Harris, Clark and Matheny, 2004)***

Although the above diagram (Figure 1) depicts a root system as being symmetrically dispersed from the trunk, this is not always the case. Tree root direction and symmetry is determined by the growing environment that they find themselves in. Roots will grow towards optimum growing conditions, where there is adequate water, nutrient and oxygen levels. Therefore, root systems will grow to an obstruction e.g. wall, then change directions to find better growing conditions. This may inadvertently cause the root system of a tree to be confined to one side of the tree; this is more evident within an urban environment where more underground obstacles are present. When assessing trees suitability for retention, consideration is required for the presence of underground obstacles and the available growing space of a trees root system.

Tree Protection Zones

Prior to commencing any work on site it important to protect the existing trees from mechanical damage, soil compaction and the introduction of contaminates to the site, this can be achieved by setting up a Tree Protection Zone (TPZ) parameter around the trees.

The Tree Protection Zone (TPZ) has been developed as an industry standard used to determine an area around a tree which is to be protected to ensure the ongoing health of the tree. Trees have a varying ability to tolerate soil and root disturbance; In general a younger actively growing tree will be better able to withstand some

damage to root zones than a slower growing older tree or one that is already under some stress (Trowbridge J. and Bassuk N, 2004). With this in mind AS4970-2009 Protection of trees on development sites has developed a methodology for calculating the TPZ which has an allowance for most trees in most environments. The Tree Protection Zone is calculated using the following calculation

TPZ = DBH x12

Developing a TPZ will require the installation of a physical barrier around the subject tree/s; this can achieved be the instalment of a temporary fence located at the parameter of the calculated TPZ. The installation of TPZ fencing is to prevent potential mechanical damage to the upper canopy, trunk region or root system of the tree; the TPZ is also an area which is designated to prevent certain activities from being undertaken (Refer to Activities restricted within the TPZ).

In some circumstances the installation of temporary fencing may not be appropriate due to either the physical area available e.g. narrow nature-strips or the works to be undertaken are within the designated TPZ. In these circumstances it important to ensure this work is monitored to ensure the impact to the tree is minimised. All monitoring is to be undertaken by a qualified Arborist, the primary role of the Arborist is to monitor the construction, troubleshoot onsite problems relating to tree health and ensure activities restricted within the TPZ are avoided.

Allowable Encroachment into the TPZ

Although not ideal some tolerable encroachment has been allowed for within the TPZ, this is calculated at 10% of the TPZ, however the total amount lost in area needs to be compensated by increasing the remaining TPZ by the total amount lost by the encroachment. The following diagram extracted from AS4970 Protection of trees on development sites, Figure 2- Encroachments within TPZ further explains the allowable encroachment within the TPZ.

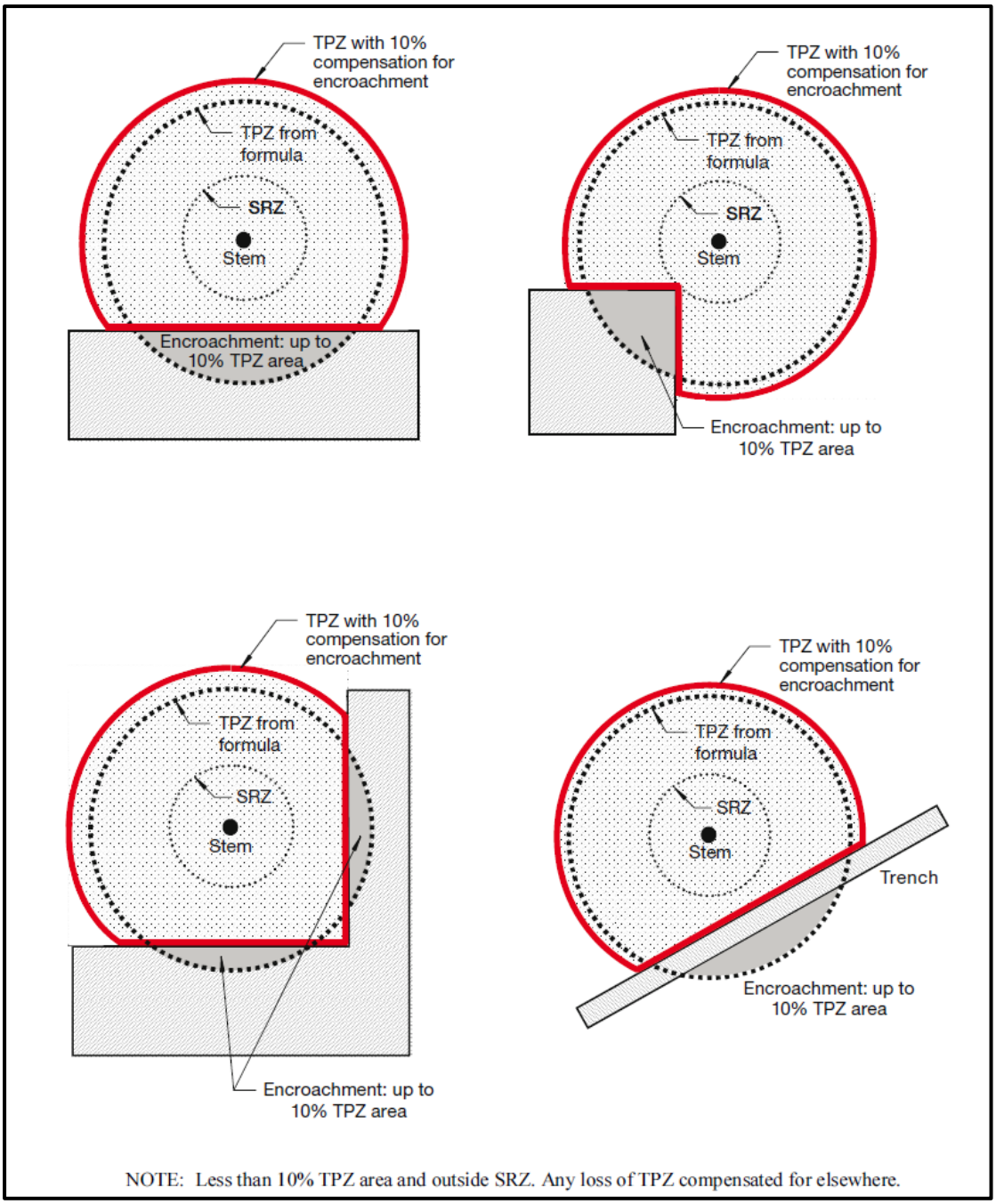


*Figure 2- **Allowable encroachments within the TPZ***

Ground protection

Consideration should be given to tree sensitive measures such as ground protection in areas close to or encroaching into the TPZ. Additional tree protection measures when considering encroachment of TPZ is permanent tree guards to reduce physical damage to the tree structure. Elevating the tree canopy may also be necessary when considering encroachment of the TPZ.

Due to the limited space, available on this site and trees to be retained, encroachment into the TPZ will be required and must be carefully planned and supervised. There should be minimal or no disturbance to existing soil grade under the tree canopy.

The proposed vehicle access should be limited to travel in and out, no parking of vehicles on this site. For all vehicle assess **only traverse on defined surface that consists of Geo-textile fabric and large rock or rumble boards**. This is necessary to limit ground compaction. **The remaining are within the TPZ must be mulched**.

Activities restricted within the TPZ

AS4970-2009 Protection of Trees on Development Sites, Section 4 Tree Protection Measures outlines that the following activities are to be avoided within the TPZ

- Machine excavation including trenching.
- Excavation for silt fencing.
- Cultivation.
- Storage.
- Preparation of chemicals, including preparation of cement products.
- Parking or movement of vehicles and plant.
- Refuelling.
- Dumping of waste.
- Wash down and clearing of equipment.
- Placement of fill.
- Lighting of fires.
- Soil level changes.
- Temporary or permanent installation of utilities and signs, and
- Physical damage to the tree.

Tree root management

Levelling, filling and cutting of soil grades will result in the same types of damage associated with excavating, trenching and soil compaction. Ninety percent of the fine roots that absorb water and minerals are in the upper 150-300mm of soil. This area is the most conducive to root growth as it usually has available space, oxygen, nutrients, and water. Altering the soil level during trenching may either strip away the fine absorbing roots from the soil surface or remove the nutrient-rich topsoil that supplies the basic elements trees require for growth.

Raising or filling grades around trees reduces oxygen diffusion, and exchange, in the rhizosphere. As little as 100mm of soil placed over the established root systems of some species is enough to cause their death. Grade changes to the soil outside the rhizosphere of the tree may also affect water drainage, causing root dieback due to changes in soil moisture content In the situation where roots have been identified and require extraction, it is important that this be undertaken under the direct supervision of a qualified Arborist. The use of earth moving equipment has the potential to cause significant damage not only to the exposed root needing removal but also to major anchorage roots within the SRZ; this is due to the roots being removed, split and compresses vascular tissue away from the target site. Where possible roots should be removed radially from the root zone rather than directly across the root system, this will reduce secondary damage to structural roots- refer to figure 3.

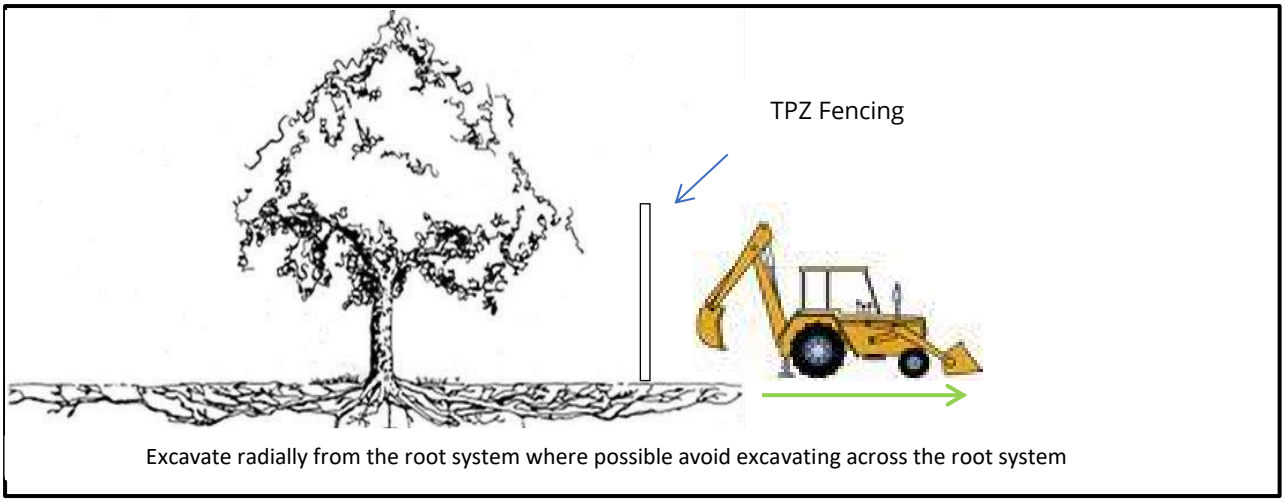


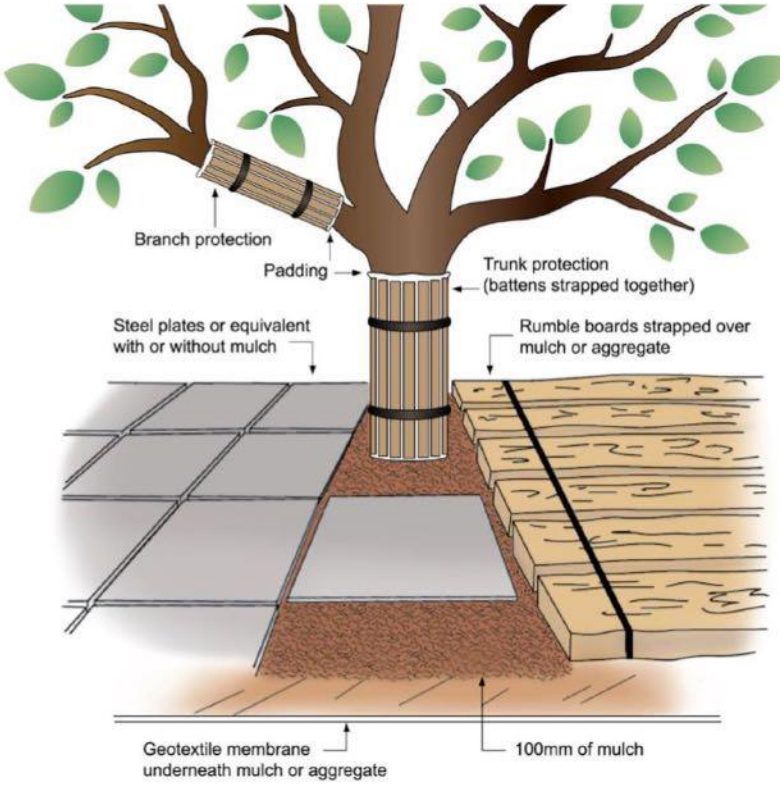
Figure 3- Preferred excavation method

Trunk and Ground Protection

Given that proposed works are often within the TPZs of retained trees, standard protective fencing may not always be a viable method of protection. In these areas trunk protection and ground protection should installed prior to the commencement of works and remain in place after construction works have completed.

Where construction access into the TPZ of retained trees cannot be avoided, the root zone of each tree must be protected using either teel plates or rumble boards strapped over mulch/aggregate until such a time as permanent above ground surfacing (cellular confinement system or similar) is installed as shown in Figure 15.

Trunk and ground protection should be undertaken in accordance with the Australian Standard AS 4790-2009: Protection of Trees on Development Sites as per the image below.



Tree protection fencing

The type of fencing employed to isolate the TPZ is less important than the desired outcome from the fencing. The indicator for successful tree protection fencing will be its ability to deter the entry of heavy equipment and vehicles, and the entry of workers and/or the public into the TPZ.

Where minimum requirements for the fencing are desirable, it should be a minimum of 1.2 - 1.5 metres in height, of chain mesh or like fence with 1.8 metre posts (e.g. treated pine) or like support every 3-4 metres and a top line of high visibility plastic hazard tape- refer to figure 4. The posts should be strong enough to sustain knocks from on-site excavation equipment. On large projects, with large numbers of trees, para-webbing may be used. However, the maintenance of this type of fencing must be enforced regularly. Para-webbing could also be used to isolate groups of trees at the fringe of the work zone to indicate that access is not permitted.

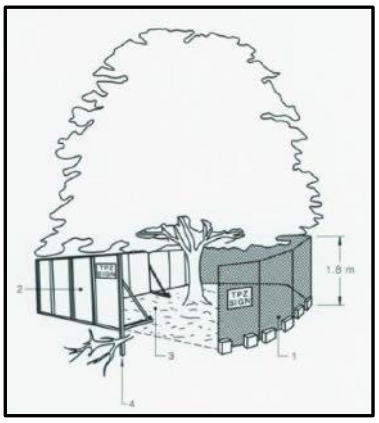


Figure 4- Tree Protection Zone fencing

Legend

1. Chain wire mesh panels with shade cloth (if required) properly secured to the ground.
2. Alternative plywood or wooden paling fence panels
3. Mulch installation across surface of TPZ, no excavation, construction activity, grade change, or storage of materials of any kind are permitted within the TPZ
4. Bracing is permissible within the TPZ. Installation of supports should avoid damaging significant roots. **Direct extract from AS4970-2009**

The tree protection fences should only be removed or shifted by the consent of the site manager in conjunction with the site arborist. In situations where the recommended TPZ encroaches on to a road, path, private property or building, the fencing should extend the maximum distance that is reasonable and practical.

An additional recommendation would be to attach signs to the fencing indicating their purpose and the restrictions applying to the TPZ. Contact details could also be attached to assist persons/contractors seeking information on the TPZ- refer to figure 5.

Example of sign

Figure 5- Tree Protection signage

TOWN PLANNING REFERRALS

ENGINEERING CONDITIONS

Application No	:	PLN22 - 0176
File	:	102703P
Property No	:	102703
Address of Land	:	4719 Midland Highway, Daylesford
Description	:	8 Lot subdivision

1. Stormwater Drainage

- Prior to Statement of Compliance, all underground and surface drainage works that are considered necessary by the Responsible Authority shall be constructed in accordance with professionally prepared plans and computations to be provided by the developer and approved by the Responsible Authority prior to the commencement of construction. The drainage works shall include the provision of an onsite stormwater detention system designed to ensure that the post development runoff does not exceed pre development runoff from the development. The drainage works shall be installed to transport stormwater runoff from the subject land and surrounding land and/or adjoining road(s) to an approved point of discharge. No concentrated stormwater shall drain or discharge from the land to adjoining properties. The drainage system must be constructed and completed prior to the issue of the statement of compliance.

  Return period for a Detention system is to be 20% AEP where there is overland escape path and 1% AEP if the failure of the detention system will cause property damage or inundation of freehold titles.

- All allotments shall be provided with drainage outfall (house connection) connected to the underground drainage system to the satisfaction of the Responsible Authority. House drainage connection shall be constructed in accordance with Infrastructure Design Manual Standard Drawing SD 510 or SD 505 with hot dip galvanised kerb adaptors.

- Stormwater shall be connected to the legal point of discharge to the satisfaction of the Responsible Authority.

- Prior to Statement of Compliance, all drainage easements deemed necessary by the Responsible Authority must be provided by the Permit Holder to protect and facilitate existing and future drainage infrastructure. Easements shall also be provided through properties between the development site and the nominated legal point of discharge. Minimum width of drainage easements shall be 2.0m for stormwater.

- A new stormwater easement and pipe shall be created/constructed along the Eastern boundary for the purpose of draining new lots and overland flow.

- Drainage easements shall be created to allow for gravity stormwater drainage to the satisfaction of Responsible Authority.

- If the proposed stormwater drainage system includes any works to be undertaken during house construction stage, the Owner must enter into a Section 173 Agreement with the responsible Authority under section 173 and 174 of the Planning and Environment Act,

Engineering Services – Hepburn Shire Council PO Box 21, Daylesford VIC 3460
Phone: (03) 5348 1633 Fax: (03) 5348 1304

requiring that such works shall be constructed and completed during house/building construction stage.

- The Owner must pay all of the costs and expenses including Responsible Authority's lawyers checking fees in relation to preparation, execution, registration, enforcement and cancellation of this Agreement including costs for obtaining necessary consents if required by the Land Titles Office before registration of this Agreement.

- It is the responsibility of the developer, to prepare a Stormwater Strategy Plan to identify and record the manner by which the quantity and quality of stormwater shall be managed for the catchment. The stormwater strategy plan must demonstrate how to avoid adverse impact on neighbouring properties and surrounding road network due to the development. Drainage design plans and legal point of discharge will not be considered until the drainage strategy has been established.
- Where stormwater detention is proposed on public land, including road reserve, the detention system shall be designed in such a way as to minimise the ongoing maintenance costs and maximise the public benefit of the area. No area used for stormwater detention shall be considered for the purposes of public open space.
- It is the responsibility of the developer to meet the requirements for stormwater quality as stated in the BPEM (Best Practice Environmental Management) Guidelines
  Note: Additional information for requirements can be found at https://www.epa.vic.gov.au/business-and-industry/guidelines/water-guidance/urban-stormwater-bpemg

2. New Intersection and Road Creation

- All Roads and drainage designs and constructions shall be based on sound engineering practice following the general principles of The Planning Scheme, the Austroads Guidelines, the Co-ordination of Streetworks Code of Practice, Relevant Australian Standards, VicRoads Road Design Guidelines, Infrastructure Design Manual [IDM] and to the satisfaction of Responsible Authority.
- Professionally prepared plans are to be submitted to the Responsible Authority for approval prior to construction.
- A Traffic and Pedestrian Impact study shall be conducted for the new intersection to the satisfaction of the Responsible Authority.
- All recommendations from the Traffic and Pedestrian Impact study, in particular provision for turning lanes, shall be implemented unless agreed to by the Responsible Authority.
- New roads shall include provisions for traffic calming in accordance with section 12.6 of IDM and to the satisfaction of the responsible authority.
- All internal roads within the development shall be in accordance with 'Table 2 – Urban Road / Street Characteristics' of IDM.
- Minimum width of the road reserve shall be in accordance with 'Table 2 – Urban Road / Street Characteristics' of IDM.
- The road pavement at a minimum, shall include
    - 200mm compacted depth class 3, 20mm FCR sub base and 100mm compacted depth class 2, 20mm FCR base pavement.

- 2 coat spray seal, 10mm primer seal/7mm rubberised final seal, or 40mm Type H, 10mm asphalt
- Kerb and channel
- 1.5m wide concrete footpaths
- Court Bowls must have a minimum radius of 12.5m and asphalt wearing course

- All no through traffic roads must terminate with a court bowl
- Unless stated otherwise by Regional Roads Victoria, kerb and channel shall extend along the frontage of the development at Raglan Street to prevent unauthorised parking. Plans for works on arterial roads shall be approved by Regional Roads Victoria and Council.
- The Supervising Consulting Engineer shall provide to Council a report of hold points and inspections for the construction and verification that the roads and drains have been designed and constructed in compliance with the above standards, by providing a list verifying the results of all tests undertaken and corresponding results. The minimum tests required to be provided to the Responsible Authority are:
  - Road Sub-grade (Proof Roll)
  - Pavement sub-base and base (density test and proof roll)
  - Pavement prior to sealing or asphalt application
  - Drainage trench and bedding
  - Drainage infrastructure prior to backfill
  - Drainage pits

3. Access

- Vehicle access/crossing to the land is to be located, constructed and maintained to the satisfaction of the Responsible Authority.
- Prior to statement of compliance the following will be constructed for approval.
  - Vehicle access/crossing to all lots is to be constructed in accordance with Infrastructure Design Manual Standard Drawing SD 240 or to approval of Responsible Authority.
  - Vehicle access/crossing to the land shall be located so that adequate sight distance is achieved to comply with Australian Standard AS2890.1:2004 Section 3.2.4 and as specified in Ausroad's Guide to Road Design Part 4A Section 3.4 - 'Sight Distance at Property Entrance'.
  - Minimum 10.0m and 9.0m clearance shall be maintained from any road intersection and between adjacent crossovers respectively.
  - Any proposed vehicular crossing shall have satisfactory clearance to any side-entry pit, power or Telecommunications pole, manhole cover or marker, or street tree. Any relocation, alteration or replacement required shall be in accordance with the requirements of the relevant Authority and shall be at the applicant's expense.
- The final location and construction of the vehicle crossing is to be approved by the Responsible Authority via a "Consent to Work within the Road Reserve", prior to

undertaking of works, unless shown on certified plans and constructed prior to statement of compliance.

4. Access and Mobility

- All footpaths shall be designed and constructed in accordance with the relevant Australian Standards, Infrastructure Design Manual [IDM] and to the satisfaction of the Responsible Authority.
- Minimum width of the footpaths shall be 1.5m and are to be constructed in accordance with IDM Standard Drawings SD 205 – Typical Footpath Detail.
- Footpaths shall be provided along one side of newly created roads within the development site and connect to the existing Council footpath network to the satisfaction of Responsible Authority.
- A new footpath connection shall be constructed from the development along the north side of Raglan Street to the existing footpath network at the corner of Smith and Reglan Streets.

5. Landscaping

- Prior to construction, the Developer is to prepare and submit a landscaping plan for road reserves and other open spaces to the satisfaction of Responsible Authority for review and approval. These plans are to comply with the Code of Practice for Management of Infrastructure in Road Reserves and shall provide following information:
    - Plant selection, layout and planting density
    - Landscaping design intent
- Street tree planting shall be designed to meet approximately 40% canopy coverage of new roads and must be selected and planted by a qualified horticulturist / arborist.
- The developer shall prepare an arborist report for all street trees within the construction zone
- The developer shall implement a construction plan showing how existing street trees shall be protected during construction works.
- Any existing street trees must be bonded for a period of 24 months at a value determined by a registered arborist. All new landscaping shall be bonded for a period of 24 months at minimum value of $400 per tree.

6. Boundary Lines

- Where a lot has significant cross fall, retaining walls and associated cut and fill shall be constructed along the lot boundary line including provisions for boundary fencing.
- All structural retaining walls shall have an engineering design and approval

7. Linemarking and Signage

- Appropriate signage and linemarking shall be provided to the satisfaction of the Responsible Authority

8. Street lighting

- Energy efficient LED street lighting shall be provided in accordance with the current issue of Australian standard AS/ANZ 1158 – Lighting for Roads and Public Spaces and to the satisfaction of the Responsible Authority.
- New lighting must be located outside the clear zones and meet the standards for category P lighting. Lighting requirements on arterial roads shall be included in the Traffic and Pedestrian Impact study.

9. Development Standard

- Prior to Statement of Compliance it is the responsibility of the developer to meet the requirements and standards as set out in the IDM (Infrastructure Design Manual) version 5.20

10. Prior to Construction

- Before any road, drainage and associated with the subdivision start following items must be satisfied.
  - Approval of the constructions plans by the Responsible Authority
  - A pre-construction meeting shall be held with the Responsible Authority, the Contractor and the Developer/Developer's Consultant Engineer to discuss and agree on hold point inspections, roadside management, traffic management and any other construction related matters.

11. Completion of Construction Works

- Prior to the issue of the Statement of Compliance for the relevant stage of the subdivision under the Subdivision Act 1988, the developer must construct and complete road works, drainage and other civil works in accordance with endorsed plans and specifications approved by the Responsible Authority and in accordance with Infrastructure Design Manual. Road works, drainage and other civil works to be constructed must include:
  - street and drainage in accordance with the approved construction drawings
  - construction of footpaths
  - underground drainage
  - intersection and traffic control/mitigation measures
  - signage and linemarking; and
  - high stability permanent survey marks
  - Lot access

12. As Constructed Drawings

- Prior to issue of statement of compliance, the Developer must provide as-constructed plans for all infrastructure created by this development and vested to the ownership and control of the Responsible Authority. Such plans shall be prepared by a registered surveyor

and/or qualified Engineer and endorsed by the Developer's Consultant Engineer and the Contractor.

- As-Constructed plans shall include:
    - An asset statement of each street including costs
    - as constructed' information for the entire work in each development stage detailing information as listed in the Infrastructure Design Manual
- Information to be presented in pdf. and dwg. formats, unless otherwise agreed in writing by the Responsible Authority.

13. Defects Maintenance and Bonds

- Prior to Statement of Compliance, the developer must enter into an agreement with the Responsible Authority regarding responsibilities for maintenance and correction of defects of all infrastructure works. Agreement must include the defects liability period, the amount of bond and the date of practical completion occurs.
- Prior to issue of Statement of Compliance, the developer must provide the Responsible Authority with a maintenance bond(s) of $5,000 or 5% of the total cost of infrastructure, whichever is greater.
- The bond(s) shall be an unconditional bank guarantee or cash for the predetermined amount. The Responsible Authority will hold the bond(s) until any and all defects notified to the developer before and/or during the liability period have been made good to the satisfaction of the Responsible Authority. A request must be made to the Responsible Authority for the release of maintenance bond(s) after the defects maintenance period.
- The Defects Liability Period for civil works shall be 12 months from the date of practical completion.
- The Defects Liability Period for landscaping shall be 24 months from the date of acceptance at a minimum bond of $400 per tree.

14. All costs incurred in complying with the above conditions shall be borne by the permit holder.

15. Plan Checking & Supervision Fee

- In accordance with the Subdivision Act 1989, Responsible Authority requires the following fees for works undertaken on this Subdivision.
    - Plan checking fee of 0.75% of the value of works
    - Supervision fee of 2.50% of the value of works

Prepared by: Ashley Goad – Engineering Development Officer
Date: 23/12/2022

Department of Transport

GPO Box 2392
Melbourne, VIC 3001 Australia
Telephone: +61 3 9651 9999
www.transport.vic.gov.au
DX 201292

Richard Siedlecki
Hepburn Shire Council
10 Duke Street
Daylesford VIC 3460

Dear Richard

PLANNING APPLICATION NO.:	**PLNPA003533**
DEPARTMENT REFERENCE NO:	**PPR 40213/22**
PROPERTY ADDRESS:	**4719 MIDLAND HIGHWAY, DAYLESFORD VIC 3460**

Section 55 – No objection subject to conditions

Thank you for your correspondence, referring details of the above application to the Department of Transport (Head, Transport for Victoria) pursuant to Section 55 of the Planning and Environment Act 1987.

The application is for:

Construction of a Dwelling, Associated Works and Creation of Access to Transport Zone 2.

The Department has considered the application and in principle has no objection to the proposal, but would require that the following conditions be included in any Notice of Decision to issue a Planning Permit or Planning Permit:

1) Prior to the start of the development amended plans must be submitted to and approved by the Department of Transport. When approved by the Roads Corporation, the plans may be endorsed by the Responsible Authority and will then form part of the permit. The plans must be drawn to scale with dimensions and two copies must be provided. The plans must be generally in accordance with the plans date stamped 10/12/2021 and annotated as but modified to show:
   a) The removal of the proposed access to Midland Highway with the only access being the existing access at the southern boundary.
2) Prior to the commencement of construction of the dwelling the existing access at the southern property boundary must be upgraded to the satisfaction of the Head, Transport for Victoria in accordance with VicRoads guideline drawing GD4010 Typical Access to Rural Properties (attached) to cater for an 8.8m service vehicle as detailed in Table 2 - Access Setout Details as shown on the guideline drawing (modified to suit location).

Please forward a copy of the Planning Permit, Notice of Decision to Grant or Refusal to Grant a Planning Permit to the Department at western.mail@roads.vic.gov.au, as required under Section 66 of the Planning and Environment Act 1987.

Should you have any enquiries regarding this matter, please contact western.mail@roads.vic.gov.au

Yours sincerely

V. mcleod

Virginia Mcleod
Team Leader Statutory Planning - Grampians
REGIONAL TRANSPORT
DEPT. OF TRANSPORT
Under delegation from the Head, Transport for Victoria
12/12/2022
Cc Applicant

I, as Biodiversity officer for Hepburn Shire Council do not object to permit on biodiversity grounds if the following specific conditions are met;

- That the protection measures identified in the Xylem report to protect the mature *Eucalyptus viminalis* (Tree 4) on adjacent property are complied with
- In addition to the temporary measures above, redesign surrounding land use close to the tree to ensure permanent clearance from infrastructure, allow for natural limb fall and regeneration of this tree and planting of associated indigenous plant species to help viability of this remnant tree into the future. This could be achieved through extension of the Drainage and recreation Reserve to incorporate the TPZ and a 'fall zone'.
- That planting designs of the recreation and drainage reserves incorporate indigenous plantings that could constitute corridor or 'stepping stone' habitats.

In developing this assessment I have reviewed the Vegetation assessment by Mark Trengrove supplied with the report, the Arborist report (Xylem) and in addition inspected the NatureKit website and inspected the site from roadsides. I concur with the assessment of the site's current biodiversity values.

Clause 12.01-1s identifies the strategy to 'Support land use and development that contributes to protecting and enhancing habitat for indigenous plants and animals in urban areas.' This might be addressed through the protection measures for the remnant tree identified above and through inclusion of habitat plantings of indigenous plant species in the Recreation and drainage reserves to help constitute corridor or 'stepping stone' habitats

Regards,
Brian Bainbridge

ATTACHMENT 10.2.17

GMW Ref: PP-22-00856
Doc ID: A4460036

Hepburn Shire Council
Planning Department
shire@hepburn.vic.gov.au

22 August 2022

Dear Sir and/or Madam,

Planning Permit Application - Subdivision - Multi Lot Staged Subdivision

Application No.	PLN22/0176
Applicant:	Smith Development Partnership Pty Ltd
Location:	4719 Midland Hwy DAYLESFORD VIC 3460 V 12297 F 878 Lot 2 Plan 826164A

Thank you for your letter and information received 19 July 2022 in accordance with Section 55 of *the Planning and Environment Act 1987.*

Goulburn-Murray Water's (GMW's) areas of interest are surface water and groundwater quality, use and disposal. GMW requires that development proposals do not impact detrimentally on GMW's infrastructure and the flow and quality of surface water and groundwater. Applicants must ensure that any required water supplies are available from an approved source.

GMW's understands that the applicant is seeking planning permission for a 5 lot subdivision and vegetation removal. The property is zoned NRZ1 and subject to ESO1, ESO2 and HO. The property is located in the Cairn Curran Special Water Supply Catchment area. It is noted that the site will be connected to all services including reticulated sewer and drainage. A waterway/drainage reserve is located to the west and north-east of the subject site.

Based on the information provided and in accordance with Section 56 (b) of *the Planning and Environment Act 1987*, Goulburn-Murray Water has no objection to this planning permit being granted subject to the following conditions:

1. All construction and ongoing activities must be in accordance with sediment control principles outlined in 'Construction Techniques for Sediment Pollution Control' (EPA, 1991).

2. Any Plan of Subdivision lodged for certification must be referred to Goulburn-Murray Rural Water Corporation pursuant to Section 8(1)(a) of the Subdivision Act.

3. Each lot must be provided with connection to the reticulated sewerage system in accordance with the requirements of the relevant urban water authority.

PO Box 165 Tatura Victoria 3616 Australia
reception@gmwater.com.au
1800 013 357
www.gmwater.com.au

ABN. 46 761 336 846

4. All stormwater discharged from the site must meet the urban run-off objectives and Standard C25 as specified in Clause 56.07-4 of the Victorian Planning Provisions. All infrastructure and works to manage stormwater must be in accordance with the requirements of the Responsible Authority.

5. The plan of subdivision submitted for Certification must show a drainage reserve in favour of the relevant authority.

If you require further information please e-mail planning.referrals@gmwater.com.au or contact 1800 013 357.

Yours sincerely

Ranine McKenzie
STATUTORY PLANNING PARTNER
Per: (original signed by Loretta Mulla)

Doc code: 22/13797 Sect 55 2022-08-12
Your ref: PLNN/0176

CENTRAL HIGHLANDS WATER

12th August 2022

Julie Lancashire
Statutory Planner
Hepburn Shire Council
P.O. Box 21
DAYLESFORD VIC 3460

Dear Julie,

Application for Planning Permit, Application for a staged multi lot subdivision and associated works and roadwork's. Subdivision of land adjustment to transport zone 2 and creation of access to a road in a transport zone 2. Removal of vegetation,4719 Midland Highway, Daylesford.

We refer to your letter received 19th July 2022 and advise that in accordance with Section 56(1)(b) of the Planning and Environment Act, this Authority does not object to the granting of any permit that may issue subject to the following conditions: -

1. Any plan lodged for certification will be referred to the Central Highlands Region Water Corporation pursuant to Section 8(1)(a) of the Subdivision Act.

2. Reticulated sewerage facilities must be provided to each lot by the owner of the land (or applicant, in anticipation of becoming the owner) to the satisfaction of the Central Highlands Region Water Corporation. This will include the construction of works and the payment of major works contributions by the applicant.

3. A reticulated water supply must be provided to each lot by the owner of the land (or applicant, in anticipation of becoming the owner) to the satisfaction of the Central Highlands Region Water Corporation. This will include the construction of works and the payment of major works contributions by the applicant.

4. The owner will provide easements to the satisfaction of the Central Highlands Region Water Corporation, which will include easements for pipelines or ancillary purposes in favour of the Central Highlands Region Water Corporation, over all existing and proposed sewerage facilities within the proposal.

5. If the land is developed in stages, the above conditions will apply to any subsequent stage of the subdivision.

Yours faithfully,

Casey Boucher
Senior Officer Planning

Central Highlands Region Water Corporation
7 Learmonth Rd Wendouree VIC 3355 PO Box 152 Ballarat VIC 3353
T: 1800 061 514 **F:** 03 5320 3299 **E:** customerenquiries@chw.net.au **ABN:** 75 224 340 348
chw.net.au

cfa.vic.gov.au

Our patron, Her Excellency the Honourable Linda Dessau AC, Governor of Victoria

CFA Fire Prevention and Preparedness
8 Lakeside Drive Burwood East Vic 3151
Email: firesafetyreferrals@cfa.vic.gov.au

CFA Ref: **15000-76808-121226**
Council Ref: **PLN22/0176**

29 July 2022

Town Planner
Hepburn Shire Council
P O Box 21
DAYLESFORD VIC 3460

Dear Town Planner,

CONDITIONAL CONSENT TO GRANT A PERMIT
CERTIFICATION AND COMPLIANCE REQUIRED

Application No: PLN22/0176
Address: 4719 Midland HighwayDaylesford

CFA, acting as a Referral Authority pursuant to Section 55 of the Planning and Environment Act does not object to the grant of a permit for the subdivision at 4719 Midland Highway Daylesford subject to the following conditions being attached to any permit which may be issued and a copy of the permit being forwarded to CFA.

– Start of Conditions –

1. Hydrants

Prior to the issue of a Statement of Compliance under the *Subdivision Act 1988* the following requirements must be met to the satisfaction of the CFA:

1.1 Above or below ground operable hydrants must be provided. The maximum distance between these hydrants and the rear of all building envelopes (or in the absence of building envelopes, the rear of the lots) must be 120 metres and the hydrants must be no more than 200 metres apart. These distances must be measured around lot boundaries.

1.2 The hydrants must be identified with marker posts and road reflectors as applicable to the satisfaction of the Country Fire Authority.

Note – CFA's requirements for identification of hydrants are specified in 'Identification of Street Hydrants for Firefighting Purposes' available under publications on the CFA web site (www.cfa.vic.gov.au)

2. Roads

Roads must be constructed to a standard so that they are accessible in all weather conditions and capable of accommodating a vehicle of 15 tonnes for the trafficable road width.

2.1 The average grade must be no more than 1 in 7 (14.4%) (8.1 degrees) with a maximum of no more than 1 in 5 (20%) (11.3 degrees) for no more than 50 meters. Dips must have no more than a 1 in 8 (12%) (7.1 degree) entry and exit angle.

2.2 Curves must have a minimum inner radius of 10 metres.

2.3 Have a minimum trafficable width of 3.5 metres and be clear of encroachments for at least 0.5 metres on each side and 4 metres above the access way.

2.4 Roads more than 60m in length from the nearest intersection must have a turning circle with a minimum radius of 8m (including roll-over kerbs if they are provided) T or Y heads of dimensions specified by the CFA may be used as alternatives.

– End of Conditions –

Additional Comments

CFA requests that the Responsible Authority reviews the sweep path diagram prepared by One Mile Grid, Drawing Numbers: SPA100, SPA101 & SPA102, Rev A, in Appendix B into the site as it involves large vehicles to cross over to the other side of the road upon entry and exit to the site.

CFA recommends that both entries and egresses are widened to allow trucks to turn within the road lane to minimise the risk of a collision.

CFA does not consent to the Certification of the Plan of Subdivision and Statement of Compliance for Subdivision at this stage.

If you wish to discuss this matter, please do not hesitate to contact Anthony Kacunic, Fire Safety Officer, on 0429 105 701.

Yours sincerely,

Andrew Ganey
Bushfire Planning Advisor
Fire Risk, Research & Community Preparedness

cc: naomi@nicheplanningstudio.com.au

Our Reference: 308522050
Your Reference: PLN22/0176

28 July 2022

Hepburn Shire Council
PO BOX 21
DAYLESFORD VIC 3460

Dear Sir/Madam

CONDITIONAL CONSENT TO ISSUE OF PLANNING PERMIT
PLAN NO: PLN22/0176
4719 MIDLAND HIGHWAY, DAYLESFORD

Subject to the following conditions, Powercor Australia Ltd (the Distributor) does not object to the issue of a planning permit for the abovementioned application

Conditions Required By the Distributor

1. This letter shall be supplied to the applicant in its entirety.

2. The plan of subdivision submitted for certification under the Subdivision Act 1988 shall be referred to the Distributor in accordance with Section 8 of that Act.

3. The applicant shall provide an electricity supply to all lots in the subdivision in accordance with the Distributor's requirements and standards.
Notes: Extension, augmentation or rearrangement of the Distributor's electrical assets may be required to make such supplies available, with the cost of such works generally borne by the applicant.

4. The applicant shall ensure that existing and proposed buildings and electrical installations on the subject land are compliant with the Victorian Service and Installation Rules (VSIR).
Notes: Where electrical works are required to achieve VSIR compliance, a registered electrical contractor must be engaged to undertake such works.

5. The applicant shall, when required by the Distributor, set aside areas with the subdivision for the purposes of establishing a substation or substations.
Notes: Areas set aside for substations will be formalised to the Distributor's requirements under one of the following arrangements:
   - RESERVES established by the applicant in favour of the Distributor.

~SAP{6DCD7C9F-7234-41BE-B0B1-1C3AC7C54279}

- SUBSTATION LEASE at nominal rental for a period of 30 years with rights to extend the lease for a further 30 years.
  The Distributor will register such leases on title by way of a caveat prior to the registration of the plan of subdivision.

6. The applicant shall establish easements on the subdivision, for all existing Distributor electric lines where easements have not been otherwise provided on the land and for any new powerlines to service the lots or adjust the positioning existing easements.
   Notes:
   - Existing easements may need to be amended to meet the Distributor's requirements
   - Easements required by the Distributor shall be specified on the subdivision and show the Purpose, Origin and the In Favour of party as follows:

Easement Reference	Purpose	Width (Metres)	Origin	Land Benefited / In Favour Of
	Power Line		Section 88 - Electricity Industry Act 2000	Powercor Australia Ltd

***** END OF CONDITIONS *****

It is recommended that applications for electricity supply to each lot be submitted at the earliest opportunity so that the precise requirements of the Distributor can then be determined and accommodated. Applications for electricity supply shall be submitted via the Distributor's web portal, "mySupply" which can be accessed via the following link:
https://customer.portal.powercor.com.au/mysupply/CIAWQuickCalculator

Queries about this subdivision may be directed to the Customer Requests Team on 1800 771 434 or crr@powercor.com.au.

Yours faithfully,

Lucii Soreno

Lucii Soreno
Customer Requests Officer

NCCMA Ref: NCCMA-F-2022-01014
Council Ref: PLN22/0176
Date: 25 July 2022

Julie Lancashire
Statutory Planner
Hepburn Shire Council
Po Box 21,
Daylesford Vic 3460

Dear Julie

Planning Permit Application No: **PLN22/0176**
Development Description: **Application for a staged multi lot subdivision and associated works and roadwork's. Subdivision of land adjustment to transport zone 2 and creation of access to a road in a transport zone 2. Removal of vegetation**
Street Address: **4719 Midland Highway Daylesford Vic 3460**
Cadastral Location: **Lot 3 TP826164, Parish Of Wombat**
Applicant: **Smith Development Partnership**

Thank you for your referral under Section 55 of the *Planning and Environment Act, 1987* dated 19 July 2022, and received by North Central Catchment Management Authority (CMA) on 19 July 2022, regarding the above matter.

North Central CMA, pursuant to *Section 56* of the *Planning and Environment Act 1987,* **does not object** to the granting of a permit.

Advice to Applicant / Council

Information available at North Central CMA indicates that the location described above is not subject to flooding from any designated waterway based on a flood level that has a probability of occurrence of 1% in any one year. It would be in your best interest to contact the relevant Local Council regarding the impact of overland flows associated with the local drainage system.

Should you have any queries, please do not hesitate to contact me on **(03) 5440 1896**.
To assist the CMA in handling any enquiries and the supply of further information, please ensure you quote **NCCMA-F-2022-01014** in your correspondence.

Yours sincerely

Camille White

Camille White
Manager Floodplain
Cc: Smith Development Partnership

Information contained in this correspondence is subject to the definitions and disclaimers attached.

ABN 73 937 058 422
628-634 Midland Highway, Huntly
PO Box 18, Huntly Victoria 3551

Telephone 03 5448 7124
Email info@nccma.vic.gov.au
www.nccma.vic.gov.au

www.nccma.vic.gov.au

Attached: Definitions and Disclaimers

Definitions and Disclaimers

1. The area referred to in this letter as the 'proposed development location' is the land parcel(s) that, according to the Authority's assessment, represent(s) the location identified by the applicant. The identification of the 'proposed development location' on the Authority's GIS has been done in good faith and in accordance with the information given to the Authority by the applicant(s) and/or local government authority.
2. While every endeavour has been made by the Authority to identify the proposed development location on its GIS using VicMap Parcel and Address data, the Authority accepts no responsibility for or makes no warranty with regard to the accuracy or naming of this proposed development location according to its official land title description.
3. **AEP** as Annual Exceedance Probability – is the likelihood of occurrence of a flood of given size or larger occurring in any one year. AEP is expressed as a percentage (%) risk and may be expressed as the reciprocal of ARI (Average Recurrence Interval).

   Please note that the 1% probability flood is not the probable maximum flood (PMF). There is always a possibility that a flood larger in height and extent than the 1% probability flood may occur in the future.
4. **ARI** as Average Recurrence Interval - is the likelihood of occurrence, expressed in terms of the long-term average number of years, between flood events as large as or larger than the design flood event. For example, floods with a discharge as large as or larger than the 100-year ARI flood will occur on average once every 100 years.
5. **AHD** as Australian Height Datum - is the adopted national height datum that generally relates to height above mean sea level. Elevation is in metres.
6. No warranty is made as to the accuracy or liability of any studies, estimates, calculations, opinions, conclusions, recommendations (which may change without notice) or other information contained in this letter and, to the maximum extent permitted by law, the Authority disclaims all liability and responsibility for any direct or indirect loss or damage which may be suffered by any recipient or other person through relying on anything contained in or omitted from this letter.
7. This letter has been prepared for the sole use by the party to whom it is addressed and no responsibility is accepted by the Authority with regard to any third party use for the whole or any part of its contents. Neither the whole nor any part of this letter or any reference thereto may be included in any document, circular or statement without the Authority's written approval of the form and context in which it will appear.
8. The flood information provided represents the best estimates based on currently available information. This information is subject to change as new information becomes available and as further studies are carried out.

ABN 73 937 058 422
628-634 Midland Highway, Huntly
PO Box 18, Huntly Victoria 3551

Telephone 03 5448 7124
Email info@nccma.vic.gov.au
www.nccma.vic.gov.au

www.nccma.vic.gov.au

Department of Transport and Planning

GPO Box 2392
Melbourne, VIC 3001 Australia
www.transport.vic.gov.au

Ref: PPR 40475/22

Julie Lancashire
Hepburn Shire Council
10 Duke Street
Daylesford VIC 3460

Dear Julie

PLANNING APPLICATION NO.:	**PLN22/0176**
DEPARTMENT REFERENCE NO:	**PPR 40475/22**
PROPERTY ADDRESS:	**4719 MIDLAND HIGHWAY, DAYLESFORD VIC 3460**

Section 55 – No objection subject to conditions

Thank you for your correspondence, referring details of the above application to the Department of Transport and Planning (Head, Transport for Victoria) pursuant to Section 55 of the Planning and Environment Act 1987.

The application is for:

Multi Lot Subdivision and Associated Road Wors, Subdivision of Land adjacent Transport Zone 2, Creation of access to a Road in a Transport Zone 2 and Removal of Vegetation.

The Department has considered the application and in principle has no objection to the proposal, but would require that the following conditions be included in any Notice of Decision to issue a Planning Permit or Planning Permit:

1. Prior to the issue of Statement of Compliance the following roadworks on Midland Highway must be completed to the satisfaction of and at no cost to the Head, Transport for Victoria:
    a. Intersection of local road generally in accordance with provided plan from One Mile Grid titled Proposed Intersection (Midland Highway) Concept Layout Plan drawing number CLP101 including line marking
2. Prior to the issue of Statement of Compliance footpath must be constructed the entire southern boundary (Raglan Street frontage)to the roundabout intersection including pram ramp to connect to southern side of Raglan Street to the satisfaction of the Responsible Authority and at no cost to the Head, Transport for Victoria.
3. All waste collection must be via the local road
4. During the construction of the internal local road and dwellings the developer must ensure the Midland Highway remains debris free and maintained in a fit and proper state so as to not compromise the ability of vehicles using the Midland Highway.

NOTES: Prior to the works commencing, the applicant must enter into a Works Agreement with the Head, Transport for Victoria, confirming design plans and works approvals processes, including the determination of fees and the level of Head, Transport for Victoria's service obligations.
The proposed development requires removal of a street tree. Tree removal constitutes works within the Midland Highway road reserve and separate approval under the Road Management Act for this activity is required from the Head, Transport for Victoria.

Please forward a copy of the Planning Permit, Notice of Decision to Grant or Refusal to Grant a Planning Permit to the Department at western.mail@roads.vic.gov.au, as required under Section 66 of the Planning and Environment Act 1987.

Should you have any enquiries regarding this matter, please contact western.mail@roads.vic.gov.au

Yours sincerely

V. Mcleod

Virginia Mcleod

Team Leader Statutory Planning - Grampians
REGIONAL TRANSPORT
DEPT. OF TRANSPORT AND PLANNING
Under delegation from the Head, Transport for Victoria
3/03/2023
Cc Applicant

Reason(s) for the submission/objection - I object to this planning application for several reasons.

Just like 17 Smith St Daylesford, the developer is making an application for land surrounding ‘eco village’ or ‘super lot’ - which is an unknown use of this land. So these applications are not 'full and disclosed’.
What are we to assume will happen there? This will definitely constitute overdevelopment. Until there is full disclosure, one must assume such overdevelopment.

As this is the final (we hope) of the parcels of land that this developer ‘destroys’, the character of the area will be detrimentally affected. It will complete 30 acres of new development at the entrance to town, where once sheep grazed. An unknown number of suburban little houses will create a shining river of little boxes covered in solar panels, with no space to plant trees (in the superlots). The Council will be responsible for this nasty non-retractable decision. Once this end of town is destroyed, nothing can be done.

The impact on services will be massive. This small town will now have hundreds more houses and people. Our services are just able to cope now - but what of this bleak future? Everything from fire, ambulance, utilities and traffic. Has there been a full study on the population increase for our local fire station when all these houses are complete - not just considering each individual application, but the whole 30 acres as a total area housing hundreds of new residents?

Hepburn Shire can endorse such a proposal and reap the financial rewards, or take a strong stand and say no. The developer must disclose the full development potential - not this stage 1, stage 2, stage 3 business. Tell the town how many they intend to cram in. Don’t let the developers hoodwink us, destroy the town, and then go back to their houses, none of which are in Hepburn Shire.

I would like to see strength in our Council, not weak pushovers …

[redacted]

[redacted]

For the attention of the **Hepburn Council Planning Dept**.

Please accept this as our formal objection (summary) to the proposed Wombat Park development (PLN 22/0176 Address 4719 Midland Highway).

These include:

1. Inadequate planning for flooding and storm-water drainage (including impact to residents on Malmsbury Road)

2. Loss and threat to trees; (particularly to very old and established Trees) environmental issues; nature conservation of environment and land

3. Highway safety; Dangerous traffic generation & road access

4. Lack of unencumbered open space in general

5. No consideration of the underground mining tunnel known as the "Defiance Tunnel"

We will be submitting a detailed submission early in the new year, noting that council will consider all submissions received up until the date it makes its decision on this proposed development application.

.

Kind regards,

[redacted]

[redacted]

[redacted]

For the attention of the Hepburn Council Planning Dept.

Please accept this as our formal objection (summary) to the proposed Wombat Park development (PLN 22/0176 Address 4719 Midland Highway).

These include:

1. Inadequate planning for flooding and stormwater drainage (including impact to residents on Malmsbury Road)

2. Loss and threat to trees; environmental issues; nature conservation of environment and land

3. Highway safety; traffic generation; road access

4. Lack of unencumbered open space

5. No consideration of the underground mining tunnel known as the Defiance Tunnel

We will be submitting a detailed submission early in the new year, noting that council will consider all submissions received up until the date it makes its decision on this proposed development application.

Many thanks.

Kind regards,

[redacted]

[redacted]

[redacted]

[redacted]

For the attention of the Hepburn Council Planning Dept.

We tried to draft our complaint similar to that of [redacted]. However, we have come to conclusion that we cannot draft our complaints better than they have done. So with their permission, we have cut & paste theirs and forward it to you. Please record it as our legal objection to this plan. Thank you

Dear Rick, We are [redacted]
Could you also please confirm receipt of this email for us. Thank you.

Further to the summary provided on 30 December, here is the detailed response.

Please accept this as the addendum to our formal objection to the proposed Wombat Park development "Middleton Field" (PLN 22/0176 Address 4719

Midland Highway), with particular reference to Lot 2.

The application is communicated as 8 super lots - these super lots will subsequently redeveloped. This is in addition to Stage 2 of Middleton Field which represents a high density development of approx. 50 dwellings and as such future implications in allowing this development must be considered at this time.

By saying it is only a 8 lot subdivision, developers avoid having to comply with a range of planning scheme requirements applicable to a larger lot subdivision. This occurred with the 17 Smith St development. By applying for an 8 lot subdivision here, regardless that the lots may later be further subdivided into multiple dwellings, the developers are minimising their compliance requirement with the Planning Scheme.

What assurances can council give that this staged multi-lot subdivision into 8 lots (inclusive of one superlot) does not subsequently turn into lots with high density dwellings impacting both the neighbourhood character and heritage of the township?

1. Inadequate planning for flooding and stormwater drainage (including impact to residents/existing dwellings on Malmsbury Road)

The area of Wombat Park to be developed is known to be a floodplain and enhanced storm water management is required in addition to the standard approach. This proposed development, combined with Stage 2, Smith Street and Ragan Streets will create an additional and significant increase of storm water in rainfall events due to removal of vegetation and construction of roads and dwellings. This needs to be managed very carefully in an area already prone to flooding.

In regards to existing dwellings on Malmsbury Road (start of Midland Highway) - currently there is a council storm water pipe which runs under properties between Knox St and Malmsbury Rd carrying all of the stormwater from the East St area and precinct via the spring next to the Farmers Arms, distributing it along Malmsbury Road, under the road and then onto Wombat Park. The pipe - an asset owned by the HSC - which flows from Knox St is inadequate in size and in significant rainfall events the excess stormwater impacts dwellings in this area via a number of overflow drains - as well as flooding the road and highway. In such rain events, the water cannot get away quickly enough, hits the floodplain in Wombat Park and causes flooding. The introduction of a concrete dense development, removal of significant trees and a standard approach to stormwater management as currently proposed will vastly impact dwellings.

Research projects that significant rainfall events and subsequent flooding as a result of climate change will occur more frequently and more be impactful. Council needs to ensure that stormwater management and flood planning are very carefully assessed - and that the development application is not just 'rubber stamped' as others in the shire have been.

The council should include the requirement for green infrastructure, permeable pavements/surfaces, rain gardens and other nature based flood mitigation strategies to assist with this crucial issue.

How will the council protect residents and existing dwellings on Malmsbury Road & Knox St - and indeed the new housing - from future flooding crises as a result of this proposed development?

2. Loss and threat to trees; environmental issues; nature conservation of environment and land

There are a number of significant environmental impacts related to the proposed development. The land is home to an abundance of wildlife, natural waterways and conservation of this must be considered. A standard approach is not acceptable - proper oversight and protection of our natural waterways mineral springs is required.

The removal of significant tree is a serious concern.

In regards to the cedar trees - there are number of these which will be cut down to provide roadways into the development site. There are also many more cedar trees which line Wombat Park along Malmsbury Road and Raglan Street. These trees are circa 100+ years old and can live for hundreds of years. These trees serve a number of critical purposes:

- Wind break from significant winds across the Wombat Plains (Wombat Park)
- Tree canopy offering protection from the harsh western sun in summer and contributing to decreasing urban heat
- Food source and shelter for a vast array of bird and wild life
- Carbon sequestration (this cannot be understated in trees of this stature and age)
- Significantly contributing to the neighbourhood character of the township

Once the 8 super lots along the roadside are sold and redeveloped into multiple dwellings what assurances can the council give to ensure that this entire avenue of cedar trees will not be culled through a permit process by each individual future lot owner? The environmental impact of this is enormous and must be considered at this point.

3. Highway safety; traffic generation; road access

The proposed development site (including Stage 2) could see a 20% increase in population of the Daylesford township.

Malmsbury Road signals the start of the Midland Highway (north Bound). While it is a 60km zone very few motorists adhere to the limit and there are no signs indicating it is a 60km/hour zone when exiting the town. Many - particularly HVs - consider this road as the highway and as such drive to a high speed both inbound and outbound. Turning on/off Malmsbury Road on to private dwellings is already being impacted by motorists who are driving unsafely.

This road is also used by many pedestrians and cyclists. The addition of entry/exit road into the proposed site (ie on Raglan Street and Malmsbury Road) represents additional safety issues for turning traffic.

Additional measures should be included such as extending the 60km zone past the Angus Stud and entry to Wombat Estate - and clearly sign posting this for inbound and outbound traffic and ensuring an appropriate shoulder is built.

The road turning into the development from Malmsbury Road should also be further towards Midland Highway - suggestion position is opposite the existing vacant block of land owned by to alleviate road safety concerns, noise pollution etc.

This is also extremely important for the road into the estate from Raglan Street as this section of the road is heavily trafficked by motorists and HVs, the roundabout, Mitre 10, industrial estate and market traffic on Sunday. The shoulders are in a poor condition along this stretch of road and do not allow all motorists to pull over quickly. The existing shoulder needs significant grading and has not been maintained by the HSC in some time.

When we met with the developers for a drop in session / Q&A regarding Middleton Field they indicated that a wooden post and rail fence would be erected along the estate (roadside). It is important that the material of this fencing does not reflect traffic noise back to existing dwellings but absorbs it.

What assurances can council give to ensure the relevant existing roads and road safety signage is uplifted and included in this development application?

4. Lack of unencumbered open space

The council must take into consideration the next stage and future stages of this development application. It is unacceptable that a site of this size does not have adequate unencumbered open space, particularly given the historical and environmental significance of this area.

Wombat Park and plains are iconic to Daylesford and should include a significant unencumbered park and conservation area which speaks to the environment, natural waterways, heritage of the site, the Wombat Estate, the history and significance of the Stanbridge family and mining history. It must offer not only the local residents but others an area to enjoy and appreciate the natural environment.

5. No consideration of the underground mining tunnel known as the Defiance Tunnel.

As part of an historic mining site, the land retains remnants of the mining era including the Defiance Tunnel.

It is understood that an opening to the tunnel exists off Malmsbury Road, there is water flowing through this and it partially travels underneath housing on Malmsbury Road and beyond. There has been no assessment made on what impacts this development will have to the tunnel and subsequently the existing dwellings.

The development represents a 20% increase to the township's population. Current infrastructure is already under pressure or inadequate ie schools, supermarkets, traffic, roads, social and community services, public transport, police etc. If the Stage 2 development also represents a public housing commission site these considerations are even more important.

What assurances will council have in place and genuine oversight of the development to ensure that the proposed site - a significant entrance to the township - does not turn into another concrete urban eyesore, as has been witnessed before and indeed in many other popular townships?

Kind regards,

[redacted]

Objection to permit applications:
PLN220263
PA003530
PLN 22/017

Dear Council,

I object to these applications as they stand, and recommend ways to bring them into alignment with the values of our rural town.

But firstly, when assessing permits our council must look at a range of factors and ask:

Do we actually need so many new houses, are they relevant to our population & can the town infrastructure & services cope?

- more houses does not guarantee affordability. ([redacted]. He disproved the myth that housing supply trickles down into affordability.)

https://www.prosper.org.au/wp-content/uploads/2022/07/Staged-Releases-Prosper-Australia-web22.pdf

- with total subdivisions now in play to be serviced by Daylesford, we are looking at a potential population increase of 20%, I can't see how you prepared for the increased pressure on services and infrastructure.

Is Daylesford and are these sites suitable for such over/infill development?

1. the Central Highlands Growth Plan (2014) cites Daylesford is **not a growth area**
2. the town is of **high bush fire risk**
3. has **minimal public transport**
4. is popular due to its **distinctive historic and rural nature**
5. is in an **important water catchment** and recharge zone
6. has **extremely fertile soil** in a diminishing food bowl
7. has a **high ageing population**
8. has a **high low income** earning population
9. has **poor housing affordability**

If council, the developer and their architects mean what they say when they
- acknowledge dja dja Wurrung country,
- claim to want to protect the unique features of Daylesford's rural historic nature,
- talk of 'sustainable' planning and design,

then there are changes they could make to the permit applications to ensure they respect these intentions which add value to the town rather than detract from it.

Recommended changes all permits (general)

1. Consider the natural drainage pattern and preserve all drainage lines
    a. prevent building over them

   b. design around them all & enable natural above ground flow
   c. revegetate with location appropriate native plants
2. Insist upon 5% total area as actual open space, and not cash contribution
3. Require 10-20% homes actually affordable for low income residents.(define affordable)
4. Ensure minimal 35% garden cover
5. Provide wider roads, with footpaths on both sides
6. Use permeable materials for roadways, sidewalks, and driveways that allow water to infiltrate the soil and reduce runoff.
7. Incorporate swales and landscaping to encourage infiltration
8. Avoid concrete kerbs to promote passive irrigation off roads
9. Streetscape Water Sensitive Urban Designs in flatter areas to capture first flush
10. Construct rain gardens and bioswales in open space & areas of the development to capture and filter pollutants, reducing the amount of water that flows downstream.

Recommended changes to developer's "design/lifestyle guidelines"

1. Support rural life in design /lifestyle guidelines eg contrary to current developer guidelines, choose to allow visibility of garden sheds, water tanks, machinery, trailers caravans etc atm their design guidelines are very citicentric
2. Daylesford has cold winters and frequent power blackouts, so unsuitable for sole dependence on electricity.
3. Preserve visual amenity by minimising roof glare & incorporating dimmed solar powered street lighting (rather than blinding LED)
4. Retain acoustic amenity by encouraging quiet slow gardening
5. Encourage and educate environmentally friendly methods of gardening to reduce toxins in runoff water & protect waterways
6. Choose reclaimed wood seating over uncomfortable concrete which is both too hot and too cold.
7. Incorporate Electromagnetic Radiation (EMR) protection in home design

Recommended changes to specific permits:

1.PLN 220263: 31 townhouses in 17 Smith st (ecovillage)

1. Require maximum parking spaces as per Planning Scheme dictates (ie deny waiver request)
2. Provide enough parking in eco villages for visitors, carers & delivery vans, developers cannot assume, as they have, that owners will ride bikes as Daylesford is too hilly, wet & cold & full of elders.
3. Provide onsite parking for smaller social houses
4. Provide for single story homes for the ageing & infirm who find stairs challenging
5. Provide for alternatives to electric for heating due to Daylesford's cold climate and frequent power outages
6. Allow fenced yards for dogs

2. PLN22/017: 4719 Midland Highway

1. Investigate location of historic Defiance Tunnel and avoid building over

2. Design away from flood zones, determine where watertable is
3. Provide another exit road into Midland highway, ½ way between suggested and roundabout as too densely populated posing risk in a fire
4. Create wider verges at Wombat Park border for vegetated buffer between farm land & residential zone. Farmers have the legal right to shoot domestic dogs if they trespass onto farmland. Protection buffers needed between incompatible land uses to prevent tension.
5. To protect cedars, prevent further subdivision of large blocks and ensure build is away from permissible bushfire removal zones.
6. Encourage multiple occupancy for tiny homes, (not air bnns) on larger lots
7. Encourage Community Land Trust ownership of larger lots

3. PA003530: 9 Raglan st

1. Preserve historic house as potential community centre / milk bar
2. Redesign street layout so as to not build on the northern drainage line. (leading into 17&29 Smith st)
3. Redesign layout so as to front homes to landscaped featured drainage line walkway on 4719 midland hwy

Suggested Developer Contributions

1. Consult djarra people on naming of streets
2. Make a contribution for a new fire truck & station as the increase in population resulting from these developments will not be adequately serviced by current fire fighting vehicles
3. Make a contribution to wildlife shelters due to displacement of the resident kangaroo mob.

In addition I request a councillor briefing session
1. for the whole development now referred to as ‘Middleton Fields’ Master Plan

2. where the format be more interactive with
a) more than 3 minutes to speak,
b) possibility to question planners, councillors and developers

And a general request

3. that prior to land being zoned for non-agricultural purposes, hydrological and soil quality assessments must be conducted to determine suitability of land for development

Thank you for helping keep Daylesford special for this and future generations.

Sincerely

[redacted]

View from Midland Highway : precious fertile red soil being covered in bitumen on17 Smith st.

[redacted]

To whom it may concern,

I live at [redacted] which is directly opposite the proposed development, specifically opposite the proposed new road entry into the development off Malmsbury rd. As such I will be directly affected on a number of levels and wish to submit a considered objection. However given the size of the documents, the brief period between receiving this notice and closing day and the timing ie receiving this around the Christmas period, makes it near impossible to submit a well thought out and considered objection.

As you can see from the photo attached the post date was 14/12/22 and the close date 30/11/22. This gives us 15 days to respond over Christmas, a time when most of us are distracted with end of year and Christmas obligations. I am hard pressed to believe this is coincidental.

I am therefore OBJECTING to the close day stated on your notice and request the date be extended till at least the end of January, which will enable myself and others affected by this substantial development to consider its impact.

Sincerely

[redacted]

[redacted]

We would like to state our objection to planning Application reference: PLN22/0176.

My family cannot fathom how Hepburn Shire Council can allow this continued carving up of land and destruction of the beautiful entrance to a rural town. We have been rate payers in the shire since 2012, having lived in Hepburn Springs and now Trentham and are deeply saddened at this development (and the surrounding ones).

This and the other developments by this same developer will permanently change Daylesford and destroy the very appeal that makes people come to visit, which has earned Daylesford the reputation it has earned for natural beauty and country charm. It is short sighted and I believe to the absolute detriment of everyone in Daylesford except the developer and the tradespeople he uses to build them....but then again they'll be unlikely to be local.

The increase in population will be significant (I have heard 20% increase) and the town already cannot cope. What's next....a huge new supermarket? Larger fire station? Bigger schools? How will the crumbling roads cope with increased traffic? Where will people park in or near the main street? Will more daycare be needed? Will the Avenue of Honor be impacted? Will the development impact water flow?

We believe the developments and style of housing being promoted are likely to appeal (and be afforded by) people from Melbourne or other larger cities, who may have different expectations on living.

Where will the people live who are needed to provide services for these 1,000 or so new residents? They won't be able to afford to buy a Luxe home or designer residence on a large block. It will create even more pressure on existing business owners who are struggling to find staff.

We understand the inevitability of growth but to allow a developer to destroy the country charm and entrance to Daylesford seems lacking in vision.

We object to this development because of the increase in population, strain on town services and infrastructure that this will bring, and destruction of the visual entrance to town and the long term change to social culture that makes Daylesford what it is.

PLN22/017, corner of 4719 Midland Highway and Raglan Street

Dear Mayor and Councillors, Hepburn Shire Council, CEO, and Manager Planning

Recommendations

Are strong stipulations are being put in place on the row of 'large' lots so that the building envelope is at the other end of the lots so as not to result in the desire to remove the large cedar trees? All the cedars are identified as in good health, bar one.

I have asked Rick, the planner, about this concern of the blocks being further subdivided into smaller lots which would encroach on these trees.
He said there are two things that can be done:
1/ 'locked in by legal agreement'.
2/ 'building envelopes on a restrictions plan of subdivision'

Meaning that building must be in a certain part of the block, ie further back from the trees, so that in future no one can say, 'they're dangerous for my house etc'.

……..

Infill development:

What stipulations are being put in place to restrict further subdivision from taking place on the 'large' lots?

A large part of the development is simply slotted as 'eco village'.
When I asked further about this at the information session in the town hall last year, the

developer amazingly, responded to me: ie “it won’t be up to us”.
ie we will give that to "another company to develop and build”.
So who is to say what will eventuate and be convenient in the 'other company’s' plan?

A planning permit should not be given at this stage for a vague term ‘eco village’ without responsibility. Who knows what would eventuate? Would there be good affordable housing, would there be more air bnbs, would the proposed walkways eventuate, would there even be anything 'eco’. Some people think eco means high rises, or quick cheap builds, or no car parks included.

…….

Trees:

The developer states many times in the PA about keeping the row of cedars which is great, agreed. But what is being done to absolutely restrict future owners?

Missing from the 'info session' evening was also any solid way of protecting the entrance avenue to Daylesford along the Midland Hwy leading up to the roundabout, a row of cedar trees planted as the extension of the Avenue of Honour, as part of the Wombat Hill and Wombat Park heritage gardens, known as the Railway Reserve heritage area, (including the area where the Sunday Market is held.)

When asked, the developer plus, astonishingly, a planner, responded as, "well those are exotic trees, and some are reaching the end of their useable life and could be disposed of.”

This shows no shows no respect for the town or what it represents, nor what its residents are saying. When the developer saw that this answer was not appreciated, they started on the tack of, "well the future landowner has enough space on those sections, to put his house far enough away from those trees”. So how is this to be ensured? Anyone can see the future problems with this situation, and a lane of trees with random gaps is going to be just great isn’t it. Every section owner is going to be seeing the removal of these trees. These are trees which should have a VPO over them since long ago. Something the Shire has 'not had the funding' to prioritise - for years.

All the cedars are all identified, bar one, as in good condition.
All trees within the subject area, except for one native Eucalyptus viminalis, were identified and assessed as being exotic species and not endemic to Australia and therefore do not support local biodiversity.
I highly disagree with this statement. This is an outdated and misguided assessment which disregards the contribution to Australia’s biodiversity that naturalised exotic trees contribute both in the shade they offer, native animal naturalised habitat, and with deciduous trees the contribution to fertility that annual autumn leaf drop makes to often otherwise tired soils; and not least, their visual beauty.

This tree’s protection zones need to be attended to. Not just the one Manna gum which is partly exposed to the development over the fence.
At the very least there should be a Vegetation Protection Overlay, VPO over this line of cedars.

…….

Walkways:

Are the proposed walkways, such as from Raglan Street, through 9 Raglan Street to 17 and then to 29 Smith Street a condition to the permit? Are they charted on the maps and included as a stipulation of any permit issued?
"16 metres wide" we were told by the developer at the information session in the town hall last year. So that has to be set in stone - not to be changed later once the permit is given when it's too late.
…….

Heritage:

The following relevant Planning Scheme clause is conveniently omitted from the PA:

Clause 12.05 "**Maintain significant landscapes and views for the important contribution they make to the local and regional tourism economy."**

Also conveniently omitted from the PA is the following fair and square relevant clause:

Clause 14.01-1
Protect the **visual amenity of valued rural landscapes and character areas along township entrances and sensitive tourist routes.**

The PA and its photos also conveniently omit the view across this important agricultural heritage landscape at the entrance of Daylesford which has a **'significant view corridor'** in the planning scheme mapping, so as to avoid the inconvenient truth that this agricultural cultural heritage entrance to Daylesford will be fundamentally changed to be yet another urban townscape.

When a consultant from the city with a city outlook is hired to support a PA, what is missing is appreciation of the very nature of Daylesford and why it is so popular.

An unsatisfactory situation, a sad state of affairs.

To say the following just shows no appreciation of what so many in Daylesford find precious and inspiring, nor any understanding of the history of the Heritage Overlay that applies to this Wombat Park area of Daylesford. Nor does he understand what cultural heritage is. When it is cultural it means it refers to people, as in agri-**cultural** practices. Heritage is not just buildings.

Quote (typos and all):

"• It is my assessment that the subject property whist in part covered by the Heritage Overlay has been include without evident appropriate justification and is not land that exhibits elements or characteristics that have been demonstrated to contribute to the heritage significance of the Railway Precinct Heritage Overlay."

Highlighted are the contradictions to the hired professional's above comment:

Clause 15.03-1S
Provide for the protection of natural heritage sites and man-made resources.

Provide for the conservation and enhancement of those places that are of **aesthetic**, archaeological, architectural, **cultural,** scientific or **social significance**.

Clause 43.01 - Purpose
To conserve and enhance heritage places of natural or cultural significance.

To ensure that development does not adversely affect the significance of heritage places.

Clause 43.01-8 Decision Guidelines
Before deciding on an application, in addition to the decision guidelines in Clause 65, the responsible authority must consider, as appropriate:

• The **significance of the heritage place** and **whether the proposal will adversely affect the natural** or **cultural significance** of the place.

▪ Whether the **proposed subdivision may result in development which will adversely affect** the significance, **character or appearance of the heritage place.**

…….

Objections and comment

Thank you for reading this and attending to this.

It would be appreciated if there would be a briefing session for the whole master plan, or for each development. And if this could be of a format with opportunity to ask questions to planners and councillors.

One doubts about how realistic council is really to be allowing potentially as many as a hundred new houses in Daylesford, considering available services, close proximity to bushfire prone land, lack of public transport, minimal health services, and potential sewerage challenges. Government recommendations are for development to not take place in such areas.

Can Daylesford's infrastructure and emergency services cope with even more subdivisions as there are already so many.

As you will know, Daylesford is stated as "Contain Growth" in the Central Highlands Regional Map which is included as part of the Planning Scheme. And for good reason.
A study into a development control should be initiated over this land.

As you know I have raised the other many issues in previous submissions about this development, concerning that this is a recharge zone replenishing our groundwater and at the head of a tributary of the Loddon River, and that these features have not even been acknowledged in any of the applications which is a major oversight.

Nor has the level of the groundwater been acknowledged in the PA. However from personal inspection, in many areas it is very high, close to ground level and therefore highly suitable for food growing potential, just as the people of old said, “this land should never be built on”.

Tthe whole area is very fertile and highly absorbent soil in this important catchment, and is thereby unsuitable for concrete and bitumen covering because it belongs as future food security very nearby a country town.

This will be needed going forward, so controls are required. Particular attention to pesticides, herbicides, toxins such as heavy metals coming from housing storm water need to be prohibited from the catchment and this should be addressed at this planning permit stage.

The more open area that can be stipulated to be maintained unpolluted for growing food gardens between these buildings and developments, the better.

Thank you.

8 March 2023

Dear Council,

Please accept this document as a formal objection to the below:

PLN220263,
PA003530,
PLN 22/017

In relation to

29 Smith St
17 Smith St
9 Raglan St
4719 Midland Highway

WATER PURITY

- My primary objection is the environmental unsuitability of this site for development, due to the zoning & failings of Planning Scheme to provide critical protection to water quality.

- While the western tract of 17 Smith St is arguably more suitable for housing, the eastern portion extending through 9 Raglan & into 4719 Midland are not.

- This high-quality fertile soil is very porous, and an important catchment where the water table is high & has an important recharge function.

- The overland natural drainage lines are origin tributaries to the Loddon River. It needs protection not development. Yet, zoning has been predetermined, any development must have environmental protection standards enacted.

A main issue is the threat to water purity.

- Can Council make determinations on Stormwater Management when it does not employ a hydrologist or water engineer?

In the instance of the 17 Smith St application, the community of objectors were advised by a water engineer who analysed the developer's submitted Stormwater Strategy. He found it inadequate and lacking on many counts, nonetheless council had granted the permit. Experts were ignored.

Many more questions arise from this:

- How will Council enact Stormwater Management to protect the pristine purity of our water & waterways?
- Show the community that you have adjusted the developer's submitted plans to deal with and acknowledge the depth of the water table.
- Can you, as the responsible authority, assess merit of submitted Stormwater Management Report from an Integrated Water Management perspective, without an experienced water engineer?
- How can you ensure best practices of Integrated Water Management (IWM) is incorporated in the subdivision & consequent designs, as the application does not include the required Planning Scheme Landscaping Report?

RECOMMENDATION

1. Hire a water engineer as consultant in the project, who is experienced in IWM matters.
2. Document the high-water table in plans after first identifying it via website "Visualising Victoria's Groundwater " https://www.vvg.org.au
3. Demand the Landscaping plans be submitted as Planning Scheme requires, prior to application being granted, which has community viewing.

These are serious concerns and I am sure we all share the common desire to protect what is precious about Daylesford – I will be outlining my objections at a councillor briefing session.

Many thanks for your consideration.

Kind regards,

Attn: Planning Department: Rick Traficante

Dear council,

I am writing to express my deep concern and frustration regarding the construction work that is currently taking place over my back fence with regard to the housing development at 17 Smith st. I wish to object to other applications by the same developer on the grounds my right to peaceful enjoyment of my home will be further compromised through increased construction.

As a resident of this town, I have been living here for many years, and I have never experienced such stress and disturbance in my daily life.
The ongoing construction work is causing significant disruption to my daily routine, making it almost impossible to carry out my daily activities peacefully. The loud noises, vibrations, and dust that emanate from the site have become unbearable and are affecting my mental and physical health. I am constantly feeling anxious and stressed due to the never-ending noise and disturbance that the construction work brings to my doorstep.

Moreover, the safety of the residents in the area is at risk due to the heavy machinery, lorries, and construction materials that are being transported on Smith Street. The increased traffic has created a hazardous environment, making it challenging for pedestrians to move around freely, especially the elderly, and children from the two schools on Smith Street. This will only increase as the whole precinct gets developed.

Please consider the impact these permits will have on the people living in the area.
I urge you to deny these permits and put safety measures in place to minimize the noise and disturbance levels currently being experienced from the granting of the 17 Smith Street application.

There are also the issues of water, traffic and lack of infrastructure regarding this new estate development.

Yours Sincerely,

Sunday March 5th 2023

Dear Hepburn Shire Council,

I am writing to express my strong objection to the proposed planning permits **PLN220263, PA003530, PLN 22/017**.

As a resident of Smith Street, I am deeply concerned about the impact that these developments will have on the peaceful enjoyment of my property and those of my neighbors and wider community.

Furthermore, I have observed that the developers have repeatedly disregarded no standing zones on Smith Street, putting the safety of school children, bus drivers, and parents at risk. The developers have also shown blatant disregard for laws concerning noise and dust pollution, and the council has been unable to police their belligerent behavior. This has had and continues to have a serious impact on my heath and wellbeing and the health and wellbeing of my child and that of my neghbours.

If these proposals are allowed to move forward, our community stands the risk of being taken advantage of by uncaring developers who say all the right things but whose actions speak louder than their words.

In addition to these concerns, the proposed development does not fit with the character of our town and is not compliant with important aspects of our planning scheme. Daylesford is not a designated growth town due to its location in bushfire-prone forest, and the scale proposed for this development is not suited to the town. Further, there is no substantial public transport network to support such growth.

Thank you for your attention to this matter

Sincerely

10.3 PA 3530 - 9 RAGLAN STREET DAYLESFORD - MULTI-LOT SUBDIVISION, REMOVAL OF VEGETATION, PARTIAL DEMOLITION OF BUILDINGS IN A HERITAGE OVERLAY, CREATION AND ALTERATION OF ACCESS TO A ROAD IN A TRANSPORT ZONE 2, AND ASSOCIATED WORKS

ACTING DIRECTOR COMMUNITY AND DEVELOPMENT

In providing this advice to Council as the Statutory Planner, I Julie Lancashire have no interests to disclose in this report.

ATTACHMENTS

1. PA 3530 - Plans - Subdivision Plan - 9 Raglan Street, Daylesford [**10.3.1** - 1 page]
2. PA 3530 - Plans - Intersection Plan - 9 Raglan Street, Daylesford [**10.3.2** - 1 page]
3. PA 3530 - Reports - Planning Report - 9 Raglan Street, Daylesford [**10.3.3** - 40 pages]
4. PA 3530 - Reports - Street Tree Report - 9 Raglan Street, Daylesford [**10.3.4** - 9 pages]
5. PA 3530 - Reports - Heritage Impact Assessment - 9 Raglan Street, Daylesford [**10.3.5** - 21 pages]
6. PA 3530 - Referral Response - Councils Heritage Advisor - 9 Raglan Street, Daylesford [**10.3.6** - 14 pages]
7. PA 3530 - Referral Response - Central Highlands Water - 9 Raglan Street, Daylesford [**10.3.7** - 1 page]
8. PA 3530 - Referral Response - Department of Transport - 9 Raglan Street, Daylesford [**10.3.8** - 2 pages]
9. PA 3530 - Referral Response - Councils Engineering Department Conditions - 9 Raglan Street, Daylesford [**10.3.9** - 6 pages]
10. PA 3530 - Referral Response - Powercor - 9 Raglan Street, Daylesford [**10.3.10** - 2 pages]
11. PA 3530 - Referral Response - North Central Catchment Management Authority - 9 Raglan Street, Daylesford [**10.3.11** - 2 pages]
12. PA 3530 - Referral Response - Country Fire Authority - 9 Raglan Street, Daylesford [**10.3.12** - 2 pages]
13. PA 3530 - Referral Response - Goulburn-Murray Water - 9 Raglan Street, Daylesford [**10.3.13** - 2 pages]
14. PA 3530 - Objections - Redacted Objections - 9 Raglan Street, Daylesford [**10.3.14** - 39 pages]

EXECUTIVE SUMMARY

The proposed development is for a 20 lot residential subdivision, removal of vegetation, partial demolition of buildings in a Heritage Overlay, creation and alteration of access to a road in a Transport Zone 2 and the associated works.

OFFICER'S RECOMMENDATION

That Council, having complied with the relevant sections of the Planning and Environment Act 1987, issues a Notice of Decision to Grant a Permit in respect of Application No. PA 3530 for a Multi-lot subdivision, removal of vegetation including a tree within the Heritage Overlay, partial demolition of a building within the Heritage Overlay, creation and alteration of access to a road in a Transport Zone 2, and associated works generally in accordance with the endorsed plans at 9 Raglan Street, Daylesford (CA 35 SEC 2 TP 14100G) subject to the following conditions:

1. Before the development starts, amended plans to the satisfaction of the Responsible Authority must be submitted to and approved by the Responsible Authority. When approved, the plans will be endorsed and will then form part of the permit. The plans must be drawn to scale with dimensions and three copies must be provided. The plans must be generally in accordance with the application plans but further modified to show;

- *a) Full details of the provision of public open space areas and walkways.*
- *b) A notation that an extender arm will be provided to power poles across the site's frontage to facilitate additional separation between the overhead power lines and the trees contained within the Avenue of Honour.*
- *c) A detailed landscape plan in accordance with Condition 4*
- *d) The location of all trees to be retained including their tree protection zones (TPZ)*
- *e) The Middleton Field Concept Master Plan generally in accordance with the plan submitted to Council (Revision G)*
- *f) An updated Traffic Impact Assessment Report that addresses the whole of Middleton Field including 17 Smith Street, 29 Smith Street, 9 Raglan Street and 4719 Midland Highway Daylesford.*
- *g) A notation along the lots fronting Raglan Street that an Access Restriction will be provided to prevent vehicular access from lots to Raglan Street and will be included in a plan of subdivision.*
- *h) A 5 metre buffer to the overland flow path/eastern boundary.*
- *i) A 5 metre curtilage around the dwelling to be retained in the Heritage Overlay (Lot 517).*

2. The layout of the subdivision as shown on the endorsed plans must not be altered or modified unless otherwise agreed in writing by the Responsible Authority.

Obligations and Agreements

3. Before the plan of subdivision is certified for any stage of the subdivision under the Subdivision Act 1988, the owner must enter into an agreement with the Responsible Authority made pursuant to Section 173 of the Planning and Environment Act 1987 and the agreement must be registered on the title/s to the land under Section 181 of the Act. The agreement must provide that:

a) A building envelope be designated on Lots 516, 517 and 518.
b) No further subdivision of any lot.
c) No buildings or works, including all earthworks (inclusive of the provision of service infrastructure unless provided by boring beneath root zones of retained trees or alternative means of construction to the satisfaction of the Responsible Authority) and material and equipment storage during construction works are permitted to be undertaken with the Tree Protection Zone of any trees to be retained as shown on endorsed plans.
d) The Middleton Field Design Guidelines are implemented.
e) Dwellings on lots abutting Raglan Street must front Raglan Street and provide a sensitive interface.

The owner must pay the reasonable costs for the preparation, execution and registration of the Section 173 Agreement.
Before the issue of a Statement of Compliance [for any stage of the subdivision] under the Subdivision Act 1988, a copy of the Titles Office registration number (dealing number) for the Section 173 Agreement must be provided to Council as proof of registration.

Landscaping plan to be provided

4. Before development starts, a detailed landscape plan to the satisfaction of the Responsible Authority must be submitted to and approved by the Responsible Authority. When approved the plan will be endorsed and will then form part of the permit. The landscape plan must be prepared by a person suitably qualified or experienced in landscape design and must be drawn to scale with dimensions and three copies must be provided. The landscape plan must show:

a) the locations of all landscaping works to be provided on the land
b) the locations of any trees to be retained or removed from the land (including details of species and size)
c) a detailed schedule of all proposed trees, shrubs and groundcovers, including botanical names, common names, pot sizes, sizes at maturity and quantities of each plant
d) details of the proposed surface finishes of pathways and driveways
e) details of the irrigation system to be used on land following completion of the landscaping works

f) Replacement planting in the Avenue of Honour along Raglan Street to replace the tree proposed to be removed.
g) Avenue street tree planting along the internal local road.
h) Measures to protect the existing trees in the Avenue of Honour.
i) The location of all pedestrian paths and construction materials proposed.
j) The location and type of play and exercise equipment.

5. Before the issue of a Statement of Compliance all landscaping works as shown on the endorsed plan must be carried out and completed to the satisfaction of the Responsible Authority. When the landscaping works have been completed, written confirmation must be provided to the satisfaction of the Responsible Authority that landscaping of the land has been undertaken in accordance with the endorsed landscaping plans.

6. All landscaping works as shown on the endorsed plans must be maintained, including that any dead, diseased or damaged plants are to be replaced, to the satisfaction of the Responsible Authority.

7. The landscaping is to be maintained for a period of 24 months from practical completion of the landscaping. During this period, any dead, diseased or damaged plants or landscaped areas are to be replaced to the satisfaction of the Responsible Authority.

Engineering Conditions

8. Prior to Statement of Compliance, all underground and surface drainage works that are considered necessary by the Responsible Authority shall be constructed in accordance with professionally prepared plans and computations to be provided by the developer and approved by the Responsible Authority prior to the commencement of construction.
The drainage works shall include the provision of an onsite stormwater detention system designed to ensure that the post development runoff does not exceed pre-development runoff from the development. The drainage works shall be installed to transport stormwater runoff from the subject land and surrounding land and/or adjoining road(s) to an approved point of discharge. No concentrated stormwater shall drain or discharge from the land to adjoining properties. The drainage system must be constructed and completed prior to the issue of the statement of compliance

9. Return period for a Detention system is to be 20% AEP where there is overland escape path and 1% AEP if the failure of the detention system will cause property damage or inundation of freehold title. All allotments shall be provided with drainage outfall (house connection) connected to the underground drainage

system to the satisfaction of the Responsible Authority. House drainage connection shall be constructed in accordance with Infrastructure Design Manual Standard Drawing SD 510 or SD 505 with hot dip galvanised kerb adaptors.

10. Stormwater shall be connected to the legal point of discharge to the satisfaction of the Responsible Authority.

11. Prior to Statement of Compliance, all drainage easements deemed necessary by the Responsible Authority must be provided by the Permit Holder to protect and facilitate existing and future drainage infrastructure. Easements shall also be provided through properties between the development site and the nominated legal point of discharge. Minimum width of drainage easements shall be 2.0m for stormwater.

12. A new stormwater easement and pipe shall be created/constructed along the Eastern boundary for the purpose of draining new lots and overland flow.

13. Drainage easements shall be created to allow for gravity stormwater drainage to the satisfaction of Responsible Authority.

14. If the proposed stormwater drainage system includes any works to be undertaken during house construction stage, the Owner must enter into a Section 173 Agreement with the Responsible Authority under section 173 and 174 of the Planning and Environment Act, requiring that such works shall be constructed and completed during house/building construction stage.

15. The Owner must pay all of the costs and expenses including Responsible Authority's lawyers checking fees in relation to preparation, execution, registration, enforcement and cancellation of this Agreement including costs for obtaining necessary consents if required by the Land Titles Office before registration of this Agreement.

16. It is the responsibility of the developer, to prepare a Stormwater Strategy Plan to identify and record the manner by which the quantity and quality of stormwater shall be managed for the catchment. The stormwater strategy plan must demonstrate how to avoid adverse impact on neighbouring properties and surrounding road network due to the development. Drainage design plans and legal point of discharge will not be considered until the drainage strategy has been established.

17. Where stormwater detention is proposed on public land, including road reserve, the detention system shall be designed in such a way as to minimise the ongoing maintenance costs and maximise the public benefit of the area. No area

used for stormwater detention shall be considered for the purposes of public open space.

18. It is the responsibility of the developer to meet the requirements for stormwater quality as stated in the BPEM (Best Practice Environmental Management) Guidelines
Note: Additional information for requirements can be found at https://www.epa.vic.gov.au/business-and-industry/guidelines/water-guidance/urban-stormwater-bpemg

19. All Roads and drainage designs and constructions shall be based on sound engineering practice following the general principles of the Planning Scheme, the Austroads Guidelines, the Co-ordination of Streetworks Code of Practice, Relevant Australian Standards, VicRoads Road Design Guidelines, Infrastructure Design Manual [IDM] and to the satisfaction of Responsible Authority.

20. Professionally prepared plans are to be submitted to the Responsible Authority for approval prior to construction.

21. A Traffic and Pedestrian Impact study shall be conducted for the new intersection to the satisfaction of the Responsible Authority.

22. All recommendations from the Traffic and Pedestrian Impact study, in particular provision for turning lanes, shall be implemented unless agreed to by the Responsible Authority.

23. New roads shall include provisions for traffic calming in accordance with section 12.6 of IDM and to the satisfaction of the Responsible Authority.

24. All internal roads within the development shall be in accordance with 'Table 2 – Urban Road / Street Characteristics' of IDM.

25. Minimum width of the road reserve shall be in accordance with 'Table 2 – Urban Road / Street Characteristics' of IDM. The road pavement at a minimum, shall include

- *200mm compacted depth class 3, 20mm FCR sub base and 100mm compacted depth class 2, 20mm FCR base pavement.*
- *2 coat spray seal, 10mm primer seal/7mm rubberised final seal, or 40mm Type H, 10mm asphalt*
- *Kerb and channel*
- *1.5m wide concrete footpaths*
- *Court Bowls must have a minimum radius of 12.5m and asphalt wearing course*

26. All no through traffic roads must terminate with a court bowl.

27. Unless stated otherwise by Regional Roads Victoria, kerb and channel shall extend along the frontage of the development at Raglan Street to prevent unauthorised parking. Plans for works on arterial roads shall be approved by Regional Roads Victoria and Council.

28. The Supervising Consulting Engineer shall provide to Council a report of hold points and inspections for the construction and verification that the roads and drains have been designed and constructed in compliance with the above standards, by providing a list verifying the results of all tests undertaken and corresponding results. The minimum tests required to be provided to the Responsible Authority are:

- *Road Sub-grade (Proof Roll)*
- *Pavement sub-base and base (density test and proof roll)*
- *Pavement prior to sealing or asphalt application*
- *Drainage trench and bedding*
- *Drainage infrastructure prior to backfill*
- *Drainage pits*

29. Vehicle access/crossing to the land is to be located, constructed and maintained to the satisfaction of the Responsible Authority.

30. Prior to statement of compliance the following will be constructed for approval.

- *Vehicle access/crossing to all lots is to be constructed in accordance with Infrastructure Design Manual Standard Drawing SD 240 or to approval of Responsible Authority.*
- *Vehicle access/crossing to the land shall be located so that adequate sight distance is achieved to comply with Australian Standard AS2890.1:2004 Section 3.2.4 and as specified in Austroad's Guide to Road Design Part 4A Section 3.4 - 'Sight Distance at Property Entrance'.*
- *Minimum 10.0m and 9.0m clearance shall be maintained from any road intersection and between adjacent crossovers respectively.*
- *Any proposed vehicular crossing shall have satisfactory clearance to any side-entry pit, power or Telecommunications pole, manhole cover or marker, or street tree. Any relocation, alteration or replacement required shall be in accordance with the requirements of the relevant Authority and shall be at the applicant's expense.*

31. The final location and construction of the vehicle crossing is to be approved by the Responsible Authority via a "Consent to Work within the Road Reserve", prior

to undertaking of works, unless shown on certified plans and constructed prior to statement of compliance.

32. All footpaths shall be designed and constructed in accordance with the relevant Australian Standards, Infrastructure Design Manual [IDM] and to the satisfaction of the Responsible Authority.

33. Minimum width of the footpaths shall be 1.5m and are to be constructed in accordance with IDM Standard Drawings SD 205 – Typical Footpath Detail.

34. Footpaths shall be provided along one side of newly created roads within the development site and connect to the existing Council footpath network to the satisfaction of Responsible Authority.

35. A new footpath connection shall be constructed from the development along the north side of Raglan Street to the existing footpath network at the corner of Smith and Reglan Streets.

36. Prior to construction, the Developer is to prepare and submit a landscaping plan for road reserves and other open spaces to the satisfaction of Responsible Authority for review and approval. These plans are to comply with the Code of Practice for Management of Infrastructure in Road Reserves and shall provide following information:

- *Plant selection, layout and planting density*
- *Landscaping design intent*

37. Street tree planting shall be designed to meet approximately 40% canopy coverage of new roads and must be selected and planted by a qualified horticulturist / arborist.

38. The developer shall prepare an arborist report for all street trees within the construction zone

39. The developer shall implement a construction plan showing how existing street trees shall be protected during construction works.

40. Any existing street trees must be bonded for a period of 24 months at a value determined by a registered arborist. All new landscaping shall be bonded for a period of 24 months at minimum value of $400 per tree.

41. Where a lot has significant cross fall, retaining walls and associated cut and fill shall be constructed along the lot boundary line including provisions for boundary fencing.

42. All structural retaining walls shall have an engineering design and approval

43. Appropriate signage and line marking shall be provided to the satisfaction of the Responsible Authority

44. Energy efficient LED street lighting shall be provided in accordance with the current issue of Australian standard AS/ANZ 1158 – Lighting for Roads and Public Spaces and to the satisfaction of the Responsible Authority.

45. New lighting must be located outside the clear zones and meet the standards for category P lighting. Lighting requirements on arterial roads shall be included in the Traffic and Pedestrian Impact study.

46. Prior to Statement of Compliance it is the responsibility of the developer to meet the requirements and standards as set out in the IDM (Infrastructure Design Manual) version 5.20.

47. Before any road, drainage and associated with the subdivision start following items must be satisfied.

- *Approval of the constructions plans by the Responsible Authority*
- *A pre-construction meeting shall be held with the Responsible Authority, the Contractor and the Developer/Developer's Consultant Engineer to discuss and agree on hold point inspections, roadside management, traffic management and any other construction related matters.*

48. Prior to the issue of the Statement of Compliance for the relevant stage of the subdivision under the Subdivision Act 1988, the developer must construct and complete road works, drainage and other civil works in accordance with endorsed plans and specifications approved by the Responsible Authority and in accordance with Infrastructure Design Manual. Road works, drainage and other civil works to be constructed must include:

- *street and drainage in accordance with the approved construction drawings*
- *construction of footpaths*
- *underground drainage*
- *intersection and traffic control/mitigation measures*
- *signage and line marking; and*
- *high stability permanent survey marks*
- *Lot access*

49. Prior to issue of statement of compliance, the Developer must provide as-constructed plans for all infrastructure created by this development and vested to

the ownership and control of the Responsible Authority. Such plans shall be prepared by a registered surveyor and/or qualified Engineer and endorsed by the Developer's Consultant Engineer and the Contractor.

50. As-Constructed plans shall include:

- *An asset statement of each street including costs*
- *as constructed' information for the entire work in each development stage detailing information as listed in the Infrastructure Design Manual*

51. Information to be presented in pdf. and dwg. formats, unless otherwise agreed in writing by the Responsible Authority.

52. Prior to Statement of Compliance, the developer must enter into an agreement with the Responsible Authority regarding responsibilities for maintenance and correction of defects of all infrastructure works. Agreement must include the defects liability period, the amount of bond and the date of practical completion occurs.

53. Prior to issue of Statement of Compliance, the developer must provide the Responsible Authority with a maintenance bond(s) of $5,000 or 5% of the total cost of infrastructure, whichever is greater.

54. The bond(s) shall be an unconditional bank guarantee or cash for the predetermined amount. The Responsible Authority will hold the bond(s) until any and all defects notified to the developer before and/or during the liability period have been made good to the satisfaction of the Responsible Authority. A request must be made to the Responsible Authority for the release of maintenance bond(s) after the defects maintenance period.

55. The Defects Liability Period for civil works shall be 12 months from the date of practical completion.

56. The Defects Liability Period for landscaping shall be 24 months from the date of acceptance at a minimum bond of $400 per tree.

57. All costs incurred in complying with the above conditions shall be borne by the permit holder.

58. In accordance with the Subdivision Act 1989, Responsible Authority requires the following fees for works undertaken on this Subdivision.

- *Plan checking fee of 0.75% of the value of works*
- *Supervision fee of 2.50% of the value of works*

Heritage Conditions

59. Prior to the commencement of any of the works approved by this permit, a suitably experienced heritage conservation architect, approved in writing by the Responsible Authority, must be engaged to prepare a conservation management plan. The conservation management plan must include evaluation of the detached timber barn.

60. Prior to the commencement of any of the works approved by this permit, a full scope of conservation repairs including details for the repair of the roof of the east timber addition must be provided to the Responsible Authority for approval.

61. Prior to the commencement of any of the works approved by this permit, a suitably experienced heritage conservation architect, approved in writing by the Responsible Authority, must be engaged to advise and assist as necessary the preparation of the documentation where any new intervention to the built fabric of heritage significance is involved and to provide relevant conservation advice to the permit holder during the carrying out of those works at Lot 517.

62. Prior to the commencement of any of the works approved by this permit, the approved conservation architect must prepare a final costed schedule and drawings of conservation works identified in compliance with Condition 59 and 60 for the approval and endorsement by the Responsible Authority. Once endorsed these works become part of the permit and must be completed within the period of validity of the permit.

63. Prior to the commencement of any of the works approved by this permit, an Archaeology Management Plan (AMP) must be submitted and when endorsed must be implemented to the satisfaction of the Responsible Authority. The AMP must include an evaluation of the place history and the potential of the site to contain historical archaeological features and deposits. The AMP must include evaluation of the detached timber barn and site.

64. All works must cease, if historical archaeological artefacts or deposits are discovered during any excavation or subsurface works. The Responsible Authority must be informed when the approved works have been completed.

65. The removal of the timber barn will only be considered following approval by the Responsible Authority of the works required by Conditions 59, 61, and 63.

66. Prior to the commencement of any of the works approved by this permit, a conservation architect is to be appointed to carry out periodic inspections during

the demolition phase to ensure that any previously hidden earlier fabric that is uncovered during the demolition works is identified and documented.

67. Prior to the commencement of any of the works approved by this permit, the subdivision layout plan must be amended to create a 5 metre curtilage around the historic house complex.

68. Prior to the commencement of any of the works approved by this permit, the subdivision layout plan must be amended to create a buffer zone (5 metres) along the eastern boundary fence along the Spring Creek waterline from Raglan Street northwards.

69. The vehicular driveway into each lot must only be single crossovers

70. Prior to the commencement of any of the works approved by this permit, a detailed landscape layout plan that clearly demonstrates how the Daylesford Avenue of Honour will be protected must be submitted to the Responsible Authority for approval.

71. Prior to the commencement of any of the works approved by this permit, a landscape vegetation plan showing width and design of roads, width of verge, channel details, pathways, all materials, as well as tree and grass plantings along the eastern buffer zone Condition 5 must be approved by the Responsible Authority. The landscape plan must include planting of an avenue of trees along the road from Raglan Street. The specimen trees selected for the avenue must be approved in writing by the Responsible Authority.

Powercor Conditions

72. The plan of subdivision submitted for certification under the Subdivision Act 1988 shall be referred to the Distributor in accordance with Section 8 of that Act.

73. The applicant shall provide an electricity supply to all lots in the subdivision in accordance with the Distributor's requirements and standards.
Notes: Extension, augmentation or rearrangement of the Distributor's electrical assets may be required to make such supplies available, with the cost of such works generally borne by the applicant.

74. The applicant shall ensure that existing and proposed buildings and electrical installations on the subject land are compliant with the Victorian Service and Installation Rules (VSIR).
Notes: Where electrical works are required to achieve VSIR compliance, a registered electrical contractor must be engaged to undertake such works.

75. The applicant shall, when required by the Distributor, set aside areas with the subdivision for the purposes of establishing a substation or substations.
Notes: Areas set aside for substations will be formalised to the Distributor's requirements under one of the following arrangements:

- *Reserves established by the applicant in favour of the Distributor.*
- *Substation Lease at nominal rental for a period of 30 years with rights to extend the lease for a further 30 years. The Distributor will register such leases on title by way of a caveat prior to the registration of the plan of subdivision.*

76. The applicant shall establish easements on the subdivision, for all existing Distributor electric lines where easements have not been otherwise provided on the land and for any new powerlines to service the lots or adjust the positioning existing easements.
Notes:

- *Existing easements may need to be amended to meet the Distributor's requirements.*
- *Easements required by the Distributor shall be specified on the subdivision and show the Purpose, Origin and the In Favour of party as follows:*

Easement Reference	Purpose	Width (Metres)	Origin	Land Benefited / In Favour Of
	Power Line		Section 88 - Electricity Industry Act 2000	Powercor Australia Ltd

Central Highlands Water Conditions

77. Any plan lodged for certification will be referred to the Central Highlands Region Water Corporation pursuant to Section 8(1)(a) of the Subdivision Act.

78. Reticulated sewerage facilities must be provided to each lot by the owner of the land (or applicant, in anticipation of becoming the owner) to the satisfaction of the Central Highlands Region Water Corporation. This will include the construction of works and the payment of major works contributions by the applicant.

79. A reticulated water supply must be provided to each lot by the owner of the land (or applicant, in anticipation of becoming the owner) to the satisfaction of the Central Highlands Region Water Corporation. This will include the construction of works and the payment of major works contributions by the applicant.

80. The owner will provide easements to the satisfaction of the Central Highlands Region Water Corporation, which will include easements for pipelines or ancillary

purposes in favour of the Central Highlands Region Water Corporation, over all existing and proposed sewerage facilities within the proposal.

81. If required the owner will provide easements to the satisfaction of Central Highlands Region Water Corporation for pipeline or ancillary purposes through other land in the vicinity, as it is considered by the Authority that such easements may be required for the economical and efficient subdivision or servicing of or access to land covered by the subdivision.

82. If the land is developed in stages, the above conditions will apply to any subsequent stage of the subdivision.

Goulburn Murray Water Conditions

83. Any Plan of Subdivision lodged for certification must be referred to Goulburn-Murray Rural Water Corporation pursuant to Section 8(1)(a) of the Subdivision Act.

84. Each lot must be provided with connection to the reticulated sewerage system in accordance with the requirements of the relevant urban water authority.

85. All stormwater discharged from the site must meet the urban run-off objectives and Standard C25 as specified in Clause 56.07-4 of the Victorian Planning Provisions. All infrastructure and works to manage stormwater must be in accordance with the requirements of the Responsible Authority

86. Prior to any works commencing on site a plan must be submitted to and approved by Goulburn Murray Water which clearly shows the following:

- *a) The overland flow path of where water will be directed through the relevant proposed allotment(s) into the roadside drainage (comparing Figure 6 within the Stormwater Management Plan and the Preliminary Subdivision Layout Plan this appears to be lots 514 & 515, as well as lots 506/507-511).*
- *b) Proposed easements over the relevant allotment(s) for the flow of water in relation to 4 a) above. The easements approved by Goulburn Murray Water must be shown on any plan of subdivision submitted for certification.*

CFA Conditions

87. Prior to the issue of a Statement of Compliance under the Subdivision Act 1988 the following requirements must be met to the satisfaction of the CFA:

a) *Above or below ground operable hydrants must be provided. The maximum distance between these hydrants and the rear of all building envelopes (or in the absence of building envelopes, the rear of the lots) must be 120 metres and the hydrants must be no more than 200 metres apart. These distances must be measured around lot boundaries.*
b) *The hydrants must be identified with marker posts and road reflectors as applicable to the satisfaction of the Country Fire Authority.*

88. Roads must be constructed to a standard so that they are accessible in all weather conditions and capable of accommodating a vehicle of 15 tonnes for the trafficable road width.

a) *The average grade must be no more than 1 in 7 (14.4%) (8.1 degrees) with a maximum of no more than 1 in 5 (20%) (11.3 degrees) for no more than 50 meters. Dips must have no more than a 1 in 8 (12%) (7.1 degree) entry and exit angle.*
b) *Curves must have a minimum inner radius of 10 metres.*
c) *Have a minimum trafficable width of 3.5 metres and be clear of encroachments for at least 0.5 metres on each side and 4 metres above the access way.*
d) *Roads more than 60m in length from the nearest intersection must have a turning circle with a minimum radius of 8m (including roll-over kerbs if they are provided) T or Y heads of dimensions specified by the CFA may be used as alternatives*.

Department of Transport and Planning Conditions

89. Prior to the issue of Statement of Compliance, the following roadworks on Raglan Street (Midland Highway) must be completed to the satisfaction of and at no cost to the Head, Transport for Victoria:

a. *Intersection of local road generally in accordance with provided plan from Niche Planning Studio titled Preliminary Subdivision Layout Plan dated 23/01/2023.*
b. *Widening of shoulders on the north and south road reserve either side of intersection.*

90. Prior to the issue of Statement of Compliance, the redundant vehicle crossing must be removed, and the area reinstated to the satisfaction of the Responsible Authority and at no cost to the Head, Transport for Victoria.

91. Prior to the issue of Statement of Compliance footpath must be constructed east of the intersection to the property boundary along Raglan Street to the

satisfaction of the Responsible Authority and at no cost to the Head, Transport for Victoria.

92. All waste collection must be via the local road.

93. During the construction of the internal local road and dwellings the developer must ensure the Midland Highway remains debris free and maintained in a fit and proper state so as not to compromise the ability of vehicles using the Midland Highway.

Servicing conditions

94. The owner of the land must enter into an agreement with:

a) telecommunications network or service provider for the provision of telecommunication services to each lot shown on the endorsed plan in accordance with the provider's requirements and relevant legislation at the time; and

b) *a suitably qualified person for the provision of fibre ready telecommunication facilities to each lot shown on the endorsed plan in accordance with any industry specifications or any standards set by the Australian Communications and Media Authority, unless the applicant can demonstrate that the land is in an area where the National Broadband Network will not be provided by optical fibre.*

95. Before the issue of a Statement of Compliance for any stage of the subdivision under the Subdivision Act 1988, the owner of the land must provide written confirmation from:

a) a telecommunications network or service provider that all lots are connected to or are ready for connection to telecommunications services in accordance with the provider's requirements and relevant legislation at the time; and

b) a suitably qualified person that fibre ready telecommunication facilities have been provided in accordance with any industry specifications or any standards set by the Australian Communications and Media Authority, unless the applicant can demonstrate that the land is in an area where the National Broadband Network will not be provided by optical fibre.

Construction Management Plan:

96. Before any works associated with the subdivision start, a Construction Management Plan must be submitted to, and be to the satisfaction of the

Responsible Authority. The Construction Management Plan will then be endorsed and form part of the planning permit. The Construction Management Plan must include details of:

a) A Site Management and Safety Plan including, but not limited to, the following:
- *Locations of temporary on-site facilities such as equipment storage areas, litter control compounds, contractor rest and car parking areas and the likes;*
- *On-site safety procedures;*
- *Relevant service authority and emergency services contact details;*
- *Site access address for emergency vehicles;*
- *Working hours and days;*
- *Site specific safety and risk analysis;*
- *Methods to ensure the recommendations of any approved Cultural Heritage Management Plan applying to the land are carried out.*

b) An Environmental Management Plan including, but not limited to, the following:
- *Methods to contain dust, dirt and mud within the subject site, and the method and frequency of clean up procedures;*
- *Sediment control techniques to ensure that no mud, dirt, sand, soil, clay or stones are washed into or allowed to enter the storm water drainage system;*
- *Stormwater management and water quality control procedures;*
- *Methods to prevent and manage illegal dumping on the land;*
- *Tree Protection Zones around the trees to be retained as shown on the endorsed plans;*
- *Machinery wash-down areas, clearly fenced and located in disturbed areas, which ensure that all machinery entering and exiting the land is weed and pathogen free;*
- *Methods to ensure that contractors working on the land are aware of the requirements of the Construction Management Plan and any other obligations of the planning permit.*

97. Prior to the approval of detailed engineering plans and certification of a plan of subdivision, a geotechnical assessment must be completed and endorsed to the satisfaction of the Responsible Authority to determine if the shafts associated with the Defiance Tunnel will have any detrimental impacts upon the development including but not limited to the location of services.

Permit Expiry:

98. This permit will expire if one of the following circumstances applies:

a) *The development is not started within two years of the date of this permit.*
b) *The development is not completed within four years of the date of this permit.*

The Responsible Authority may extend the permit if a request is made in writing in accordance with Section 69 of Planning and Environment Act 1987.

BACKGROUND

Application History

The application was first submitted on 16 December 2021 and proposed the following:

Staged multi-lot subdivision (22 lots)

- Demolition of a building within the Heritage Overlay
- Removal of vegetation
- Upgrading of the Raglan Street entrance to accommodate the residential subdivision

Original Plan of Subdivision

The application was referred to external authorities and internal departments on 24 December 2021. On 2 February 2022 further information was requested regarding addressing Goulburn Murray Water's (GMW) concerns requiring the applicant to review potential water activity affecting the site and to provide further information to GMW. The information needed to address how the springs will be protected in accordance with the Environmental Significance Overlay 2 and any potential sheet flow managed across the site.

On 1 March 2022 a response was forwarded to Goulburn Murray Water from Axiom Consulting Engineers acting for the applicant.

On 24 March 2022 after an on-site meeting with Council's Heritage Advisor, the applicants agreed to:

- undertake a Conservation Management Plan that included a historical analysis and chronology of the history of the site and buildings and plans of

the building, statement of significance and recommended conservation policies concerning retention and preservation.

- Increase the size of the lot the heritage dwelling was to be retained on to allow for greater side setbacks and separation to new built form on lots either side.
- Until the history and cultural heritage significance of the barn is known and agreed, the building was to be retained.

On 8 June 2022 the application was amended to:

- Delete 'demolish a building under the heritage overlay' from the application.
- Realign lots to include the existing dwelling in one larger lot resulting in some lots on western side of the site having different areas and dimensions.
- Include a Heritage Impact Statement.

On 18 July 2022 an amendment was made to the application to include the "Middleton Field Design Guidelines" as part of the application and to update the response to the zoning as it had changed to Neighbourhood Residential Zone as a result of Amendment C80. The Guidelines set out the vision for how the estate will look and sets quality benchmarks to be achieved in dwelling designs. The project's heritage advisor provided guidelines that ensure relevant dwellings are designed to be sympathetic to the existing character of the Railway Precinct.

Advertising of the application was undertaken on 25 July 2022 and a total of 16 objections were received.

On 25 January 2023 a further amendment was made to the application in response to some referral responses and further discussions with Council officers. The amendments comprised the following:

- To facilitate the development of proposed lots, some existing trees are required to be removed. Noting that these trees were always intended for removal, the subdivision layout plan has been amended to indicate which trees are proposed for removal. In addition, following advice from the Department of Transport, the removal of one tree in Raglan Street was sought, as part of an upgrade of the existing crossover to an intersection entrance road to the subject site. While all efforts have been made to find a solution to retain all trees within the Raglan Street road reserve, this has not been possible with Department of Transport road safety requirements. Arborist advice indicates that the proposed tree for removal is stunted and in poor condition and is the most suitable tree for removal for the provision of road access to the subject site.
- This amendment further removed the proposed crossover from lot 501, instead redesigning the lot so that access is provided from the internal north south road. This will reduce impact to the Avenue of Honour and Raglan Street, which is a higher order road controlled by the Department of Transport. In addition, following discussions with the Department of

Transport, which indicated that a non-standard intersection would not be supported, the entrance intersection has been amended to show a standard intersection layout. To facilitate this, a tree in the Raglan Street road reserve is required to be removed. The proposed intersection will be in accordance with the Department of Transport's safety standards and will facilitate improved access through the Middleton Field development and supporting the existing road network in Daylesford.

- At Council's request, an east west road was included in the north east portion of the site, allowing connection between 9 Raglan Street and 4719 Midland Hwy.
- To address heritage feedback from Council's heritage advisor, the lot containing the existing heritage house has been increased in size to increase curtilage around the house in line with its rural character.
- The alignment of the north-south road reserve was slightly curved to allow for a better alignment with existing drainage and topography.
- A 270sqm open space area has been added to align with natural drainage lines and connect to 17 Smith St and 4719 Midland Hwy.
- East-west road reserve has been added to connect to 4719 Midland Hwy
- Removal of four trees within the site from Lots 515, 517 and 506.
- Removal of one tree in Raglan Street following advice from the Department of Transport that tree retention as proposed will not be acceptable.
- Change of crossover location for lot 501 to reduce the number of crossovers to Raglan Street.
- More variety in lot sizes with lots now ranging from 609sqm to 1235sqm.
- Footpath now located on the eastern side of the north-south road reserve.
- Drainage /sewer easements have been added to lots 515, 512 and 505.
- A 5m setback on north and south lot boundary from heritage house (not barn) on lot 515.
- Lot count has been reduced from 22 to 20 and average lot sizes have increased as a result of the above changes.

As a result of the above further amendments to the initial application, notice was given again on 31 January 2023 to the objectors of the original application. This resulted in one objection being received from one of the original objectors.

Site and Surrounds

The subject site is located on the northern side of Raglan Street approximately 100 metres west of Malmsbury Road. The site is rectangular in shape and has a frontage to Raglan Street of 100.58 metres with the same length for the northern boundary. The east and west boundaries are 201.17 metres. Total area is 2.023 hectares.

The site has little vegetation apart from scattered trees which are not native and are to be removed. The site consists of mostly mature exotic specimens endemic to the northern hemisphere, and fruit trees. The site is also occupied by an old

weatherboard dwelling and three outbuildings which are within the Daylesford Railway Heritage Precinct. Much of the southern part of the subject site is relatively flat and is lined by trees in the Avenue of Honour in Raglan Street. The northern section of the subject site has a minor to moderate slope to the east.

To the north of the subject site is 17 Smith Street where a new residential subdivision is currently under construction. To the east lies large undeveloped land which includes Wombat Park with the Midland Highway beyond. To the south across Raglan Street are small residential lots and the old Daylesford Railway Station. To the west is a mixture of small and large lots which include some commercial and tourist uses.

Proposal

The application proposes to subdivide the land into 20 lots ranging in area from 609 sqm to 1235 sqm. All lots will have access to a 16m wide road which will be located largely in the centre of the site in a north-south alignment. The proposed subdivision will provide a connection to abutting land to the north at 17 Smith Street and a road connection to the east for future residential development at 4719 Midland Highway. Planning approval is also sought to demolish a small outbuilding related to the dwelling to be retained on site which is within a Heritage Overlay and to remove vegetation including a tree in the Avenue of Honour.

Four lots at the southern end of the site are proposed in a battle axe design which negates the sides of future dwellings fronting Raglan Steet. There are several scattered trees on the site which are to be removed including one in the Avenue of Honour that provides a new access to Raglan Street.

Current Plan of Subdivision

Relevant Planning Ordinance applying to the site and proposal

Zoning:	NRZ1	
Overlays:	HO (698), ESO2, ESO1	
Particular Provisions	Clause 52.17 (Native Vegetation) Clause 52.29 (Access to a Transport Zone 2) Clause 53.01 - (Public Open Space) Clause 56 (Rescode)	
Relevant Provisions of the PPF	• Clause 11.01-1S Settlement • Clause 11.01-1L Township and settlements • Clause 13.02-1S Bushfire planning • Clause 14.02-1L Catchment and land protection • Clause 15.01-01S Urban design • Clause 15.01-1L Urban design • Clause 15.01-3L Subdivision in Hepburn Shire • Clause 15.01-5L-01 Neighbourhood Character in Daylesford • Clause 16.01-01S Housing supply	
Under what clause(s) is a permit required?	Clause 32.09-3	To subdivide land
	Clause 42.01-2 Clause 43.01-1	To subdivide land and removal vegetation To demolish a building and remove trees
	Clause 52.29-2	To subdivide land and alter access to land adjacent to a Transport Zone 2
Objections	17	

KEY ISSUES

Referrals

External referrals have all provided condition consent, except for Tenix who have not responded. Gas is not proposed to be provided so their response is not required.

Internal referrals including engineering and heritage have all provided conditional consent.

Response to Policy Planning Policy Framework

Clause 11.01-1S – Settlement. The objective of this clause is to facilitate the sustainable growth and development of Victoria and deliver choice and opportunity for all Victorians through a network of settlements. Strategies under this clause include:

- Ensure regions and their settlements are planned in accordance with their relevant regional growth plan.
- Guide the structure, functioning and character of each settlement taking into account municipal and regional contexts and frameworks.

This proposal is within the Daylesford Township Plan and accords with this clause.

Clause 11.01-1L Township and Settlements. Strategies under this clause include:

- Provide for urban development and economic growth in the townships of Clunes, Creswick, **Daylesford,** Hepburn Springs and Trentham based on township boundaries and structure plans.
- Locate new dwellings and residential subdivisions within township boundaries.
- Encourage development in townships and settlements to be respectful of heritage, environmental and neighbourhood character elements.

The subject site is included within the Daylesford Township Plan pursuant to this clause and accords with the strategies detailed above.

Clause 13.02-1S Bushfire Planning. The strategies applicable to this clause include:

- Directing population growth and development to low risk locations and ensuring the availability of, and safe access to, areas where human life can be better protected from the effects of bushfire.
- Reducing the vulnerability of communities to bushfire through the consideration of bushfire risk in decision making at all stages of the planning process.

The subject site is not within a Bushfire Management Overlay but rather in a bushfire prone area. The application was referred to the Country Fire Authority who have not objected to the proposal subject to several conditions being included in any approval. Furthermore, the proposed subdivision is within the lower risk and defendable area of the township.

Clause 14.02-1L – Catchment and Land Protection. The objective of this clause is to ensure that use and development in a special water supply catchment protects, restores and enhances the quality and quantity of the natural resources and environmental systems for the long-term supply of quality water for future generations.

The proposal has considered the existing natural resources and environmental systems within the area and has responded to ensure that stormwater is managed on site and other impacts minimised to reduce any impact on the surrounding landscape. Deep sewerage is utilised across the subdivision areas minimising the risk of any seepage. A comprehensive Stormwater Management Strategy prepared by Axiom Consulting Engineers has been provided to Council and to Goulburn Murray Water who have provided conditional consent.

Clause 15.01-1L – Urban Design. The objective of this clause is to create urban environments that are safe, healthy, functional and enjoyable and that contribute to a sense of place and cultural identity.

The proposed development has tried to respect and enhance notable features and landmarks of Daylesford such as building form, volume, low scale height, setbacks, spacing, streetscapes, tree lined streets, intact heritage places and existing vegetation through Design Guidelines established for development of the estate.

Clause 15.01-3L - Subdivision in Hepburn Shire. Strategies for this clause include

- Ensuring new street and subdivision layouts reflect and integrate with surrounding grid-based or gold rush subdivision patterns within townships where enabled by topography.
- Encouraging diverse lot sizes to facilitate residential infill in locations within walking distance of town centres that complement the neighbourhood character of the area.

The proposed subdivision accords with both the above strategies.

Clause 15.01-5L-01 – Neighbourhood Character in Daylesford. Being within Precinct 11 of the Daylesford neighbourhood character precincts map, the key objective is to ensure development maintains the spaciousness of the dwelling settings and strengthens the definition of the entrance way to the town.

The design of the lots abutting Raglan Street will allow the dwellings to front Raglan Street and the lots are consistent in area to those existing along Raglan Street thereby maintaining the spaciousness of the dwelling settings.

Clause 16.01-1S – Housing Supply. The objective of this clause is to facilitate well-located, integrated and diverse housing that meets community needs.

The proposed subdivision meets the objective of this clause by providing access to residential land in an area identified for future residential development within the township boundary plan. The generous lot sizes ensure the township character is retained.

Zoning and Overlay Considerations

Neighbourhood Residential Zone (NRZ1)

Pursuant to Clause 32.09 the relevant purposes of the NRZ are;

- To implement the Municipal Planning Strategy and the Planning Policy Framework.
- To recognise areas of predominantly single and double storey residential development.
- To manage and ensure that development respects the identified neighbourhood character, heritage, environmental or landscape characteristics.

The proposed subdivision complies with the purpose of the zone by allowing for future low-rise housing within the township boundary with good access to various services and amenities within Daylesford.

Pursuant to Clause 32.09-3 a permit is required to subdivide land. Clause 32.09-13 specifies decision guidelines for subdivision of land for residential development which Council must consider for subdivision of land for residential development, this being the objectives and standards of Clause 56.

The applicant has provided a satisfactory response to Clause 56.

Environmental Significance Overlay Schedules 1 and 2

Pursuant to Clause 42.01 the purpose of the Overlay is to

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

Under this clause a permit is required to subdivide land and to remove vegetation.

Schedule 1 of the Overlay refers to Special Water Supply Catchment Protection with the objective being to ensure all development is undertaken in a manner that protects, restores and enhances natural resources and environmental systems and seeks to eliminate detrimental impacts on the quality and quantity of water in the catchment, to ensure the long-term plentiful supply of quality water.

The subdivision has been designed to comply with the above by ensuring all wastewater will be managed with deep sewer reticulated infrastructure. Stormwater will be managed through the subdivision drainage system and will improve the quality of water released beyond the subdivision boundaries. To this end a Stormwater Management Strategy was provided and referred to relevant water authorities who have not raised any objection.

Decision guidelines under the Overlay have been addressed by the applicant and are considered satisfactory.

Schedule 2 of the Overlay refers to Mineral Springs and Groundwater Protection with the objective being to protect the mineral springs, their aquifers and their environs,

private domestic bores and water bores that provide town water supply from the impacts of effluent and drainage.

As mentioned above *a Stormwater Management Strategy was provided and referred to relevant water authorities who have not raised any objection. Decision guidelines here again required addressing which have been provided by the applicants and are considered satisfactory.*

To facilitate the development of proposed lots, some existing trees are required to be removed. The subdivision layout plan has been amended to indicate which trees are proposed for removal. These trees are located within lots 506, 516 and 518 and are fruit trees and not native vegetation.

Following recent advice from the Department of Transport, approval for the removal of one tree in Raglan Street is now sought as part of an upgrade of the existing crossover to an intersection entrance road to the subject site. Whilst the applicants have made every effort to find a solution to retain all trees within the Raglan Street road reserve, this has not been possible with Department of Transport road safety requirements. A Tree Assessment Report provided by Xylem TreeCare, qualified arborists, concluded that the subject tree is of poor form and low amenity value and is therefore the most suitable tree for removal for the provision of road access to the subject site. The applicants have also advised that they intend to seek an arrangement to improve the impact on remaining Avenue of Honour trees within the road reserve, which are currently significantly trimmed by Powercor to protect power lines. Currently, they are investigating opportunities to alter electricity infrastructure along the Middleton Field frontage to allow for trees within the road reserve to grow back to fuller canopy size. This will allow the Avenue of Honour to revert to its intended appearance along this entrance to Daylesford. Council's Heritage Advisor has also requested a replacement tree be provided and this can be facilitated by a condition of planning permit.

Clause 43.01 Heritage Overlay (698)

Pursuant to Clause 43.01-1 a permit is required to subdivide land and demolish or remove a building, in this case a barn. A structural report had been undertaken to assess the barn under the Heritage Overlay. The report concluded that the building is in poor condition and extensive works would have to be undertaken to remediate the building. A Heritage Impact Statement undertaken by John Briggs Architect and Conservation Consultant was provided to Council and Council's heritage consultant subsequently had no objection to the barn being demolished subject to specific conditions being placed on a permit. A response to Decision Guidelines under this clause has been provided to Council.

Advice from Council's Heritage Advisor agrees to the removal of the barn and the proposed lot size containing the heritage dwelling to be retained, subject to conditions.

Council's Heritage Advisor also agrees to the removal of the tree in the Avenue of Honour subject to a replacement tree being provided. This can be facilitated by a condition of planning permit.

Based on additional advice from the applicant's arborist, *"the tree is of low amenity value largely due to its poor form because of ongoing pruning for electric powerline clearance. The ongoing contribution of the subject tree to the existing avenue of trees is currently and will continue to be minor."*

Particular/General Provisions

Clause 52.29 – Land Adjacent to the Principal Road Network.

Pursuant to Clause 52.29 a permit is required to alter the existing access. The purpose of this clause is to:

- Ensure appropriate access to the Principal Road Network or land planned to form part of the Principal Road Network.
- Ensure appropriate subdivision of land adjacent to the Principal Road Network or land planned to form part of the Principal Road Network.

In this regard the application was referred to the Department of Transport who have given conditional consent. These conditions will be placed on any permit issued.

Clause 53.01 – Public Open Space Contribution and Subdivision

Under this clause, anyone who proposes to subdivide land must make a contribution to the Council for public open space in an amount specified in the schedule to this clause (being a percentage of the land intended to be used for residential, industrial or commercial purposes, or a percentage of the site value of such land, or a combination of both). If no amount is specified, a contribution for public open space may still be required under section 18 of the *Subdivision Act 1988*.

Several discussions have taken place with the applicant and advice given that Council will require a 5% public open space contribution for subdivision. For the purpose of Middleton Field (9 Raglan Street), a land contribution will be required, rather than cash or combination of cash and land. This will ensure an improved amenity outcome and community benefit for future residents of the development and the broader community. Ideally dwellings should be within comfortable walking distance of local open space.

The 5% will have to be unencumbered and above the 1:100-year flood line and be for the purpose of usable public open space. The linear public open space above the 1:100-year flood level, along the overland flow path within the development, is supported and connections to a sensible pedestrian network will also be considered.

It should be noted that due to the connectivity between the proposed subdivision at 9 Raglan Street and the proposed subdivision at 4719 Midland Highway, the provision of the open space will be viewed across both developments with a large piece of open space abutting the eastern boundary of 9 Raglan Street albeit being in

4719 Midland Highway. It is considered this is the best option to provide useable open space for both developments rather than looking at the developments in isolation.

The applicant has advised that an area of approximately 0.64ha (5.76%) of encumbered land will be provided for public open space and an additional area of 0.14ha (0.95% of non-creditable (encumbered) land will be provided. Final details will be subject to detailed engineering design.

Neighbourhood Character

The subject site is identified in the township boundary and zoned accordingly. It will change in character from the open paddock that currently exists with one existing dwelling. That outcome was determined when the land was designated a residential zone. The proposed lot sizes are larger than the adjoining lots to the west in Rosella Avenue, with a large lot provided for the existing heritage home to be retained.

Building envelopes can be applied to the lots fronting Raglan Street to ensure an appropriate setback and interface. These lot widths also generally reflect the existing lot widths immediately to the west along Raglan Street.

Adherence to ResCode

The proposed development complies with the subdivision provisions of ResCode. Each lot is of sufficient size to contain a 10m x 15m envelope, the lots are well orientated, and the 16m road reserve width meets Council requirements.

Environmental and Sustainability Issues

Stormwater management has already been discussed but it is important to note that best practice measures will be implemented to remove pollutants from stormwater. There are no native vegetation or ecological issues with the proposed development.

Amenity Considerations

The only adjoining residential properties are those to the west in Rosella Avenue. Given the subject site is zoned for residential purposes it is reasonable for the land to be developed in accordance with the zone and overlay controls.

Potential off-site amenity impacts while the subdivision is being constructed can be managed with a Construction Management Plan.

Subdivision Layout

The proposed layout has been modified to provide a larger lot for the heritage dwelling to be retained, modify two of the lots fronting Raglan Street (Lots 501 and 502) to ensure no direct access is provided, realign the road to better reflect the north/south drainage line alignment and to provide a vehicular connection to the east to 4719 Midland Highway.

Lot sizes range between 607sqm and 1,235sqm with an average lot size of 766.65sqm. In the context of nearby development this is considered a site responsive outcome. The lot frontages provide adequate width for future side setbacks to maintain a less intense development outcome, more reflective of the broader development within Daylesford.

The heritage dwelling is retained on the largest lot with a 27m frontage. Building envelopes can be provided on this lot and the adjoining lots to ensure appropriate setbacks and separation of built form from the heritage dwelling.

The proposed access from Raglan Street has also been modified at the request of the Department of Transport (now Department of Transport and Planning). Previously the road was proposed to go either side of a tree in the Avenue of Honour. This outcome was unacceptable to DoT and the modified intersection results in the removal of one tree in the Avenue of Honour.

POLICY AND STATUTORY IMPLICATIONS

This application meets Council's obligations as Responsible Authority under the *Planning and Environment Act 1987.*

GOVERNANCE ISSUES

The implications of this report have been assessed in accordance with the requirements of the Victorian Charter of Human Rights and Responsibilities.

SUSTAINABILITY IMPLICATIONS

Providing an infill residential development within the boundaries of the town centre provides for a sustainable outcome and efficient use of existing services – both physical and community. Increasing population and providing for a diverse housing product in close proximity to the established township, schools and the like is a good planning outcome.

FINANCIAL IMPLICATIONS

Any application determined by Council or under delegation of Council is subject to appeal rights and may incur costs at VCAT if appealed.

RISK IMPLICATIONS

No risks to Council other than those already identified.

COMMUNITY AND STAKEHOLDER ENGAGEMENT

The application has been advertised by sending notification of the proposal to adjoining and adjacent owners and a notice on the land. As a result, 17 objections have been received. The issues raised in the objections are addressed individually as follows.

Ugly development, no design quality, nothing to complement the soul of Daylesford.

Council officers have worked with the developer to modify the proposal which has encouraged use of the north south drainage line for public open space, connectivity and improved landscape outcomes to enhance this development. The road alignment has also been modified to reflect the alignment of the drainage line and provides a 'softer' appearance.

No regard for landscape features and vistas and inadequate stormwater treatment.

The north south road and enhanced drainage line will provide for views to the north and south of the site. A Stormwater Management Plan submitted with the application demonstrates that flows will be retarded back to pre-developed flows and best practice will be implemented to remove pollutants from stormwater. Two retarding basins are to be provided in the approved developments of 17 and 29 Smith Street to cater for the overall Middleton Field development.

Will damage preferred heritage character of Daylesford.

The submitted plan has been modified to provide a larger lot for the heritage dwelling. There will also be a planning permit requirement for a Conservation Management Plan and assessment and recording of the outbuilding to be removed. This outbuilding is in a very poor condition and its removal has been agreed to by Council's Heritage Advisor.

Not reflective of neighbourhood character and ignoring important rural character.

Council should not accept cash payment but rather require land as open space.

See statement regarding character below, note retention of heritage building and that this application is for a subdivision. Built form will be subject to separate application and design guidelines. Public open space will be provided totalling no less than 5% unencumbered land along the north south drainage line. This will provide for a walking path and landscape opportunities to enhance this asset.

Infrastructure will have trouble coping with increase in housing.

No objections from the servicing authorities have been received.

Increase in population will radically change town's character and amenity.

The subject site is located within the township boundary and zoned for residential purposes. Inevitably the population will increase, and the character will change at the subject site. However, the emerging character will reflect the Neighbourhood Residential Zone applied to the site and surrounds.

How will Council ensure homes are financially accessible to the average person.

There is no mechanism in the planning scheme to require affordable housing. It should be noted that the same developer has accepted a condition for four lots in

the approved subdivision at 17 Smith Street to be provided to a Registered Housing Agency.

Application is riddled with errors and false claims.

The application has been supported by a range of reports prepared by experts in their respective fields.

Will not provide much needed residential stock as houses will be too expensive for local residents

The cost of the lot product is not a relevant planning consideration and commentary on affordable housing has been provided elsewhere in the response to objections.

Will have detrimental impact on amenity of current residents through ongoing construction works.

A Construction Management Plan will be required as a condition of planning permit which will include measures to mitigate off site amenity impacts. Furthermore, the development will need to comply with EPA requirements.

New developments bordering the rear of Rosella Lane be kept at single storey as to protect privacy and solar access to solar panels

There are eight dwellings abutting the subject site to the west. Some of these appear to have solar panels. Given the proposed development is to the east of these properties it is not anticipated there will be an unreasonable impact.

The siting of future dwellings will be controlled by the provisions of the Building Regulations.

LEGEND

- Site Boundary
- Standard Lot
- Existing Trees
- Avenue of Honour Trees
- Proposed Entrance Layout by OMG
- Footpath
- Crossover
- Verge
- Existing Building to be retained
- Existing Shed to be removed

RESIDENTIAL LOT SUMMARY

Size	No. of Lots	%Total Lots
600 sqm. - 699 sqm.	04	18.1%
700 sqm. - 799 sqm.	09	40.9%
800 sqm. - 899 sqm.	09	40.9%
Total Residential Lots	**22**	

Minimum Lot Size: 637sqm.
Average Lot Size: 772 sqm.
Maximum Lot Size: 896 sqm.
Total Lot Area: 16989.2 sqm.

PRELIMINARY SUBDIVISION LAYOUT PLAN

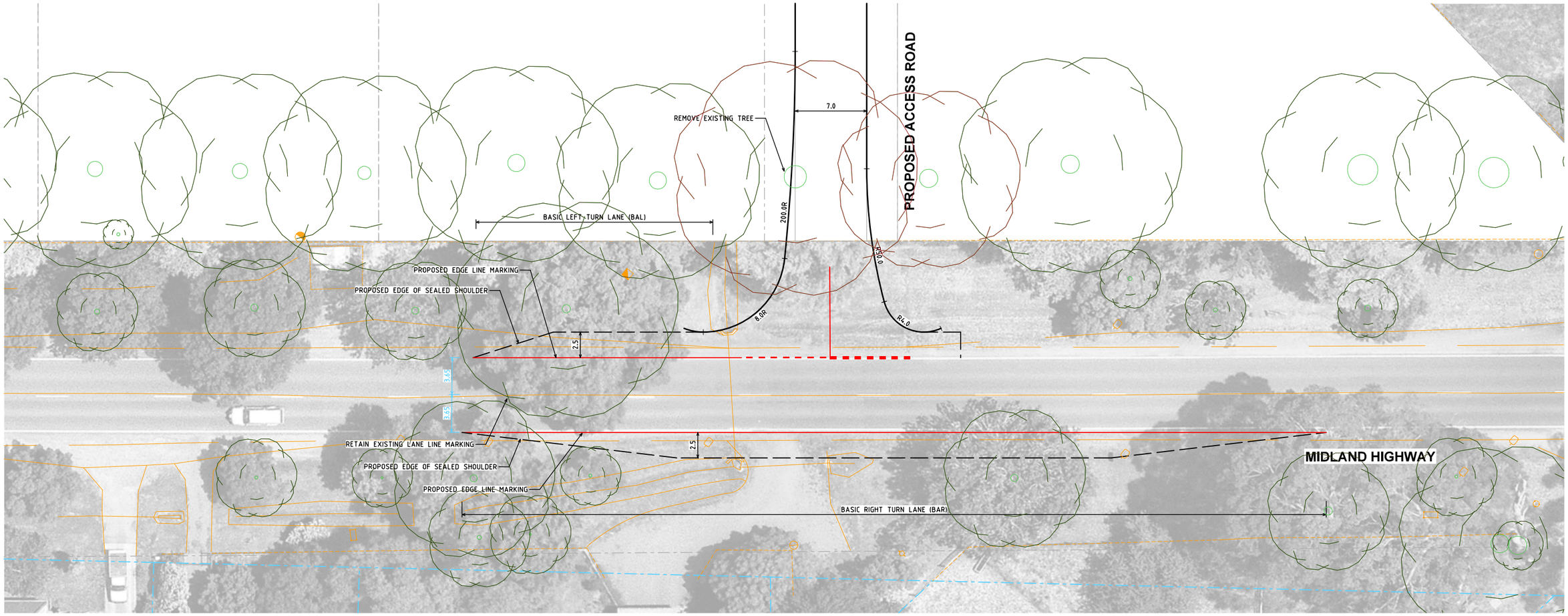
9 RAGLAN ST, DAYLESFORD VIC 3460

Aerial supplied by: Nearmap
Aerial Date Stamp: 14.12.20
Survey supplied by: N/A
Plan Number: NPS943 - 009
Revision Number: D
Drawn By: Nivedita Ravindran
Client: Hygge Property

0 10 20 30 40 50 60m

Scale: 1:1000 @A3 | Date Issued: 11.03.2022 | ©Niche Planning Studio

NICHE PLANNING STUDIO



CAD File: N:\Projects\2022\220239\Drawings\220239CLP101.dgn

Date Plotted: 20-01-2023 9:29:34 AM

GENERAL NOTES

1. ALL DIMENSIONS TO FACE OF KERB AND CHANNEL UNLESS NOTED.
2. DECLARED ROAD - MIDLAND HIGHWAY(SPEED ZONE 60KM/H).
3. SIGNS AND LINE MARKING TO BE INSTALLED IN ACCORDANCE WITH VICROADS SUPPLEMENT TO AS1742.2.
4. ADOPT VICROADS SUPPLEMENT TO AUSTRALIAN STANDARDS AS REQUIRED.
5. REMOVE ALL REDUNDANT SIGNS AND LINE MARKING.

onemilegrid operates from Wurundjeri Woiwurung Country of the Kulin nation.
We acknowledge and extend our appreciation to the Wurundjeri People, the Traditional Owners of the land. We pay our respects to leaders and Elders past, present and emerging for they hold the memories, the traditions, the culture, and the hopes of all Wurundjeri Peoples.

Aerial Photography
Aerial photography provided by Nearmap

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9 Raglan Street, Daylesford

Application for a staged multi-lot subdivision, removal of vegetation, demolition of an outbuilding, and alteration of access to a road in a Transport Zone 2.

Version 2

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EXECUTIVE SUMMARY

This planning report consolidates the work undertaken by Niche Planning Studio and the Hygge Property team regarding the overall vision and preparation for the Middleton Field estate in Daylesford, Victoria.

Middleton Field Estate stretches across 17 Smith Street, 29 Smith Street, 4719 Midland Hwy and 9 Raglan Street providing a new carbon neutral neighbourhood in Daylesford. The broader proposal incorporates house and land packages supporting 7* NatHERS ratings, no fossil fuel energy connections, retention of large existing trees within the public realm, incredible views towards the east of Daylesford and an ecovillage which delivers small footprint community living with communal gardens, food production, community housing dwellings, designed by Breathe Architecture.

The proposal at 9 Raglan Street compliments the existing design providing 20 front-loaded residential lots ranging in size from 609m² to 1235m², accessing from a central 16m north-south local access street from Raglan Street. The subject site complies with the requirements of the Neighbourhood Residential Zone – Schedule 1 (NRZ1), Environmental Significance Overlay – Schedule 1 (ESO1) and Schedule 2 (ESO2) and Heritage Overlay (HO698).

The provision of a continuous accessway from Raglan Street and Midland Hwy through to Smith Street will improve accessibility and fire safety across 17 Smith Street, 29 Smith Street, 4719 Midland Hwy and 9 Raglan Street, as well as facilitate additional housing supply within the township boundary. The proposal will facilitate a high-quality development at the site which will contribute to an attractive township entrance which respects the surrounding heritage character of the area.

In preparing this application, Hygge Property and the broader project team have undertaken investigations into the site to ensure it can be serviced, and with due consideration of the approved subdivision at 17 Smith Street and the proposed subdivision of 29 Smith Street and 4719 Midland Hwy.

The proposed staged subdivision design considers the broader development and local context specifically in regard to the planning permit triggers of subdivision, removal of vegetation, demolition of a building and alteration of access to a Transport Zone 2.

Importantly, the subdivision of the land aligns with the Hepburn Shire Planning Scheme Council's strategies and objectives pertaining to Daylesford.

Figure 1: View to 9 Raglan St from north-west

1. INTRODUCTION

Niche Planning Studio has been engaged on behalf of Hygge Property to prepare a report in support of a staged multi-lot subdivision application at 9 Raglan Street, Daylesford, within the Shire of Hepburn, herein referred to as the subject site.

The subdivision of the land will form part of Hygge Property's Middleton Field development, which will include 17 Smith Street, 29 Smith Street and 4719 Midland Hwy.

The purpose of the report is to provide an analysis of the subdivision area and a strategic justification for the proposed subdivision within the broader Middleton Field estate. It also provides an assessment for the purposes of planning approval for the multi-lot subdivision of the site, removal of existing vegetation, construction of roadworks and demolition of the existing dwelling.

These assessments are provided to demonstrate how the planning and development outcomes will deliver this part of the Middleton Field development.

Specifically, the report covers the following:

- Provides background to the project, including existing approvals within Middleton Field
- Identifies the subdivision area within the context of Daylesford's eastern entrance
- Provides planning support for the approval of a planning permit allowing for the subdivision of the site and associated works.

APPLICATION SUMMARY	
Site Address:	9 Raglan Street, Daylesford
Title Details:	Allot. 35 Sec. 2 Parish of Wombat
Zoning:	Neighbourhood Residential Zone – Schedule 1 (GRZ1)
Overlays:	Environmental Significance Overlay – Schedule 1 (ESO1) Environmental Significance Overlay – Schedule 2 (ESO2) Heritage Overlay (HO698)
Proposal:	Planning permit for staged multi-lot subdivision, removal of vegetation, demolition of an outbuilding building and alteration of access to a transport Zone 2.
Permit Triggers	NRZ1: - To subdivide land ESO1: - To subdivide land - To remove vegetation on a site greater than 1 ha and within 30m of a waterway ESO2: - To subdivide land - To remove vegetation HO698 - To subdivide land - Demolish and remove an outbuilding - Construct or carry out works for roadworks - Remove destroy or lop a tree Cl 52.29 - To alter access to a Transport Zone 2 - To subdivide land adjacent to a Transport Zone 2

2. SITE CONTEXT

2.1 Background Overview

The proposed subdivision area is located at 9 Raglan Street and is bounded to the south by the Avenue of Honour providing an eastern entry into the Daylesford township. The lot represents the current eastern boundary of urban development and is located to the south of the approved subdivision at 17 Smith Street. Subdivision of the subject site represents a logical conclusion of the Middleton Field development, providing an integrated local road connection and sewer catchment for the broader area.

As shown in Figure 2 overleaf, the site forms part of three parcels controlled and/or owned by Hygge Property and which will form part of the new Middleton Field development.

The benefit of subdivision of the site is three-fold:

1. Ensures efficient and compatible use of currently vacant land
2. Provides improved access and safety to residents within Middleton Field
3. Provides much needed residential stock to the township, within the township boundary

Raglan Street includes the Avenue of Honour, a series of ash trees, which contribute to the visual amenity of the heritage precinct and entrance to Daylesford. The trees are valued elements of the streetscape and their protection has been considered during the analysis of the site.

Figure 2: Middleton Field Masterplan (note: refer to 9 Raglan Street subdivision layout plan for final layout)

2.2 Strategic Context

Hepburn Shire's Municipal Profile identifies Daylesford as the highest order town in the Hepburn municipality. As a 'regional town', its role is to provide 'district retail, business, employment and cultural facilities, higher order shopping and some regional level services.' The town is characterised by its main employment areas of tourism operations as well as timber work, farming, and artists. Its farming, gold mining and mineral springs history contributes to its built form and heritage value, while its natural scenic landscape also contributes to its value as a place to live as well as a tourism hub.

Daylesford has good access to Ballarat, Bendigo and Melbourne via major highways and freeways.

In recent years, housing unaffordability, diversity and choice has become a significant issue for Daylesford, and as such has limited housing supply, affordability of rental properties. Niche Planning Studio understands that Hepburn Shire Council has adopted an Affordable Housing Policy which recognises this pressure on the community and commits to developing an affordable housing policy and strategy to be implemented through planning controls.

The Daylesford Structure Plan identifies the 'urban growth boundary'. The site is located within the urban growth boundary (see Figure 3). The Structure Plan also identifies five main town entrance points from varying directions, which connect to major freeways and highways. The town of Daylesford is nestled directly to the east of various regional parks and conservation areas.

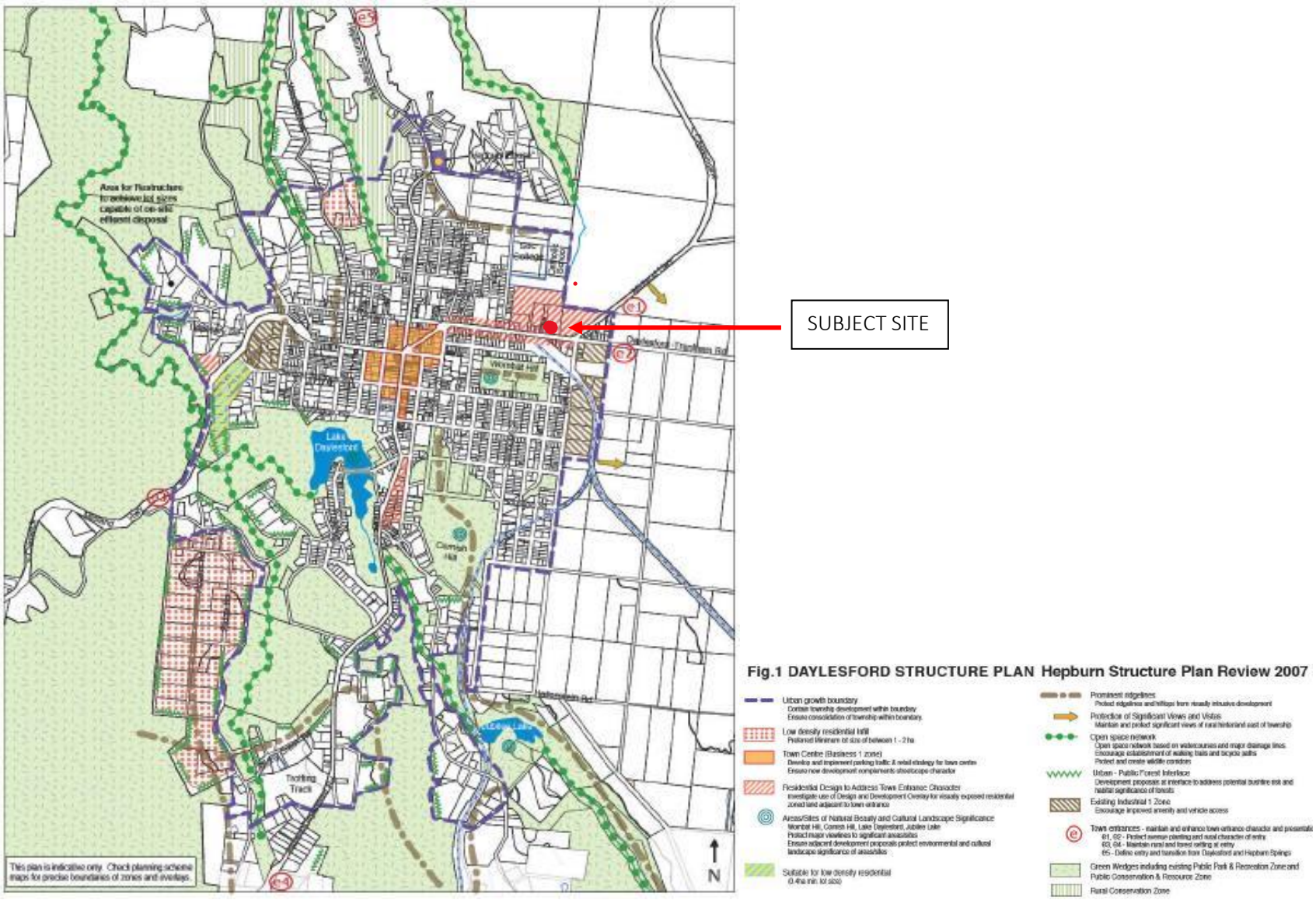

Figure 3: Strategic context plan

2.3 The Subject Site

The subject site consists of a singular landholding of approximately 2 ha and contains a homestead dwelling and associated outbuilding.

The site incorporates access and direct frontage to Raglan Street, a higher order street controlled by the Department of Transport. A planned access is proposed into the rear of the proposed as a result of the subdivision of 17 Smith Street to the north.

The site is surrounded by the following:

- To the immediate north of the site is 17 Smith Street, a new residential area currently under construction.
- To the east lies large lots, including Wombat Park, with the Midland Highway beyond.
- To the south is Raglan Street, small residential lots beyond and the old Daylesford Railway Station.
- To the west is a mixture of smaller and larger residential lots with some commercial and tourist uses within.

The general surrounds of the site are characterised by the Daylesford township edge, with standard residential lots and school facilities to the north, a mixture of vacant paddocks and residential lots to the east, Daylesford township and Wombat Hill to the south and further residential lots on the western side. These are shown in Figure 4.

A feature survey is provided with this application (see Appendix 2).

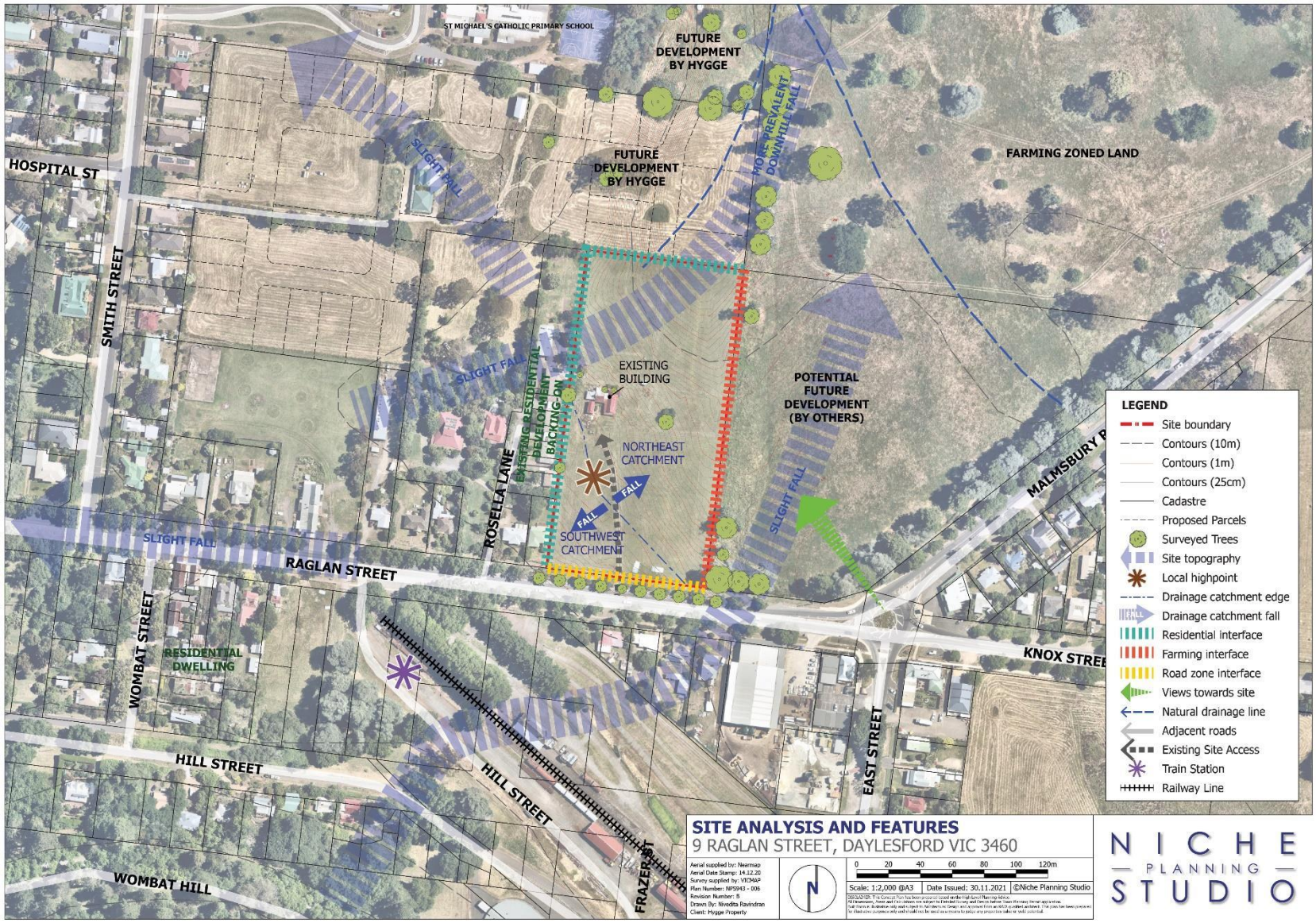

Figure 4: Site context

3. PROPOSAL

Development of 9 Raglan Street facilitates the overall development and connectivity of Middleton Field. Middleton Field is a high-quality residential development offering carbon neutral house and land packages within the eastern Daylesford township boundary. The development includes house designs prepared by leading architects which reflect the style and character of Daylesford. The estate centrepiece is the Middleton Field eco-village, which includes public open space linear park, original vegetation from the site and specialty small-footprint housing with high-spec sustainability features.

It is proposed to develop:

- Staged multi-lot subdivision (20 lots) pursuant to Clause 32.09-3 (Neighbourhood Residential Zone)
- Demolition of an outbuilding under the heritage overlay
- Removal of vegetation pursuant to Clause 42.01 (ESO) and the heritage overlay.
- Upgrade of the Raglan Street entrance to accommodate a residential subdivision

Figure 5 shows the proposed plan of subdivision.

Continuing the approved subdivision at 17 Smith Street, this proposal provides a residential link through to Smith Street and an attractive entrance to Daylesford within a high quality development in one of the last large residentially zoned landholdings in Daylesford.

Key benefits of the proposal include:

- Road **network connections** between Smith Street, Raglan Street and Midland Hwy.
- **Large lots** appropriate for a range of housing types.
- Housing packages as part of the Middleton Field estate incorporating **sustainability measures** such as double glazed windows, stormwater retention, minimum 7*NatHERS rating

A pre-application meeting was undertaken on the 12th November 2021 and attended by Niche Planning Studio, Hygge Property and Council. Initial matters that Council raised included:

- A section of Raglan Street is owned by Council, rather than the Department of Transport. This may have implications for relevant referral authorities for the intersection treatment to Raglan Street.
- The building at 9 Raglan (excluding later outbuildings/additions) is 'listed' in the Heritage Overlay schedule, and is considered 'contributory' to the railway precinct. Council did not raise any initial concerns with demolition of the building, however this is not proposed.

- Design Guidelines standards continuation throughout each subdivision stage. This issue has been resolved through finalisation of the Design Guidelines associated with 17 Smith Street subdivision permit, as the Design Guidelines will apply to the whole of Middleton Field and therefore extended to all lots within 9 Raglan Street.
- An Environmental Impact Assessment is required. Please refer Appendix 8.

Figure 5: Proposed subdivision

4. PLANNING POLICY FRAMEWORK

4.1 Planning Policy Framework and Local Planning Policy Framework

4.1.1 Municipal Strategic Statement

The Planning Policy Framework sets the high order strategic guidance for planning and land-use outcomes across Victoria.

The proposed subdivision is consistent with what is set out within the Central Highlands Regional Growth Plan (refer plan on next page). Daylesford is highlighted as a key tourism precinct, and an area which should 'contain growth'. The proposed residential subdivision allows for growth to be contained within the area, as it is within the township urban growth boundary.

The regional Planning Policy Framework sets out strategic guidance for planning and land-use outcomes across the regional context of Hepburn Shire, and the wider Central Highlands area. Relevant to the subject site, these regional policies aim to ensure that services and sub-services be provided at regional towns, including Daylesford. Additionally, it seeks to ensure that Daylesford's growth is maintained in the township boundary and respects landscape and resource values.

The proposed residential subdivision is consistent with policy framework for the Central Highlands area, providing housing at an appropriate density within a dedicated area identified for future residential land use

Figure 6: Views towards Wombat Hill and undeveloped land to the east of the site

4.1.1 Clause 12.05-2L – Landscape management

This clause outlines priorities for specific ladndscapes management within the shire. Specifically, the municipality's Goldfields, Uplands and Western Volcanic Plain areas.

The site is located within the Uplands landscape character area and therefore priorities for this landscape type include maintaining agricultural features and vegetation. The proposal retains vegetation where possible and ensures that future development can be built along topographical lines, to preserve

4.1.1 Clause 14.02-1L – Catchment and land protection and Clause 14.02-2L Mineral springs and freshwater springs protection - Hepburn

This clause provides locally relevant information regarding catchment, waterways and groundwater and provides for development that is sympathetic to surrounding landscape and habitat impacts. It includes specific guidance for matters of soil and water management, as well as biodiversity and habitat.

The proposal has considered the existing natural resources and environmental systems within the area, and has responded to ensure that stormwater is managed on site, and other impacts minimised to reduce impact on the surrounding landscape. Deep sewerage is utilised across the subdivision area, minimising the risk of seepage generally associated with septic systems. Please refer to Appendices 5 and 8 for further information.

4.1.2 Clause 15.01-1L – Urban Design

This clause provides support for good urban design outcomes relevant to a rural area with a gold rush history, specifically for Daylesford, which is included within the Strategic Framework Plan.

The proposal has considered the existing rural character of Daylesford and will provide grass verges to the retarding basin as well as consistent streetscape layout with surrounding areas. The layout has been designed to allow for development and street layout to work within the existing topography and protect and enhance views across the farming areas beyond.

4.1.3 Clause 15.01-3L Subdivision in Hepburn Shire

This clause applies to subdivision within township boundaries and aims to produce context-based subdivision outcomes that consider surrounding environmental characteristics.

The proposal has considered the existing surrounding landscape and faces lots towards the retarding basin and open landscape beyond to seamlessly interface with the townships boundary. This ensures plenty of vegetation and landscaping opportunities between the urban area and the township boundary and reduces impacts on the visual amenity of this Daylesford township entrance.

4.1.1 Clause 15.01-5L – Neighbourhood character in Daylesford

This clause reinforces preferred character in various precincts throughout Daylesford, with particular emphais on views and landmarks including Wombat Hill.

The site is located within precinct 11, which his characterised by spacious settings and defines the entrance to Daylesford. The proposal has been carefully designed to avoid the need to remove trees in the Avenue of Honour and ensure lot sizes are generous to contribute to a spacious and vegetated urban environment and minimizing visual impact to distant views from Wombat Hill. Lots front to Raglan Street but minimise crossovers to maintain a picturesque entrance to Daylesford that retains its goldrush character along the Avenue of Honour.

4.1.2 Clause 15.03-1L Heritage

This clause supports the heritage overlay and specifically ensures that subdivision and demolition proposals respond to the heritage values of the surrounding area.

The existing building on the site is proposed to be demolished, having lost structural integrity and is unable to be reasonably recovered. Any future development within the subdivision would hide the visibility of the location of the existing building and therefore the response to the heritage precinct derives from its consideration of subdivision character such as larger residential lot sizes, minimal crossovers and streetscape vegetation.

4.1.3 Clause 16.01-1S – Housing Supply

Council recognises that it will continue to grow due to its close proximity to major city centres in Victoria. To realise appriopriate growth a key issue to be addressed through planning work is to support consolidation of existing towns and support diverse housing choices while maintaining town character.

The proposed subdivision achieves the objectives of this clause providing access to residential land supply in an area identified for future residential development, within the township boundary. The generous lot sizes ensure that township character is retained and enhanced.

5. ZONING

5.1 Clause 32.09 – Neighbourhood Residential Zone (NRZ1)

The site is zoned Neighbourhood Residential Zone(NRZ1) which generally defines the residential boundary of the Daylesford township. The overall purpose of NRZ1 is to maintain low rise development within identified character, heritage and landscape values.

The proposed subdivision complies with the purpose of the zone, as it will allow for the future development of low rise housing within the township boundary, with good access to carious services and amenities within Daylesford.

5.1.1 Clause 32.09-3

Pursuant to Clause 32.09-3, a permit is required to subdivide land. The subdivision will allow for the creation of twenty (20) new lots and will enable the development of future dwellings in Daylesford. Clause 32.09-13 of the GRZ sets out a list of decision guidelines which are to be considered as part of a subdivision application. A response to the decision guidelines is provided below:

Decision Guideline	Response
The Municipal Planning Strategy and the Planning Policy Framework.	**Complies –** see section 4of this report.
The purpose of this zone.	**Complies –** see section 4 of this report.
The Objectives set out in a schedule to this zone.	**N/A –** Schedule 1 to this zone does not contain any objectives.
Any other decision guidelines specified in a schedule to this zone.	**N/A** – No decision guidelines are included in Schedule 1 to this zone.
The impact of overshadowing on existing rooftop solar energy systems on dwellings in adjoining lots in a GRZ, MUZ, NRZ, RGZ or Township Zone.	**N/A –** This application does not propose development, as such no overshadowing will impact surrounding lots.
The pattern of subdivision and its effect on the spacing of buildings.	**Complies –** The creation of the new lots as a result of the subdivision will enable the development of dwellings in accordance with the purpose of the zone. The subdivision design is similar in lot width and length to adjacent lots in the Middleton Field estate and is considered to reflect both the existing and desired subdivision pattern of the area.
For subdivision of land for residential development, the objectives and standards of Clause 56.	**Complies** -An assessment against clause 56, with the exception of clauses 56.03-1 to 56.03-3, 56.03-5 and 56.06-1 and 56.06-3 has been provided in section 7.

6. OVERLAYS

6.1 Clause 42.01 Environmental Significance Overlay

The site is affected by the following overlay and associated schedules:

- Environmental Significance Overlay – Schedule 1 (ESO1): specifically regarding water catchment protection (see Figure 7).
- Environmental Significance Overlay – Schedule 2 (ESO2): specifically referring to the Hepburn Springs and groundwater protection (see Figure 7).

Pursuant to Clause 42.01-1, a permit is required to subdivide land and to remove, destroy or lop vegetation, unless a schedule states a permit is not required.

A planning permit is triggered for both of the above.

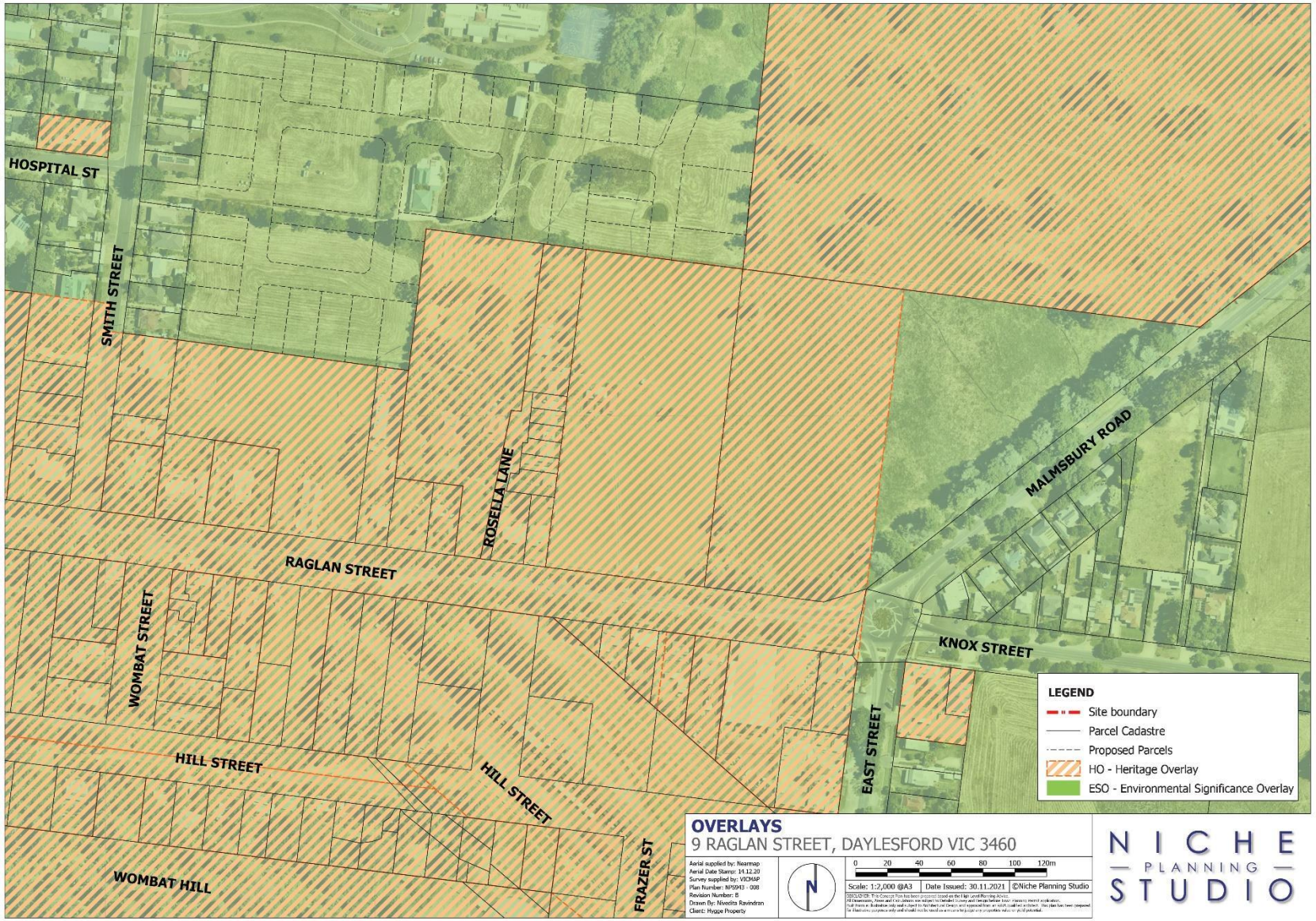

Figure 7: Environmental Significance Overlay – Schedule 1 and 2

6.1.1 Schedule 1 to the ESO

The ESO1 relates to the proclaimed catchment protection, and seeks to ensure that the region's water quality is protected. ESO1 specifies the following mandatory requirements:

- *All on-site wastewater must be treated and disposed of in accordance with the relevant EPA Code – On Site Wastewater Management.*
- *All Stormwater must be managed and discharged to the satisfaction of the responsible Authority and generally in accordance with the principles described in Urban Stormwater: Best Practice Environmental Management Guidelines (Victorian Stormwater Committee 1999).*

The proposal has been designed to ensure compliance with the above, noting that all on-site wastewater will be managed with deep sewer infrastructure (i.e. reticulated) and not via on-site septic systems. Stormwater will be managed through the subdivision drainage system and will improve the quality of water released beyond the subdivision area. For more information, please refer to Appendix 5 - Stormwater Strategy.

The ESO1 states that a permit is not required to remove, destroy or lop vegetation, including dead vegetation unless the removal, destruction or lopping is on a site greater than 1ha or is within 30m of a waterway. As the subject site is greater than 1ha, a planning permit is triggered for the removal of vegetation under this overlay. ESO1 lists the following decision guidelines:

Decision Guideline	Response
Before deciding on an application the Responsible Authority must consider:	
Any comments of the relevant water authority	It is understood that the relevant water authority will provide relevant referral comments following submission of the application.
The slope, soil type and other environmental factors including the potential for pollution of waterways and ground water.	**Complies –** The subdivision design process has considered the existing features of the land and has been designed to respond to this to ensure minimal impact, and ensuring stormwater is treated to best-practice standards.
The need to maintain water quality at a local and regional level.	**Complies –** The subdivision will not decrease the water quality of the area. The basin approved at 17 Smith Street has been designed to accommodate flow from 9 Raglan and ensures increased stormwater run-off is properly integrated into the water system.
The possible effect of the development on the quality and quantity of water in local watercourses, storages, creeks and springs, including the impact on nutrient levels.	**Complies** – The subdivision has been designed to ensure that there is no negative effect on the quality and quantity of water in surrounding waterways.
The preservation of and impact on soils and the need to prevent erosion.	**Complies –** The subdivision design integrates with the topography of the land to ensure there is minimal impact.
The need to prevent or reduce the concentration or diversion of stormwater.	**Complies –** Please refer Stormwater Strategy report at Appendix 5
The need to retain vegetation which prevents or limits adverse effects on ground water recharge.	**Complies** – The application seeks to remove native vegetation – please refer Appendix 8 Environmental Impact report for more information. The Stormwater Strategy report

	(Appendix 5) demonstrates how effects on ground water recharge will be accommodated throughout the subdivision and servicing design.

6.1.2 Schedule 2 to the ESO

The ESO2 relates to the protection of the mineral springs and groundwater in the shire.

The ESO2 states that a permit is not required for works that will not result in changes to surface or groundwater runoff or contribute to a decline in spring water quality. As the subdivision may result in changes to surface or groundwater runoff, a planning permit is triggered under this overlay.

ESO2 lists the following decision guidelines:

Decision Guideline	Response
Before deciding on an application the Responsible Authority must consider as appropriate:	
Existing use of land and the reason for the development in relation to that use.	**Complies –** The Daylesford Structure Plan identifies the subject site to be within the township boundary, and therefore appropriate for residential development. The subject site is also zoned for residential purposes.
The availability of alternative land outside the overlay area.	**Complies –** The subject site will allow for residential infill within the township boundary, and therefore an alternative area has not been considered.
The means of treatment and disposal of all sewage, sullage, stormwater and other wastes where connection to a reticulated sewage system is not available.	**Complies**
Possible effect of the development on the quality and quantity of mineral spring and freshwater.	**Complies** – The subdivision has been designed to ensure that there is no negative effect on the quality and quantity of mineral spring and freshwater.
The impact on soils and the need to prevent erosion.	**Complies –** The subdivision design integrates with the topography of the land to ensure there is minimal impact.
Protection of the area for its recreational value.	**Complies –** The subject site is zoned for residential purposes, and therefore the residential subdivision is considered appropriate. The recreation value of the surrounding area will be enhanced through the opportunities for planting locally native trees in streetscapes and gardens.
The need to prevent or reduce the concentration of wastewater or stormwater.	**Complies** – Please refer Stormwater Strategy report at Appendix 5.
Potential threats to mineral springs water quality.	**Complies –** The subdivision has been designed to ensure minimal threats to the mineral springs water quality are produced.

Comments received from the Department of Natural Resources and Environment, the relevant water authority and the Victorian Mineral Water Committee.	It is understood that the application will be referred to the relevant departments, authorities and committees to provide a response following a preliminary assessment of the application.

6.2 Clause 43.01 Heritage Overlay – Schedule (HO698)

The site is affected by the heritage overlay schedule 698 (HO698) which applies to the Daylesford Railway Heritage Precinct.

Pursuant to Clause 43.01-1, a permit is required to subdivide land; demolish or remove a building; for roadworks which change the appearance of a heritage place or which are not generally undertaken to the same details, specifications and materials; and to remove, destroy or lop a tree where tree controls apply.

A structural report has been undertaken to assess the proposal against the existing building under the heritage overlay. The structural report found that the building is in poor condition and extensive works would have to be undertaken to remediate the building. Please refer to this report at Appendix 6. In addition, a Heritage Impact report has been provided to Council.

The Heritage Overlay applies the following guidelines:

Decision Guideline	Response
Before deciding on an application, in addition to the decision guidelines in Clause 65, the Responsible Authority must consider as appropriate:	
The Municipal Planning Strategy and the Planning Policy Framework.	**Complies –** The proposal provides additional residential land in accordance with the Hepburn Planning Scheme.
The significance of the heritage place and whether the proposal will adversely affect the natural or cultural significance of the place.	**Complies –** The significance of the railway precinct is linked to the railway station. The building located on 9 Raglan Street is considered 'contributory' to the overall precinct. The proposal may have some impact on the cultural significance of the place through demolition of the existing outbuilding, however this is minimised as the building site location will be hidden by future residential buildings built to Raglan Street and is a part of the gradual increase of residential lots described in the heritage overlay.
Any applicable statement of significance (whether or not specified in the schedule to this overlay), heritage study and any applicable conservation policy.	**Complies –** The outbuilding itself is not identified within the reference document for the station precinct. The main house has no specific statement of significance, and contributes as a 'distant view of early farm houses' from the railway station. Lots sizes proposed will maintain the spaciousness valued in the precinct, with design guidelines to

	control the visual contribution of new residential development to ensure that it is sympathetic to the heritage precinct character.
Any applicable heritage design guideline specified in the schedule to this overlay.	N/A
Whether the location, bulk, form or appearance of the proposed building will adversely affect the significance of the heritage place.	N/A
Whether the location, bulk, form and appearance of the proposed building is in keeping with the character and appearance of adjacent buildings and the heritage place.	N/A
Whether the demolition, removal or external alteration will adversely affect the significance of the heritage place.	**Complies** – The removal of the existing outbuilding will not significantly affect the significance of the heritage place, having no direct cultural connection to the railway station, and being hidden from view by future residential development in the area.
Whether the proposed works will adversely affect the significance, character or appearance of the heritage place.	**Complies –** The subdivision has been designed to reflect the existing subdivision patterns of goldrush era places in Daylesford.
Whether the proposed subdivision will adversely affect the significance of the heritage place.	**Complies –** The proposed subdivision will not of itself adversely affect the significance of the heritage place, which is characterised by lots of varying sizes.
Whether the proposed subdivision may result in development which will adversely affect the significance, character or appearance of the heritage place.	**Complies –** The future development in the subdivision will be controlled by design guidelines that ensure that any development respects the character of the heritage precinct.
Whether the lopping or development will adversely affect the health, appearance or significance of the tree.	**Complies –** The proposal includes the removal of three (1) trees within the site and one (1) tree outside the subject site area in the road reserve. These trees are proposed to be removed to facilitate the development of the proposed subdivision and the upgrading of the existing crossover to a local level street in the Avenue of Honour along Raglan Street. The road will be constructed in accordance with recommendations given in the Arborist Report at Appendix 7 and any engineering requirements to ensure the ongoing health of remaining trees.
Whether the location, style, size, colour and materials of the proposed solar energy system will adversely affect the significance, character or appearance of the heritage place.	N/A

7. PARTICULAR PROVISIONS

7.1 Clause 52.29 – Land Adjacent to the Principal Road network

Pursuant to Clause 52.29, a permit is required to alter the existing access to facilitate an intersection in accordance with Department of Transport standards. In addition, the slight widening of Raglan Street is required to allow for safe left and right turns into the subject site, which may require changes to existing crossovers on Raglan Street.

A permit is also required to subdivide land adjacent to a road in a Transport Zone 2.

As the subject site is zoned for residential development, safe access to the site is required. The proposed access is considered to maintain appropriate levels of road and public safety and will be constructed to the satisfaction of Council and the Department of Transport, as relevant. The Traffic report provides further discussion and information.

7.2 Clause 53.01 – Public Open Space Contribution and Subdivision

Pursuant to clause 53.01, subdivision of land requires that a contribution of land or of an equivalent monetary value be paid to Council to enable the creation of public open space. The schedule to the clause stipulates that all residential, industrial and commercial subdivision within the Shire of Hepburn is subject to 5% of the value of land intended to be developed for residential purposes.

As the lot is subject to a residential Net Developable Area of 2ha, a total of 0.1ha is required to be contributed to Council, or the value of land to 0.1ha.

Our client would like to negotiate with Council to provide this contribution as cash contribution at statement of compliance. This contribution will be dealt with as a condition to any planning permit issued.

7.3 Clause 56 – Residential Subdivision

A detailed assessment of the proposed subdivision against the relevant objectives and standards of Clause 56 has been undertaken. The proposed subdivision complies with the requirements of Clause 56 and this is attached at Appendix 9.

8. CONCLUSION

The proposed subdivision is considered appropriate as it will provide for a viable residential development, in keeping with Council's intended strategy for the land, and its adjacent uses, respectively. The subdivision is in alignment with the Planning Policy Framework and local planning policies regarding the provision of increased housing within the township boundaries and is in accordance with the zoning and overlay provisions of the site.

The multi-lot subdivision is considered a positive initiative for the site by releasing land for viable and appropriate use and development. In preparing this subdivision design, the subdivision paves the way for future development on the site.

Appendix 1 – Certificates of Title

Appendix 2 – Feature Survey

Appendix 3 – Proposed Plan of Subdivision

Appendix 4 – Traffic Report

Appendix 5 – Stormwater Management Strategy

Appendix 6 – Structural Report

Appendix 7 – Arborist report

Appendix 8 – Environmental Impact Assessment

Appendix 9 – Clause 56 Assessment

Hygge Property – 9 Raglan Street, Daylesford

Council Owned Avenue Tree

Tree Assessment Report (TAR)

Client Representative:

Jason Webster

Client: Hygge Property

Submission Date: 27th February 2023

Xylem TreeCare Pty Ltd
303a/22 St Kilda Rd, St Kilda Vic 3182
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Email: admin@xylemtrees.com.au

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1 Quality Information

Document: Hygge Property, 9 Raglan Street, Tree Assessment Report
Date: 27th February 2023
Prepared by: Richard Forster

Table 1, Revision History

Revision	Revision Date	Details	Authorised
			Name/Position
1	27/02/2023	Initial draft	Richard Forster Consulting Arborist
2			

2 Disclaimer

Xylem TreeCare (including its subsidiaries and the directors, officers, employees, representatives, servants, or agents of Xylem TreeCare and its subsidiary) ("**Xylem TreeCare**") is in the business of advising on matters of Environmental, Arboricultural and Vegetation Management ("**the Expertise**"). Xylem TreeCare has been engaged by Hygge Property ("**the Client**") to prepare a Tree Assessment Report (TAR) ("**the Subject**") on a single Ash tree located on Raglan Street, Daylesford ("**the Purpose**"). Xylem TreeCare has prepared such a report which is dated 27/02/2023 ("**the Report**").

This Disclaimer is given by Xylem TreeCare in relation to the following matters:

- The Expertise.
- Xylem TreeCare's instructions as to the Subject of the Report.
- Xylem TreeCare's instructions as to the Purpose of the Report.
- Xylem TreeCare's instructions as to the identity of the Client.
- The use by the Client of the Report.
- Reliance on the Report by the Client.

Reference in this disclaimer to the Client incorporates any entity, director, officer, representative, employee, servant or agent of the Client insofar as, where any such person or entity seeks to or does act in reliance on the Report, such reliance is made with an express acceptance and acknowledgment of the following disclaimers and conditions:

It is expressly acknowledged by the Client that the Report, and any other material or advice provided to the Client by Xylem TreeCare:

- Is selective in that it is current only at the time of preparation or provision, relevant only to the Subject and the Purpose and based on instructions provided by the Client to Xylem TreeCare and may be subject to updating, expansion, revision, correction and amendment upon the provision of further or different instructions or through the lapse of time.
- The Report does not or may not purport to be the sole basis for any decision-making process embarked upon by the Client who should, wherever necessary, seek independent professional advice on legal, financial, or other relevant matters not within the Expertise.

- Xylem TreeCare has not independently reviewed, verified or audited any of the material in the instructions provided by the Client to Xylem TreeCare, and the Client acknowledges that insofar as the findings of the Report are reliant on instructions provided by the Client to Xylem TreeCare, no representation nor warranty, express or implied, as to the accuracy, reasonableness or completeness of the Report is made by Xylem TreeCare, which expressly disclaims any and all liability for or based upon or relating to any use of the instructions provided by the Client to Xylem TreeCare.
- Where the Report contains or refers to information or advice provided by third parties, obtained by way of instructions from the Client or otherwise, no representation or warranty, express or implied, is made in relation to the accuracy, reasonableness or completeness of such information.
- Insofar as the Report makes any forward-looking statements or predictions, the Client acknowledges that such statements or predictions are the subject of inherent uncertainty, and the Client will make its own independent assessment of the Report or such statements, in terms or reliance to be placed thereon.
- Is confidential and for the Client's use only and not to be supplied to any third party under any circumstances without the prior written permission of Xylem TreeCare.
- Is not to be electronically stored or transmitted in any form without the prior written permission of Xylem TreeCare.

It is further expressly acknowledged that:

- In no circumstances, may the Client use the Report for anything other than the Purpose, or rely on it in any way other than in relation to the Subject unless prior written permission of Xylem TreeCare is obtained.
- Notwithstanding the generality of any of the preceding disclaimers, acknowledgments and conditions, the Client expressly acknowledges that it will not use the Report in relation to any court or other legal proceedings of any kind without first obtaining the prior written consent to do so of Xylem TreeCare.
- The Client carries out its own independent investigations in relation to any reliance to be placed on the Report be that reliance of a commercial, financial, developmental, environmental, or other type of reliance.

The client's receipt of the report, information, or other material in relation to the report is an express acknowledgment and acceptance of the foregoing.

3 Executive Summary

Xylem TreeCare has been commissioned by Hygge Property as part of the site development at 9 Raglan Street, Daylesford.

The project potentially requires the removal of one of the Ash trees within the Avenue of Honour along Raglan Street at the proposed entrance to the subject site.

Based on our more recent observations, the tree is of low amenity value largely due to its poor form because of ongoing pruning for electric powerline clearance. The ongoing contribution of the subject tree to the existing avenue of trees is currently and will continue to be minor.

4 Purpose

The purpose of this report is to provide information pertaining to the condition and amenity value of the subject tree.

5 Method

The tree was inspected on the 18th of January 2023 by Richard Forster.

5.1 Limitations of Assignment

- Xylem TreeCare has not undertaken any of the following items which may impact tree health:
  - Soil analysis
  - Aerial tree inspections

5.2 Consulting Arborist

Table 2 outlines the qualifications, experience and involvement of staff who have assisted in the development of this report.

Table 2, Staff Qualifications

Staff Member	Qualifications	Experience	Project Involvement
Richard Forster Consulting Arborist	Diploma of Arboriculture	Richard has 30 years experience within the arboriculture industry; 10 years as a Consulting Arborist	Inspecting arborist and preparation of report.

5.3 Site Information

The subject tree is located at the Raglan Street entrance to the subject site. See Figure 1 below.

Figure 1 - Ash tree at 9 Raglan Street, Daylesford

5.4 Planning and Considerations

The subject tree is in a position directly in front of the proposed entrance road as per Figure 2 below.

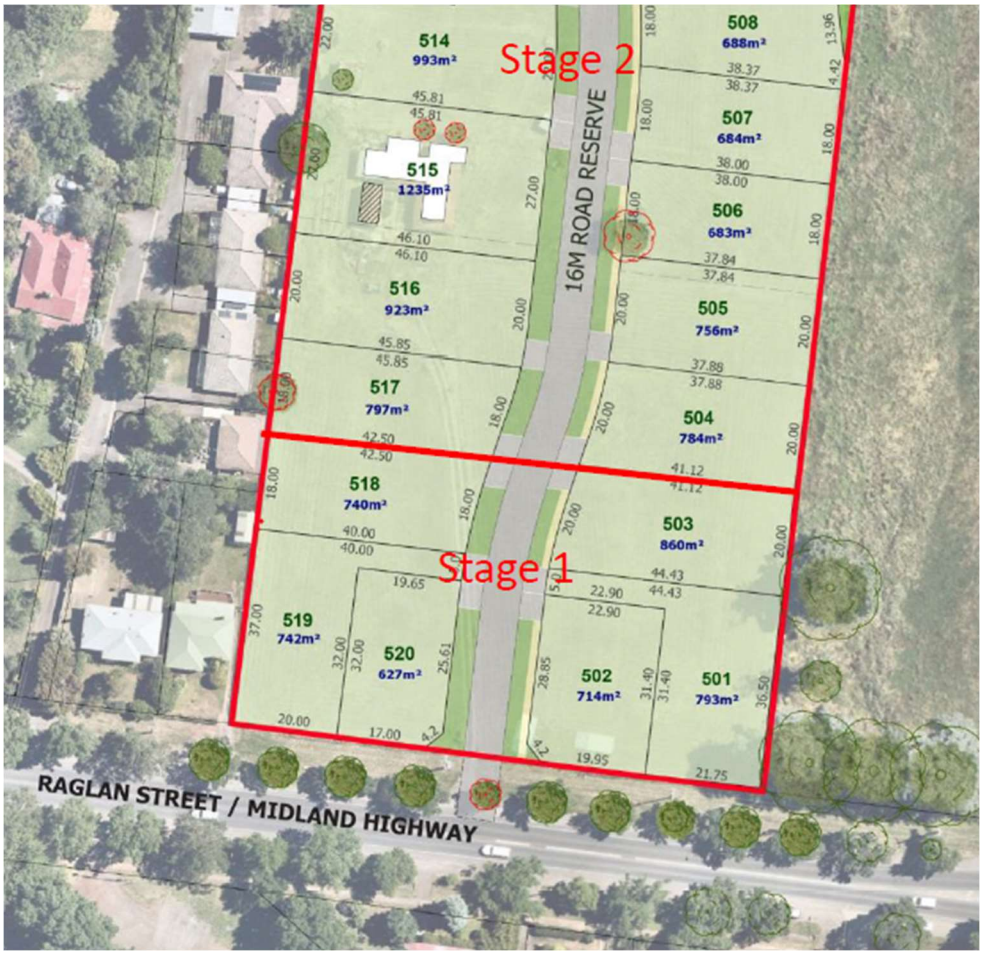

Figure 2 - Proposed Site Plans

6 Observations

Botanical Name: *Fraxinus angustifolia* subsp. *angustifolia*

Common Name: Desert Ash

Easting: 144.154094

Northing: -37.34075

Datum: GDA1994 MGA Zone 55

Height (m): 7	Spread (m): 5	DBH (mm): 330
Tree Protection Zone (m): 3.96		Structural Root Zone (m): 2.18
Age: Semi Mature		
Health: Fair	Structure: Fair	Form: Poor

The subject tree is positioned within the vicinity of overhead high-voltage powerlines and requires ongoing pruning to ensure statutory compliance. As a result of this continued pruning, the tree has an unbalanced canopy and is one-sided in appearance. See Figure 3 below showing position of tree and its form at the time of inspection. The tree is of smaller dimensions than the rest of the trees in the avenue.

The tree also has a large wound at the base, see Figure 4 below.

Figure 3 - poor form due to ongoing powerline clearance pruning.

Figure 4 - wound on lower trunk.

7 Conclusion

The subject tree is of poor form and low amenity value. The removal of the tree should be considered for the allowance of a proposed entry road.

8 Recommendations

It is recommended that a replacement tree of the same species be planted along the avenue where there are currently planting opportunities available.

9 Documents Reviewed

The following documents were reviewed in preparation of this report.

Table 3, Cited Project Documents

Date	Title	Company	Attachment
09/02/2023	9 Raglan Street – Staging Plan.pdf	Hygge Property	
24/01/2023	479 Midland Highway, Daylesford Proposed Intersection (Midland Highway) Concept Layout Plan. Project 220239 Drawing No CLP101	Hygge Property	
19/11/2021	Hygge Property – Preliminary Arboricultural Tree Assessment Report	Xylem TreeCare	

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HERITAGE IMPACT STATEMENT

Place:	9 Raglan Street, Daylesford
Date:	21 April 2022
For:	Hygge Property

Figure 1 View of the southern frontage of the house and shed facing Raglan Street

Introduction

This heritage impact statement assesses the likely heritage impacts of the proposed demolition of the latter additions to the early farmhouse retention of the pair of buildings of early farmhouse on the property with subdivision of the land for construction of houses. The property is located within the Railway Precinct HO 698 with the timber farmhouse shown as a *Listed Heritage Item* on the of the Railway Precinct Map. Under Clause 43.01 a planning permit is required for subdivision, and for subsequent construction on the subdivided land within the Heritage Overlay and also for demolition amongst other controls.

In February 2022 the gazettal of Amendment C80 relocated the character control previously under Clause 22 to Clause 15. The assessment of impact on the heritage place of the proposed subdivision and subsequent development under the Hepburn Planning Scheme must now have regard to Clause 15.03-1S, *Heritage Conservation*, Clause 15.01-2S *Building Design*, Clause 15.01-3S & 3L *Subdivision design* and *Subdivision in Hepburn Shire*, Clause 15.01-5L *Neighbourhood Character in Daylesford – Precinct 11*, Clause 15.03-21S, *Heritage Conservation*, the new Clause 15.03-1L, *Heritage,* with its policy guidelines in The Burra Charter. Limite local heritage policy is provided at of the Hepburn Planning Scheme and so the most pertinent heritage

provisions are the State-wide Clauses 15.03-1S. Finally, the *Heritage Overlay* at Clause 43.01 remains the permit trigger and primary heritage control. Whilst not heritage policy the neighbourhood character control under the Hepburn Planning Scheme provides policy in relation to the Preferred Neighbourhood Character in parallel with heritage character and appearance as applicable, particularly for Character Precinct Eleven in which the subject site is located.

In making my assessment of the proposal I have been provided by the Structural Assessment of 9 Raglan Street by James Liversage of Cardno TGM undertaken in October 2021 which concluded that it would be impractical to remediate the farmhouse and recommended that it be demolished. I have not relied upon that report and accept is finding only to the extent of matters of fact rather than opinion.

Description of Site and Surrounds

The rectangular block of land is located on the north side of Raglan Street a hundred metres west of the Midland Highway intersection with the buildings approximately half a kilometre to the northeast of the top of Wombat Hill. Whilst there is limited distant view to the farm house when looking north from Frazer Street over the railway goods shed, the railway station, tree foliage and houses along Raglan Street prevent views of the subject land from Hill Street and from Wombat Hill.

Figure 2 Aerial view of the subject property at 9 Raglan Street

The property itself is open other than the buildings of the farmhouse and two trees with the house set mid depth of the land at considerable distance from the Raglan Street frontage.

The buildings on the land are a group consisting of an early Victorian one room timber house with later skillions to the west and north sides and with the addition of a more substantial wing on the east side, consisting of three rooms and surrounding verandah looking out over the small valley that forms the property.

This addition wing has a timber shingle roof under the later corrugated iron roofing with short sheet lengths, parts of which have recently been lost as a result of storm damage. The east wing addition to the house has fretted verandah details and fretted decorative barge boards to the end gables in the Rustic Gothic style indicative of Victorian origins of the addition. Abutting the north end of the east wing has been the addition of a bathroom also with gabled ends although plain and without embellishment and with walls clad in fibro cement. The verandah along the west side of the east wing has been infilled where it connects to the original house as seen in figure 4 below.

Figure 3 View of the southern frontage of the property from Raglan Street

Figure 4 View of the southern frontage of the original one room house

Excluding the skillion additions to the north and west of the original house (shown in figures 7 & 8 below) there are in effect three distinct, but abutting buildings that make up the existing house. Free standing from the house and to the south west by a short separation is a single room that appears to have served as a shed or former garage and has the appearance of having an early 20th century origin. Whilst the house remains occupied it has progressively fallen into a dilapidated in condition and no longer provides accommodation of a standard that can be considered acceptable today.

Figure 5 View of the building from the southeast

Figure 6 View of the east wing Victorian era addition and later bathroom added to the north

Figure 7 View of the original house from the west with the later skillion to the fore

Figure 8 View from the north showing the additions to the original house

Heritage Significance

The Citation for the Railway Precinct (appended) shows the farm house complex on the subject land shaded to denote a 'Listed Heritage Item'. The heritage citation for the Railway Precinct is provided in the Daylesford and Hepburn Springs Conservation Study by Perrott Lyon Mathieson Pty Ltd and Andrew Ward in 1985. It may be noted that the boundary of the Railway Precinct passes just north of the subject house and that the e foot print of the house does not include the free standing shed close to the house at the southwest.

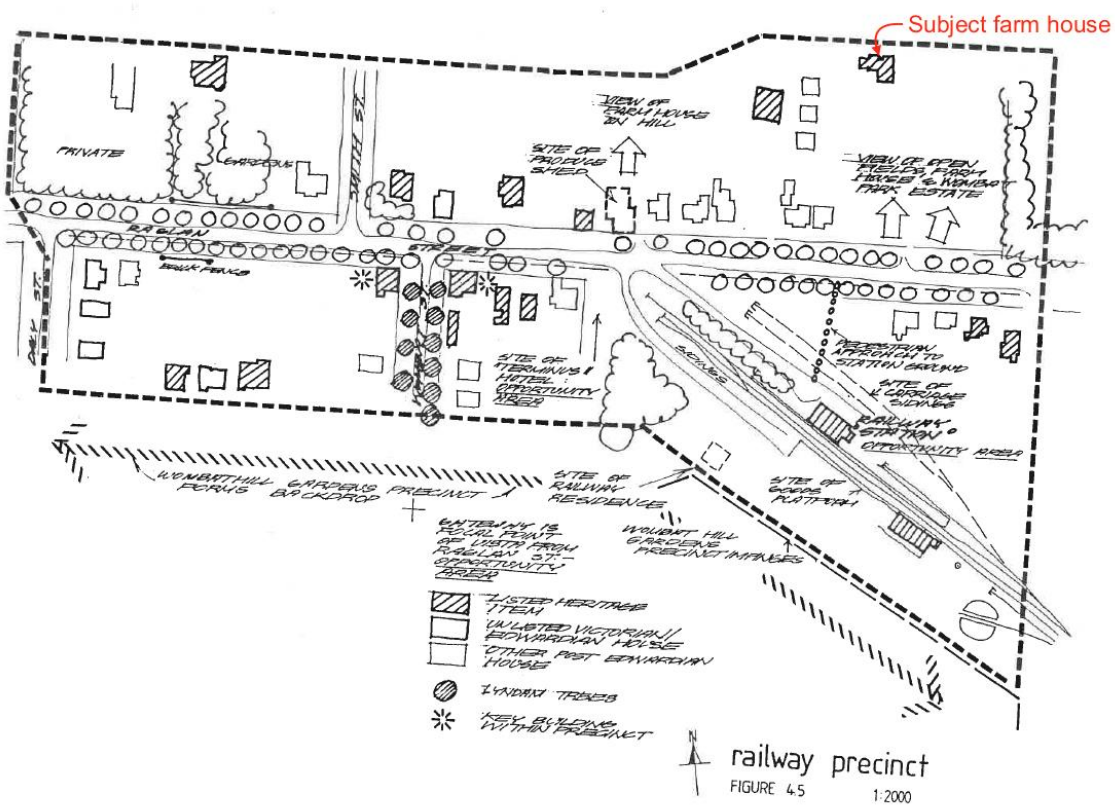


Figure 9 Map of the Railway Heritage Precinct - Daylesford and Hepburn Springs Conservation Study, 1985

Figure 10 Extract of the Heritage Overlay Map with the subject site outlined in red

As is generally the practice the mapping of the Heritage Overlay has taken in the whole of the property, extending to the north boundary beyond the 1985 mapping of the Railway Precinct. Touching the northeast corner of the subject property and adjoining the Heritage Overlay for the Railway Precinct, HO698 in which the subject site is located is the Wombat Park Estate covered by the Heritage Overlay, HO619.

On the Railway Precinct Map in conjunction with arrows pointing north over the subject property and that of the neighbour are the words: "*View of open fields, farm house and Wombat Park Estate*". This note could be taken to indicate that the 'view' is itself and element that is contributory to the heritage value of the Railway Precinct.

The Citation for the Railway Precinct is as follows:

Development

The land upon which the station ground is situated was subdivided by the Crown following completion of Frazer's survey in 1854 and sold off almost completely during the period commencing in the mid 1850's and concluding during the early 1870's. With the coming of the railway, however in 1880 it was resumed by the Crown and resulted in the closure of Church Street and the diversion of Frazer and Hill Streets through a number of building allotments and the north-east corner of the Botanical Gardens Reserve. Thus a substantial proportion of the early buildings within the precinct actually predate the railway and in case of the Athens Hotel and the grocery opposite, not doubt have thrived because of it.

…

Description and Significance

This precinct is linked visually and was formerly linked functionally with the railway station which forms its south boundary at the Frazer Street end. Commencing at the south-west corner of the Wombat Park Estate, which is encircled by mature conifers, the entire precinct is tied together by the the treed avenue which runs from the cemetery in the east to Wills Square in the west. To the north, distant views of early farm houses may be obtained whilst there has been considerable residential development in recent years in the vicinity of the station yard.

The pedestrian entrance to the station is marked by cast iron lamp standards relocated from other points in the town and fitted with "Hoor Avenue" signs in lieu of lanterns. At this point, the station building itself is visible and the embankments carrying the former carriage siding and running lines appear to intrude into the Raglan Street reservation. A solitary produce shed, the adjoining sheds having been demolished during the currency of this survey, faces the buffer stops and the site of the former Terminus Hotel. Beyond to the south, the Hill Street cottages overlook the precinct and form the edge to the Wombat Hill gardens. Further to the west, important elements include Densem's grocery building and the Victorian and Edwardian villas surrounding it. Together with the "Athens" Hotel, situated at the Wombat Street intersection, they form the heart of the precinct. Here, the

avenue of Linden trees in Wombat Street focusses attention on the northern entrance to the Botanical Gardens. West of Smith Street, extensive private gardens dominate the north side of Raglan Street and façade three early cottages, set well back from the roadway.

Management

The importance of this precinct hinges particularly on its role as main access route from Castlemaine and Woodend and also as an area of historic interest for the future patrons of the Central Highlands Tourist Railway who will congregate at this point.

Its amenity will be heightened by the encouragement of works which are sympathetic to its historical character and might include the gradual replacement of modern fencing with forms appropriate to its principal era of growth. The stone faced culverts and the bridges should be retained and consideration given to effective landscape management within the station ground, softening the impact of parked cars and heightening the presence of the tourist railway. Any works within the station ground should accurately demonstrate departmental practice at the turn of the century and will incorporate the precise restoration of the station building itself. In this role, bearing in mind that it is at present one of only six registered historic buildings within the township.

The precinct should be designated an area of special significance within the Council's planning scheme, having regard to its historic importance.

The above citation, now over three decades old, does not comply with current practice with regards to format or heritage criterion applied to statements of significance today.

The subject property and land on the north side of Raglan Street has been zoned with a Neighbourhood Residential Zoning and as such the claim that the retention of distant views to fields and farm houses, is an 'element' that is contributory to the importance of the Railway Precinct, to the a degree that the possible views are to be protected, is unsupported.

As a building group that initially evolved in the period for which Daylesford and the Railway Precinct have heritage importance, the house can reasonably be understood to be a 'heritage item' as shown on the Railway Precinct Map, having heritage significance as demonstration of the Victorian development of the land for farming and contributing to the significance of the precinct and to Daylesford.

Heritage and Character Controls

With the gazettal of Amendment C80 in February there has been introduction of local heritage provisions to the Hepburn Planning Scheme and the applicable heritage controls are those of Clause 15.03-1S, *Heritage Conservation*, Clause 15.03-1L, *Heritage,* and the *Purpose* and *Decisions Guidelines* provided at Clause 43.01, *Heritage Overlay* as follows:

Clause 15.03-1S, Heritage Conservation

Strategies

Identify, assess and document places of natural and cultural heritage significance as a basis for their inclusion in the planning scheme.

Provide for the protection of natural heritage sites and man-made resources.

Provide for the conservation and enhancement of those places that are of aesthetic, archaeological, architectural, cultural, scientific or social significance.

Encourage appropriate development that respects places with identified heritage values.

Retain those elements that contribute to the importance of the heritage place.

Encourage the conservation and restoration of contributory elements of a heritage place.

Ensure an appropriate setting and context for heritage places is maintained or enhanced.

Support adaptive reuse of heritage buildings where their use has become redundant.

Consider whether it is appropriate to require the restoration or reconstruction of a heritage building in a Heritage Overlay that has been unlawfully or unintentionally demolished in order to retain or interpret the cultural heritage significance of the building, streetscape or area.

Clause 15.03-1L, Heritage

Strategies - General

Ensure new development is consistent with and interprets the significance of heritage places.

Design development to respect elements of the heritage place and surrounds including buildings, associated trees, garden settings, plantings, agricultural features within a landscape, and archaeological sites.

Respect and respond to the evolving history of buildings and their heritage significance that are demonstrated through extensions to the building fabric over different periods such as for miners cottages and agricultural buildings.

Promote building design that clearly and positively supports the heritage significance and distinguishes old from new construction through responsive siting, scale, massing, materials and detailing.

Allow for climate mitigation measures such as dropdown shade awnings and roller blinds attached to verandah beams in commercial heritage streetscapes and areas.

Discourage new pedestrian crossovers in historic commercial streetscapes that adversely impact on significant heritage kerb stone channels.

Encourage access to parking from the rear of heritage buildings and heritage commercial areas.

Discourage new vehicle crossovers that are inconsistent with the character of heritage places including multiple crossovers and wide crossovers.

Encourage garages, carports and on-site car parking to be located behind the principal façade, at the rear or in the side setback of a building.

Retention

Retain and conserve all heritage places of significance.

Encourage the reconstruction or reinstatement of buildings or elements where there is documented photographic or other evidence.

Encourage the retention and restoration of historic shop fronts, parapets, timber and metal details, recessed entry doors, window sill heights, decorative glazing details, original colour schemes and verandahs.

Ensure the retention, reconstruction and repair of significant heritage streetscape features and infrastructure elements such as basement cellar access located in footpaths, blue stone kerb and channelling, bridges, drainage and water channels, gutters, laneways, pavements, protective railing, public statues and other similar features.

Encourage the retention of interiors and decorative finishes where they contribute to the significance of the heritage place.

Encourage the retention of the internal layout and detailing of an existing building and the significance of these elements to the heritage place.

Signs

Ensure the retention, conservation and enhancement of historic signs.

Ensure signs are consistent with the design of a heritage place and are located sympathetically on the heritage place to its corresponding building period.

Demolition and Relocation

Discourage the demolition of a heritage place, unless the:

- *Demolition is minor in scale and will not adversely affect the significance of the heritage place.*
- *Structural integrity of the heritage place has been lost and there are no options for structural stabilisation and remedial intervention.*
- *Building fabric is in very poor condition.*
- *Heritage significance has been lost to such an extent that reconstruction would be required to make the building habitable.*
- *Proposed replacement building will not detract from the historic streetscape and any proposed additions are sympathetic to the existing building's scale and form and will not affect the significance of the heritage place.*

Gardens, Trees and Landscape Features

Conserve important gardens including culturally significant vegetation, trees and plantings, gardens, features and structures.

Encourage the retention of significant trees in a heritage place.

Site and design buildings and works to respect significant trees, plantings and significant garden layouts and provide for the ongoing health of the tree without intruding into the tree protection zone.

Encourage replacement trees of the same species with advanced or mature specimens when significant trees have died.

Protect and maintain significant agricultural structures such as outbuildings, drystone walls, farm buildings and ruins.

Manage significant vegetation to preserve and enhance its contribution to the heritage place, including pruning, thinning and root control.

Subdivision

Ensure that the subdivision of heritage places does not detract from the significance of the place.

Ensure development that may result from the subdivision of a heritage place:

Respects the original layout of buildings.

Preserves the heritage significance of the place.

Retain view lines from public spaces to heritage places when new lots are created around heritage places.

Design subdivision to complement and be consistent with the rhythm and pattern of buildings and the subdivision pattern of a heritage place.

Align new lot boundaries and building envelopes to avoid the root or canopy zone of established trees.

Retain gardens and established trees and plantings (whether or not of heritage significance) that contribute to the setting of a heritage place within the same lot.

Clause 43.01

Purpose

To implement the Municipal Planning Strategy and the Planning Policy Framework.

To conserve and enhance heritage places of natural or cultural significance.

To conserve and enhance those elements which contribute to the significance of heritage places.

To ensure that development does not adversely affect the significance of heritage places.

To conserve specified heritage places by allowing a use that would otherwise be prohibited if this will demonstrably assist with the conservation of the significance of the heritage place.

Clause 43.01-8 Decision Guidelines

Before deciding on an application, in addition to the decision guidelines in Clause 65, the responsible authority must consider, as appropriate:

- *The Municipal Planning Strategy and the Planning Policy Framework.*
- *The significance of the heritage place and whether the proposal will adversely affect the natural or cultural significance of the place.*
- *Any applicable statement of significance (whether or not specified in the schedule to this overlay), heritage study and any applicable conservation policy.*
- *Any applicable heritage design guideline specified in the schedule to this overlay.*
- *Whether the location, bulk, form or appearance of the proposed building will adversely affect the significance of the heritage place.*
- *Whether the location, bulk, form and appearance of the proposed building is in keeping with the character and appearance of adjacent buildings and the heritage place.*
- *Whether the demolition, removal or external alteration will adversely affect the significance of the heritage place.*
- *Whether the proposed works will adversely affect the significance, character or appearance of the heritage place.*
- *Whether the proposed subdivision will adversely affect the significance of the heritage place.*
- *Whether the proposed subdivision may result in development which will adversely affect the significance, character or appearance of the heritage place.*
- *Whether the proposed sign will adversely affect the significance, character or appearance of the heritage place.*
- *Whether the lopping or development will adversely affect the health, appearance or significance of the tree.*
- *Whether the location, style, size, colour and materials of the proposed solar energy system will adversely affect the significance, character or appearance of the heritage place.*

Character Controls

As of the 10 February 2022 the local Neighbourhood Character Controls, including for the local area essentially overlaying the area of potential development within the Railway Heritage Precinct, Character Area 11 shown below, have been relocated from Clause 22.013 to Clause 15.01-5L-01 with some rationalization of the applicable objectives and strategies.

Figure 11 Extract of the Neighbour Character Precinct Map

Clause 15.01-5L-01 as it applies particularly to the Neighbourhood Character Precinct Eleven:

Objective

To achieve the identified preferred character in residential areas in Daylesford.

Daylesford-wide strategies

Protect and enhance vistas, views and landmarks such as Wombat Hill, Cornish Hill, residential areas interfacing with the Vincent Street commercial area, and the churches and other spires.

Create new vistas, views and landmarks within residential areas without dominating the landscape.

Ensure that vehicle access and parking does not compromise the character and amenity of residential areas including discouraging the removal of street trees for cross overs.

Encourage the retention and planting of vegetation, with a preference for indigenous plants except in precincts where exotic plants are also identified as being suitable.

Design development to provide for streetscapes and private gardens that:

- *Strengthen the visual and physical connections between the development and the public realm.*
- *Respect the underlying neighbourhood landscape character.*
- *Respond to township entries.*
- *Retain views to surrounding and distant rural land.*

Encourage subdivision that retains the important elements and features that form part of the significance and character of the neighbourhood precinct and the important view-lines between these elements.

Precinct 11 objective

To ensure development maintains the spaciousness of the dwelling settings and strengthens the definition of the entrance way to the town.

Precinct 11 strategies

Contribute to the preferred neighbourhood character by encouraging:

- *The development of buildings to better define the highway intersection, and provide a sense of entrance to the town.*
- *Use of low front fences.*
- *Use of timber or other non-masonry cladding materials, or materials and finishes with natural or earth-toned colours in streetscapes where weatherboard predominates.*
- *Landscaping that includes exotic and indigenous trees.*
- *Retention of large, established indigenous trees and understorey and provision of new indigenous trees.*
- *Development that doesn't impact on the maintenance and enhancement of the avenue planting.*
- *To maintain the openness of the streetscape.*

Proposal and Discussion

It is proposed to subdivide the land to provide 22 housing lots including four with frontage to Raglan Street, the early farm house retained on one of the lots (517) and along with the remainder of the lots having a frontage to the road establishes along the centre of the property which is to connect to the roadway of subdivision of the property to the north as shown in Figure 12 below.

Given the engineering advice that it is impractical to remediate the existing house the engineering recommendation for demolition would need to be more completely developed if it was to be considered a basis for demolition of the Victorian farm house. As the building is of simple timber construction the buildings can be lifted to allow replacement of the subfloor structure and stumps where required, followed by reconstruction and restoration of the timber components as necessary. The conservation of the pair of buildings that are the Victorian era farmhouse will require a considerable conservation works including restoration and reconstruction to provide rooms suitable for occupation today, however conservation is in my view achievable. With conservation of the two 19th century elements of the early farmhouse there would be need for construction of contemporary additions, much as historically there has been a succession of additions, to provide a house meeting current expectation. In view of the engineering assessment of the buildings the capital investment required to conserve the buildings may exceed the financial value of the farm house and exceed the likely costs of reconstruction.

With the issue of a permit for subdivision of the property into 22 housing lots, retaining the existing house on its own lot (517 as shown below) a permit condition would be expected to be applied, to be discharged to the satisfaction of Council, requiring the protection of the 19th century sections of the existing farm house to ensure the structure is water tight and secure. This would be best achieved by the replacement of missing roof sheeting and ridge capping's with the securing of gutters and down pipes as is currently planned in the coming weeks. It will also be expected that security for the buildings will be provided over the course of the

subdivisions until the property is purchased and restoration is complete. The details of security arrangement whether, ensuring the builds are occupied, at least partially, or surveilled, or secured by boarding up windows, fencing and the like will need to respond to changing circumstances to the satisfaction of Council.

The conditions of the permit for subdivision would also confirm the expectation that the early farmhouse buildings are to be conserved and require submission of the record of the existing buildings on the land as well as the scope and methodology for conservation works required for the restoration and reconstruction of the early Victorian farmhouse buildings.

Development of new houses on the subdivided lots will continue to require a planning permit in accordance with Clause 43.01 of the Hepburn Shire Planning Scheme.

The requirement of the Clause 43.01 would remain unless there is a planning scheme amendment to include and Incorporated Plan into the Schedule to Clause 43.01 for HO698. This permit requirements extends not only the subject site but also the currently open land sharing the east boundary, extending to the Raglan Street and Malmsbury Road corner, along with other land on the north and south of Raglan Street within HO698. Notably as can be seen in the image below there is a swale in the topology running parallel to the east boundary of the subject subdivision over which storm water runs to the north. This area will remain open space and along with the character of the frontage to the road reserve of the subject subdivision is opportunity to support the understanding and appreciation of the farmhouse by retention of a degree of openness to the setting and reference to current open rural setting.

Figure 12 Proposed plan of subdivision with existing house shown retained

The plan proposed above provides a lot with a 20 metre frontage to the site on which the existing buildings stand. The location of the buildings on the lane leave a distance of approximately four metres from the southern verandah of the wing with long frontage to the road reserve and the southern side boundary of the lot. With car parking to be located to the western rear of the lot the drive will need to pass this south end of the early building. This could be addressed by adjusting the width of the lots to the south of lot 517 to the 18 or 16 metre frontage of some other lots in the subdivision and extending the width of the frontage of lot 517 on which the farmhouse will continue to stand. It is to be expected that the setbacks of future development will be responsive to the location of the farmhouse building and consideration might also be given to location of the road reserve slightly westward in the southern approach to the farmhouse building. The location of the evolved farmhouse building is such that the earliest cottage has its frontage to the south, and set back northward of the southern verandah of the later east wing. This configuration will limit exposure of the cottage to view form the road reserve as presently configured.

It is anticipated that a further condition of the subdivision permit would require submission and approval, to Council's satisfaction, of a set of Development Guidelines that would extend upon the character objectives and strategies of Neighbourhood Character Precinct Eleven. These are to be similar to those to be applied at Middleton Field, with which the subject subdivision connects to the north.

The guidelines may be developed to go further than the expectation of low front fences to consideration of no front fences for the lots adjoining and adjacent to the farmhouse lot. With setbacks of new buildings on the adjacent lots to the south of the farmhouse responsive to the location of the farmhouse and with low or absent fences retaining open frontage the future setting of the farmhouse can refence the current rural condition.

The *Development Guidelines* might also include consideration of the provision of tradition timber post and rail fences along the east boundary of the subdivision looking onto the open swale run north along that eastern boundary.

The *Development Guidelines* would apply to the 21 vacant lots of the subject subdivision through inclusion of a Covenant applied to those property titles. In the first instance the Covenant would make the assessment and approval of new house designs as compliant with the *Development Guidelines*, the responsibility of a *Design Review Panel*. The panel would be initially appointed by Hygge Properties who are subdividing the land. Following approval by Council of the *Development Guidelines* would apply to development on the subdivided lots of subject land, and to the adjacent subdivision to the east also within the Heritage Overlay, HO698.

Whilst it would be desirable for the neighbourhood character controls of the Neighbourhood Character Precinct Eleven at Clause 15.01-5L-01 to be amended to reflect the *Development Guidelines* this would not be essential as they will be subject to both the Covenant control exercised by the Responsible Building Surveyor and also remain subject to a Permit under Clause 43.01.

To this end the endorsed *Development Guidelines* would ideally be included in a revised Citation for the Railway Precinct, HO698. Not a necessity but nonetheless worthy of consideration would be the inclusions of an

Incorporated Plan that would includ the *Development Guidelines* at the Schedule to Clause 43.01. This could exempt new house designs that comply with the *Development Guidelines* from the permit requirements. This would not obviate the need for sign off from a Responsible Building Surveyor, informed by approval from the *Design Review Panel* in accordance with the Covenant on title to the lots of subdivision.

Conclusion

It is my assessment that there are two aspects of the subject property that have been considered to contribute to the heritage significance of Daylesford and the Railway Street Precinct. These are the Victorian era sections of the building group that is the evolved farmhouse that currently exists on the land, and the intermittent and partial view of open field and farmhouse that may be obtained from Raglan Street looking to the north.

Whilst it is evident that parts of the farmhouse are of early Victorian origin and have heritage significance as demonstrative of the period of development and use of the land, the poor condition of buildings has resulted in the engineering recommendation that demolition is appropriate. Accepting this assessment might be justified on a basis of the use value of the buildings given their current state, and on basis of the equations of capital input and return, such demolition would clearly be contrary to the heritage provisions of the Hepburn Planning Scheme and contrary to the conservation of the heritage value embodied in the early farmhouse.

Respecting the heritage value of the farmhouse to the extent of the 19th century components, and with expectation of expenditure over and above the capital value of the building, the simple timber framed buildings can be conserved with restoration of serviceable elements and with reconstruction of those parts beyond feasible restoration. Given the conditions of the buildings has progressed to the point that they are no longer habitable the restoration including reconstruction would be a desirable outcome from the heritage perspective.

The plan of subdivision has been amended such that the original cottage and its extension are now located on one lot that will retain a frontage to the central roadway and retain view of the house from the public domain of the subdivision. It is my recommendation that some further adjustment may be needed to the layout of the lots to ensure that the views to the farmhouse building from the public domain of the future road reserve provide for the visual appreciation of the heritage value of those buildings and appreciation of that value having primacy in the developed setting of the new subdivision.

With issue of a permit for the subdivision of the property as a whole, the permit requirement of Clause 43.01 regarding the expectation of conservation of the house would remain. It is expected that the permit for subdivision would included permit conditions requiring the protection and weatherproofing of the existing buildings and a condition requiring submission of a record of the existing building on the land, as well as the scope and methodology for conservation works required for the restoration and reconstruction of the early Victorian farmhouse buildings.

It is a reasonable expectation that the existing latter additions to the Victorian farm house may be replaced and supplemented with modern additions to provide a serviceable dwelling to contemporary accommodation standards. The approach to the restoration and reconstruction and the modern addition will remain subject

to a heritage permit under Clause 43.01. Also responding to the proposed design guidelines, it is expected that the additions would be conducted with contemporary expression integrated with the aesthetic appeal of the restored Victorian buildings and can be expected to provide a distinctive and desirable home.

The context of the former farmhouse would naturally be altered from the present extent of bare paddock to suburb, however with the conservation of the early farmhouse would continue to demonstrate is historical origins with its aesthetic appeal and value also restored.

The detail of the conservation works to be undertaken and the nature of the additions to the house would become subject to a permit condition that would need to be settled to the satisfaction of Council prior to approval of a permit for conservation works and additions, and prior to the commencement of demolition. In the interim period appropriate measures to the satisfaction of Council will need to be established to protect the buildings.

With the permit for subdivision of the wider property, and the interim condition requiring the building to be recorded and protected ensuring the building is weather tight and secure, and with the scope of restoration also recorded, there can be confidence that the restoration will be achieved. The heritage value of the former farmhouse will be secured and enhanced with its long-term conservation ensured. This presents a very positive heritage outcome given the current condition of the building.

The loss of the distant views to the early components of the house from Raglan Street will have limited impact in the experience of the locality from Raglan Street and no notable impact upon the experience of the place from the Railway station and yards to the south of Raglan Street at the foot of Wombat Hill.

The views of the subject land and farmhouse from north of Raglan Street are effectively screened by the mature trees of Raglan Street, those within the area of the former Railway and those on Wombat Hill such that no open view of the land north of Raglan Street is available.

The zoning of the land as general residential land clearly provides for the subdivision of the subject land and development of houses that will replace the current open fields. The zoning determines the expectation that views from Raglan Street to the existing farmhouse are not required to be maintained. The farm houses will continue to be available to view from the public domain and in a restored condition appreciation of the heritage place will be substantially enhanced.

As a further condition of the permit of subdivision, the submission and approval to Council's satisfaction of *Development Guidelines* for the new houses on the lots of subdivision will be required. The Development Guidelines are to be applied through Covenants on the title of the lots of subdivision and so there can be confidence they will be implemented. The submission of Heritage Permit applications under Clause 43.01 and already confirmed as complying with the *Development Guidelines* should make the processing of permits a simple exercise.

With conformity of new houses to the Development Guidelines there can be confidence that the heritage values of the place will be complimented by the new housing.

Given the historical development along Raglan Street the particular existence of open pasture on the subject land is not, in my assessment, a feature or item that can be construed as contributing to heritage significance. There is no heritage consideration that in my assessment suggests that the general residential zoning of the land can be shown to have been in error.

On the basis of assessment that the exiting views over the open farm land are of interest but are not contributory to heritage significance, with the expectation of the conservation and restoration of the former farm house confirmed, with the existing house to be protected and secured, it can reasonably be considered that with appropriate permit conditions the proposed subdivision is acceptable having regard to the heritage provisions of the Hepburn Planning Scheme.

John Briggs

John Briggs Architects Pty Ltd

HO 698

4.5 RAILWAY PRECINCT

4.5.1 Location

The location of this precinct is indicated on figure 4.1 and described in more detail in figure 4.5. It occupies the north-east corner of the 1854 township survey plan and focusses on Raglan Street which forms part of the Midland Highway at this point.

4.5.2 Development

The land upon which the station ground is situated was sub-divided by the Crown following completion of Frazer's survey in 1854 and sold off almost completely during the period commencing in the mid 1850's and concluding during the early 1870's. With the coming of the railway, however, in 1880 it was resumed by the Crown and resulted in the closure of Church Street and the diversion of Frazer and Hill Streets through a number of building allotments and the north-east corner of the Botanical Gardens reserve. Thus a substantial proportion of the early buildings within the precinct actually predate the railway and in the case of the Athens Hotel and the grocery opposite, no doubt have thrived because of it.

In recent years, the gradual decline in railway traffic leading eventually to its extinction with the closure of the line in 1978, has contributed to the passing of the Terminus Hotel formerly located at the entrance to the goods yard and to the cessation of trading of produce merchants opposite. Today recent development has not only taken the form of houses, but petrol filling stations, and has increased traffic movement causing a decline in residential amenity. The management of the future development of the railway station environment will continue to have a strong bearing upon the amenity of this precinct.

4.5.3 Description and Significance

This precinct is linked visually and was formerly linked functionally with the railway station which forms its southern boundary at the Frazer Street end. Commencing at the south-west corner of the Wombat Park estate, which is encircled by mature conifers, the entire precinct is tied together by the treed avenue, which runs from the cemetery in the east to Wills Square in the west. To the north, distant views of early farm houses may be obtained whilst there has been considerable residential development in recent years in the vicinity of the station yard.

63.

The pedestrian entrance to the station is marked by cast iron lamp standards, relocated from other points in the town and fitted with "Honour Avenue" signs in lieu of lanterns. At this point, the station building itself is visible and the embankments carrying the former carriage siding and running lines appear to intrude into the Raglan Street reservation. A solitary produce shed, the adjoining shed having been demolished during the currency of this survey, faces the buffer stops and the site of the former Terminus Hotel. Beyond to the south, the Hill Street cottages overlook the precinct and form the edge to the Wombat Hill gardens. Further to the west, important elements include Densem's grocery building and the Victorian and Edwardian villas surrounding it. Together with the former "Athens" Hotel, situated at the Wombat Street intersection, they form the heart of the precinct. Here, the avenue of Linden trees in Wombat Street focusses attention on the northern entrance to the Botanical Gardens. West of Smith Street, extensive private gardens dominate the north side of Raglan Street and face three early cottages, set well back from the roadway.

Throughout the precinct, a stone faced culvert runs along the southern shoulder of the roadway and is bridged, where necessary, to facilitate pedestrian and vehicular movement.

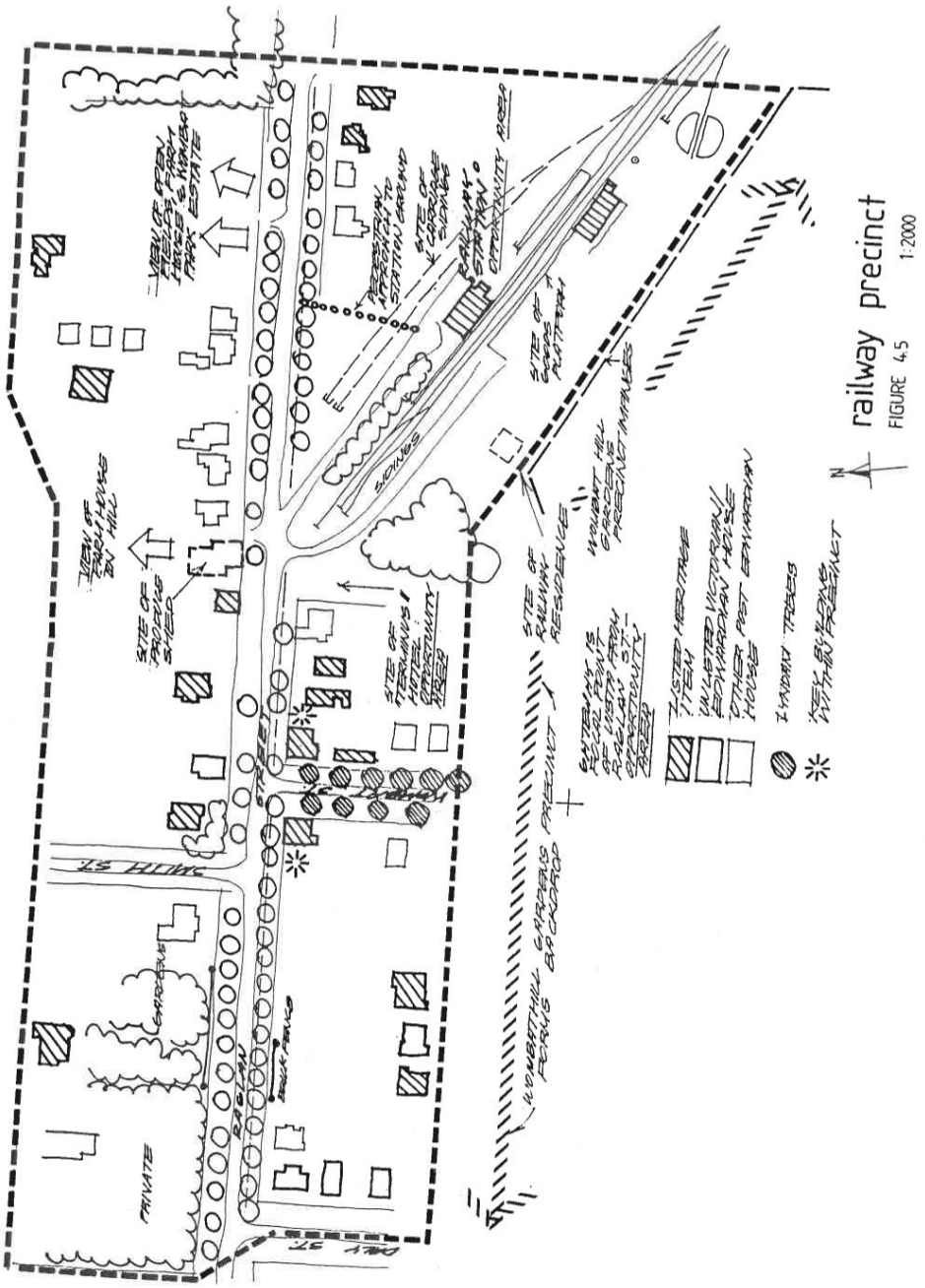
4.5.4 Management

The importance of this precinct hinges particularly on its role as a main access route from Castlemaine and Woodend and also as an area of historic interest for the future patrons of the Central Highlands Tourist Railway who will congregate at this point.

Its amenity will be heightened by the encouragement of works which are sympathetic to its historic character and might include the gradual replacement of modern fencing with forms appropriate to its principal era of growth. The stone faced culverts and bridges should be retained and consideration given to effective landscape management within the station ground, softening the impact of parked cars and heightening the presence of the tourist railway. Any works within the station ground should accurately demonstrate departmental practice at the turn of the century and will incorporate the precise restoration of the station building itself. In this respect, Council, as the lessee, will have a role, bearing in mind that it is at present one of only six(30) registered historic buildings within the township.

The precinct should be designated an area of special significance within the Council's planning scheme, having regard to its historic importance.

65.


railway precinct
FIGURE 4.5
1:2000
N
RAGLAN ST
PRIVATE
RAGLAN ST
SITE OF RAILWAY RESIDENCES
HUNTHILL GARDENS PRECINCT
HUNTHILL GARDENS PERIOD BOUNDARY
SITE OF RAILWAY STATION BUILDING
SITE OF GOODS SHED
SIDINGS
SITE OF TENNIS COURTS
SITE OF PRIVATE SHED
LISTED HERITAGE ITEM
LISTED VICTORIAN/EDWARDIAN HOUSE
OTHER PAST EMINENCE
EXISTING TREES
VIEW OF BAY WINDOW WITH BAY PRESENT

Heritage Report 19th March 2023

Readvertised Planning Plans 2023 Niche Planning Studio for 9 Raglan Street, Daylesford Version 2

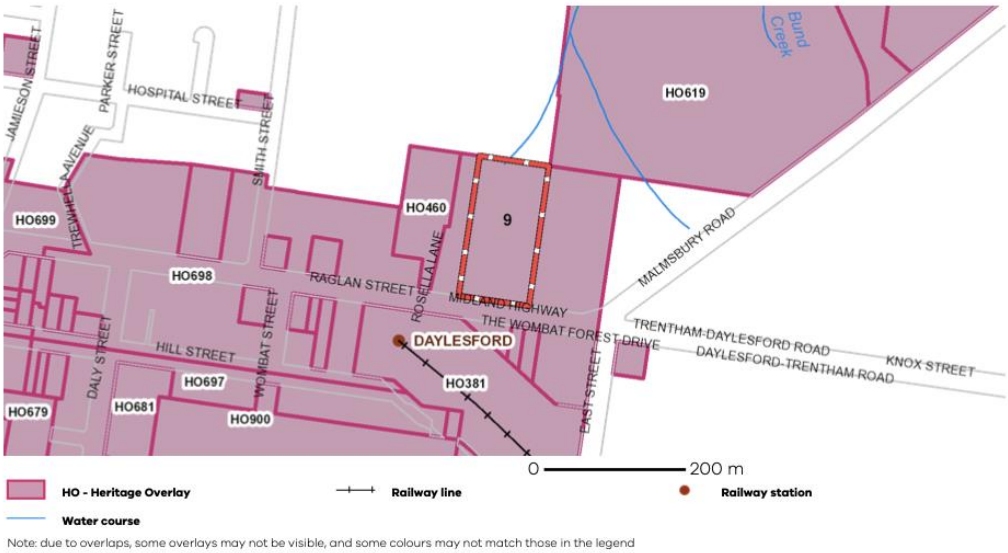
Planning Officer:	Senior Statutory Planner Consultant,
Application No:	PA 3530
Property Address:	9 Raglan Street, Daylesford VIC 3460 CA 35 SEC 2 TP 14100 PSH PWO
Proposal:	**Readvertised Planning Plans 2023 Niche Planning Studio for 9 Raglan Street, Daylesford Version 2:-** *"Planning Application (23/01/2023) for a staged multi-lot subdivision, removal of vegetation, demolition of an outbuilding, and alteration of access to a road in a Transport Zone 2."*
Zone Overlays	General Residential Zone – Schedule 1 Environmental Significance Overlay – Schedule 1 Environmental Significance Overlay – Schedule 2 Heritage Overlay – Daylesford Railway Heritage Precinct HO 698
Department:	Planning Heritage Response amendment April 2022, Heritage Impact Statement April 2022 (John Briggs Architect & Conservation Consultant
Officer:	Mandy Jean Hepburn Heritage Advisor 19/03/2023 and dated 21/07/2022

Background

This Heritage Response dated 19/03/2023 is the 3rd Heritage Report and provides comments on the potential impact of the proposal on the heritage values of the site as described in the Planning Application (23/01/2023) for '*a staged multi-lot subdivision, removal of vegetation, demolition of an outbuilding, and alteration of access to a road in a Transport Zone 2*', prepared by Niche Planning Studio for 9 Raglan Street, Daylesford, (the subject site) which is now aligned with the agreed masterplan for Middleton Field, see Master Plan diagram below .

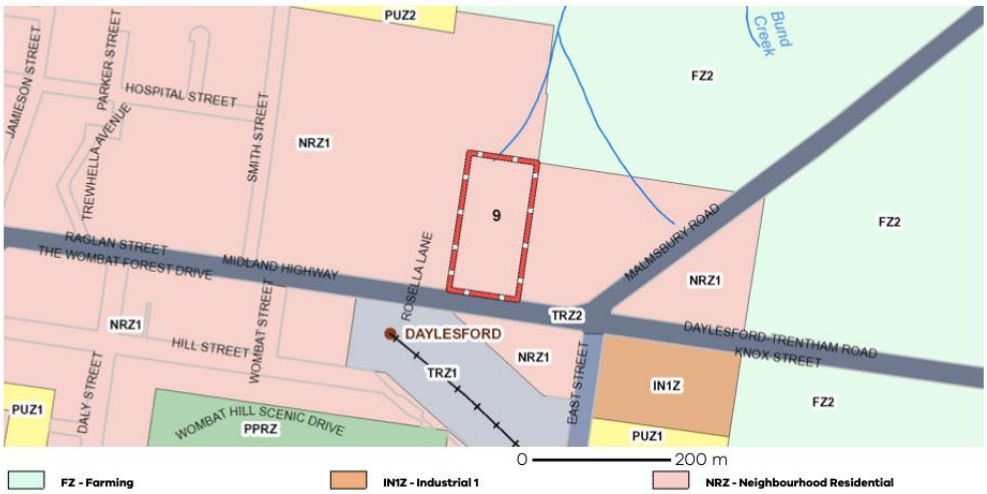
Figure 2: Middleton Field Masterplan (note: refer to 9 Raglan Street subdivision layout plan for final layout)

HERITAGE OVERLAY (HO)
HERITAGE OVERLAY - SCHEDULE (HO698)



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

NEIGHBOURHOOD RESIDENTIAL ZONE (NRZ)
NEIGHBOURHOOD RESIDENTIAL ZONE - SCHEDULE 1 (NRZ1)



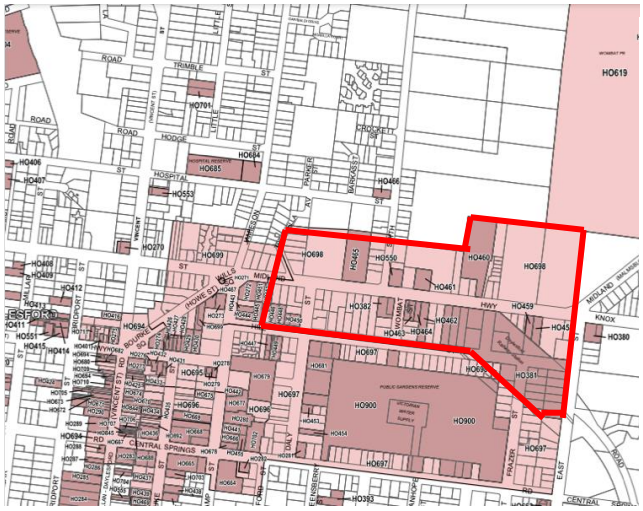
Note: labels for zones may appear outside the actual zone - please compare the labels with the legend.

Hepburn Planning Scheme

The subject site at 9 Raglan Street is located within the Railway Heritage Precinct HO698, Daylesford. As identified in the previous Heritage Response (see above) the potential impact of the proposal affects a number of significant heritage places that contribute to the Railway Precinct HO698 and extend to Wombat Park Estate and gardens, HO619.

The Railway Heritage Precinct as described in the *Daylesford and Hepburn Springs Conservation Study (*1985, Perrott Lyon Mathieson Pty Ltd, and Andrew Ward, Architectural Historian) is more than the Railway Station, itself, which is individually listed at HO381.The focus of the precinct is Raglan Street and the treed avenues among other heritage places.[1] These are described below.

[1] A detailed response to Bigg's *Heritage Impact Statement* is provided in the first Heritage Report, 21/07/2022.



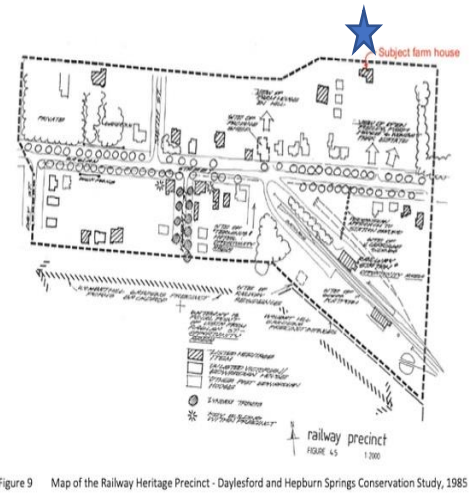


Figure 9 Map of the Railway Heritage Precinct - Daylesford and Hepburn Springs Conservation Study, 1985

Details of Heritage Overlay map (Hepburn Planning Scheme and the Railway Precinct Map) Daylesford and Hepburn Springs Conservation Study (Perrott Lyon Mathieson Pty Ltd, 1985)

1) **Railway Heritage Precinct, HO698**

2) The heritage significance of the Railway Heritage Precinct HO698 as set out in the description and statement of significance in the *Daylesford and Hepburn Springs Conservation Study (*1985, Perrott Lyon Mathieson Pty Ltd, and Andrew Ward, Architectural Historian) incorporates the historic views and landscape at the entrance to Daylesford along Raglan Street from the Midland Highway, and the Avenue of Honour extending to Knox Street (Trentham– Woodend Road). The precinct covers the early 1854 Fraser survey which was sold off almost immediately, many of the buildings within the precinct predate the coming of the railway in 1880 and were built in the early 1860s.

3) **Wombat Park Estate HO619** The significance of the precinct among other things as stated," *Commencing at the southwest corner of the Wombat Park estate, which is encircled by mature conifers, the entire precinct is tied together by the treed avenue, which runs from the cemetery in the east to Wills Square in the west.*"

4) The treed avenue referred to is the magnificent Daylesford Avenue of Honour (Hermes Number 126326) and the avenue of Linden Trees in Wombat Street, and cypress pines that encircle Wombat Park, identified in the statement of significance.

Writing in 1987 Jane Haddon surveyed 132 avenues of honour planted as World War One monuments in Victoria, at the time only 56 had survived intact of which the Daylesford Avenue of Honour was one. At the time of preparing the *Daylesford and Hepburn Springs Conservation Study, in 1985,* the extent and significance of the Daylesford Avenue of Honour was limited. There has been a national upsurge in interest in avenues' replanting, re-plaquing, creation of new or replacement ones has ensued since the 2015 Centenary of Anzac. Research carried out by the Federation University Ballarat, the National Trust of Victoria and the Australian War Museum on the Daylesford Avenue of Honour provides detailed history of the 12-year project that started in 1918 and concluded in 1930.

5) **The Daylesford Avenue of Honour, HO698, and listed on the Victorian War Heritage Inventory** was established in 1918 with the first planting of 104 trees to honour the local volunteer soldiers who fought and died at Gallipoli and at Ypres, Belgium, starting near the railway station entrance in Raglan Street. The Daylesford Honour Avenue extends along Midland Highland about a kilometre to the gates of Wombat Park and further along the Midland Highway to Dry Diggings Road.

The Daylesford Avenue of Honour, along Raglan Street and the Midland Highway, was planted to commemorate the First World War. The trees planted comprised of 218 Sycamore (*Acer pseudoplatanus*), Copper Sycamore (*Acer pseudoplatanus 'Purpureum'*) and Spanish Chestnut (*Castanea sativa*). This comprises the first planting in 1918 and is listed on the Victorian War Heritage inventory. In addition, the Daylesford War Memorial, Daylesford State School Honour Roll, Christ Church Honour Roll, Uniting Church Honour Roll and Daylesford and District Memorial Pool, and the

RSL Memorial Plaques are all listed on the Victorian War Heritage Inventory. These associated heritage objects and sites comprises multiple listings of the volunteer soldiers who are commemorated in the Daylesford Avenue of Honour, which by 1930 consisted of over three hundred trees.

After 1918, there were two further tree plantings days within a few years when the Avenue of Honour was extended from Midland Highway at the Glenlyon Malmsbury turn off to Porcupine Road. The next tree planting day was organized by the Women's Win the War Committee that extended the Avenue of Honour from Raglan and East Street to the Cemetery on the Trentham Road. A further dedication in 2020 of Manna Gum trees honours the Djaara, First Nation recruits who fought in the World War One and World War. The Avenue of Honour was also extended to Wills Square and in 1930 the Daylesford War Memorial was erected at the junction of Raglan and Vincent Streets.

Records show the dedication of each tree to a particular soldier recruited locally who died and is buried overseas, as well as the family member who planted them. Honour Rolls as mentioned above are held in the Daylesford Anglican Church, the Daylesford Primary School and are inscribed on the Daylesford War Memorial as well as other places. Details are also held by the Australian War Memorial in the virtual War Memorial. The three consecutive plantings achieved the initial aim that is to plant a tree to honour every local soldier that enlisted. The early Avenue of Honour tree plantings adjacent the subject site was the first stage of the living memorial. These trees in the avenue are individual living memorials to those soldiers who lost their lives in at Gallipoli and Lone Pine, and then consecutively mark each battle fought in World War One, Sommes, Pozieres and Ypres, where hundreds and thousands of Australian soldiers died.

The Avenue of Honour tree that is proposed to be removed and not replaced by this planning application seems likely to be dedicated to Private WG Graham or possibly Private FJ Rowe.

The tree dedicated to 2181 Private William George Graham, a boundary rider from Daylesford, enlisted in 7th company Australian Army Service Corps and died 19th October 1917 during third battel of Ypres along with 57 other men from his regiment, along with his three brothers, Robert Graham, Roy Smart Graham, and Thomas Graham, who also were killed during action and are commemorated through the planting of adjacent trees in the Avenue of Honour. (Federation University Avenues of Honour).



Studio portrait of 2181 Private (Pte) William George Graham, 47th Battalion. A boundary rider from Daylesford, Victoria prior to enlistment, Darge Photographic Company, 15 June 1916, Daylesford War Memorial, Australian War Museum.

Many of the first memorial trees planted in the Daylesford Avenue of Honour fought and died at the Battle of Gallipoli. The photograph above shows Infantry from the Australian 1st Brigade in a captured Turkish trench at Lone Pine, 6 August 1915, during the Battle of Gallipoli. Also present are members of the 7th Battalion, of the 2nd Brigade (Daylesford recruits) Australian War Museum. In a similar family history to WG Graham, whose 4 brothers are commemorated in the Daylesford Avenue of Honour, Rowe attended the Daylesford Primary School with his five brothers' three of whom also died during the War and are commemorated by symbolic Avenue of Honour trees adjacent the subject site at 9 Raglan Street, Daylesford.

6) **Railway Heritage Precinct, HO698: significant historic views**

The Railway Heritage Precinct is one of seven heritage precincts in Daylesford. The location of the Railway Heritage Precinct occupies the northeast corner of the 1854 township survey plan and focusses on Raglan Street, which forms part of the Midland Highway at this point. (Perrott, 1985, p 63). The subject

site is included in the Railway Heritage Precinct HO 698, the largest heritage precinct in Daylesford. This is well-known cultural landscape, recognized for its great beauty. The Railway Heritage Precinct at the entrance to Daylesford is one of a group of heritage precincts that provide continuous heritage protection encircling Wombat Hill and the historic township of Daylesford. They include the following, Railway Heritage Precinct, Wills Square Heritage Precinct, Albert Street Heritage Precinct, Vincent Street Heritage Precinct, Churches Heritage Precinct, Cornish Hill Mining Heritage Precinct and Wombat Hill Garden Heritage Precinct.

There are significant historic views of the surrounding rural landscape to the north and northeast. As described in the statement of significance, these views consist of scattered historic farm homesteads, Wombat Park, the English Elm entrance avenue, HO908, farmlands, the cypress pines that encircle Wombat Park Gavin Fleming of Taylor and Sangster designed Wombat Park arboretum of trees, listed by the National Trust (state level) and covered by HO619, and HO907, *Pinus quadfifolia* (Parry's Nut Pine), driveway near the tennis court, Wombat Park, Daylesford.

As early as the 1860s the *Daylesford Express* described the view of Spring Creek (the subject site in Railway Precinct) from Wombat Hill to Breakneck Gorge as '*exceedingly romantic'* one of the most picturesque in the region.[2] William E. Stanbridge, the local landowner and squatter commissioned Eugene van Gerard to paint his estate, parkland arboretum, including Spring Creek that rises from two springs alongside Raglan Street, the subject site, and flows northward to Hepburn Springs, Hepburn Regional Park, joining Sailors Creek at Breakneck Gorge with distant views of Mt Franklin, Mt Kooroorcheang, Mt Tarrengower and the Pyrenees.

These scenic views have long been celebrated and protected over 140 years of tourist development. The 1860s design and layout of Wombat Hill Botanic Gardens adjoining Railway Heritage Precinct was designed with four lookout points and pathways providing 350-degree views of regional, state and national forests that surround Daylesford. The forests that surround Daylesford, now form part of the 19th century Hepburn Springs mineral springs reserves, and conservation areas of Wombat Forest, Hepburn Regional Park, Bullarook Forests, Mt Franklin volcanic Reserve and Castlemaine Diggings National Heritage Park among others.

Extract from the Daylesford and Hepburn Springs Conservation Study, 1985, Perrott, Lyon Mathieson Pty Ltd, and Andrew Ward, Architectural Historian. Clause *4.5.1: The land upon which the station ground is situated was subdivided by the Crown following the completion of Frazer's survey 1854 and sold off completely during the period commencing in the mid 1850s and concluding during the early 1870s.*

The north-eastern approach to Daylesford is the only area of farmland in private ownership, that was once part of the 1830s Wombat Park and Holcombe squatters' run. This land was previously owned by William Stanbridge and abuts the subject site at 9 Raglan Street, Railway Precinct. Wombat Park is protected by National Trust listing (1965) including the entire former Wombat Park Gardens, House, Arboretum Parkland. Included in these latter areas is Stanbridge's original 1850s cottage, the relocated Stanbridge's 1870s timber cottage, now in Frazer Street and the 1910 two storey Edwardian Arts and Craft style Wombat Park House.

The township of Daylesford was formerly part of Wombat Park run, leased by squatter William E. Stanbridge. In 1854 the Government Surveyor Frazer laid out the township, and first parcels of land were auctioned around Vincent Street, the commercial centre. Daylesford was formerly gazetted in 1855, when further lots were sold, including the subject site, which was sold to Doveton. These lots to the north and east along Raglan Street were quickly purchased by local squatters, including William E. Stanbridge, who purchased as many lots as he could surrounding his pre-emptive right, Wombat Park of 340 acres.

The consequence of these early land sales in 1854 and 1855 created a strong boundary and visual feature of the town, which is identified in the statement of significance for the Railway Precinct '*the pastoral nature*

[2] Marshall, David, *Eugene von Guérard's Views of the Daylesford Region for William E. Stanbridge,* La Trobe Journal, 93-94, pp1-13.

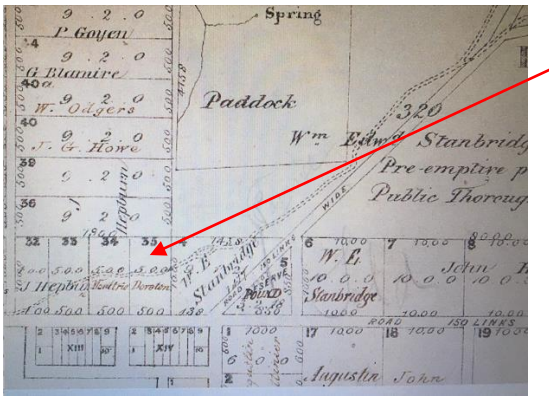
of Wombat Park forms a strong contrast to the dense urban setting of Daylesford' becoming an iconic entrance to the township.

Subject site, historic cottage, adjacent to Stanbridge's land and Wombat Park shown in red and beige prepared by John Lewis, Daylesford Historical Society.

William E. Stanbridge, squatter, landowner and member of parliament, arrived in Port Phillip in 1841. He took up the original Holcombe run, later selecting the western portion, Wombat, the site of Daylesford. When gold was discovered at Wombat Flat in 1851, he had the opportunity to purchase the Wombat pre-emptive right of 340 acres in 1851. He negotiated royalties from the miners that mined for gold on his land along Spring Creek, the Royal Oak and Florence leads, and in consequence became a very wealthy gentleman and philanthropist. Stanbridge developed spectacular tree planting, an arboretum parkland that is listed by the National Trusts and included in the Hepburn Planning Scheme Heritage Overlay, HO 619, HO 908 and HO907. The subject site, HO968, shares a boundary fence which includes rows of conifer trees planted in 1850s and 1860s along Spring Creek waterway.

7) **Railway Heritage Precinct, HO698: The 1850-1870s historic timber cottage**

Originally purchased by and made for FC Doveton, first Gold Commissioner on the Victorian goldfields, HO698 a significant contributory place.



The subject site 9 Raglan St, Daylesford 3460. Purchased byAllot. 35 Sec. 2 PARISH OF WOMBAT

The lot was purchased in 1855 by the former Commissioner of Crown Lands, Francis Crossman Doveton (1817-1905), employed as the first Gold Commissioner on the Ballarat Goldfields. After the Eureka uprising and abolition of the office he was relocated to Daylesford and Hepburn in 1855, where he worked as Chair of the Local Courts, Protector of the Chinese, Magistrate and Coroner.

The subject site at 9 Raglan Street Crown Allotment 35 Section 2 is the last town lot that was auctioned for the second sale of land in the new township, the original Wombat Park run in 1855. The original lot remains intact, with the early construction of a timber cottage during the 1850s and 1860s, insitu. The lot abuts Wombat Park, the pre-emptive right of William E. Stanbridge, who purchased the land in 1851 and progressively purchased surrounding parcels of land as they became available. The following statement of significance for the historic cottage has been prepared with reference to the Planning Practice Note 1 Applying the Heritage Overlay AUGUST 2018,. *Criterion E: Importance in exhibiting particular aesthetic characteristics (aesthetic significance).*

Historic House Complex at 9 Raglan Street, Daylesford Statement Of Significance.
What is significant?
The following features contribute to the significance of the heritage place:

The historic house complex at 9 Raglan Street, Daylesford, consists of a series of timber frame and weatherboard structures that have been built separately and then connected in a disjointed manner over several years starting from the late 1850s and 1860s. The brick square shaped chimney at the rear may previously been associated with a temporary tent dating from the mid-1850s. It later became an

outbuilding or early kitchen with skillion roof to the west side of a single room cottage. The single room cottage has a large fireplace at one end and opposite two doors lead to two separate additions. The north addition is a narrow timber frame room, latterly converted into a bathroom. The other addition is a simple rectangle, timber frame and weatherboard structure with elegant large French windows opening out onto a verandah looking east. The space is divided into several modest rooms with an access on the west. The original timber shingle roof tiles remain beneath the corrugated iron roof. Development of the homestead seems to have stopped by the late 1860s to 1870s.

The lot was purchased in 1855 by the former Commissioner of Crown Lands, Francis Crossman Doveton (1817-1905), employed as the first Gold Commissioner on the Ballarat Goldfields. He lived here with his wife and possibly all his eleven children. He was declared bankrupt in 1866. He died in Melbourne in 1905.

The association of the cottage with Francis Crossman Doveton (1817-1905) who purchased the subject site in 1855 according to the Daylesford Parish Plans, has great interest and is associated with the story of goldmining law and order on the goldfields generally and in Daylesford. He was born on 18 October 1817 at Marksbury in Somerset, England. He arrived in Sydney in1838 as a Lieutenant in the 51st Regiment, the Kings Own. From 1837 the regiment escorted convicts to Tasmania where Doveton served for 12 years. He was stationed at Triabunna on the coast adjacent to Maria Island, which housed a penal colony that is now part of the Port Arthur World Heritage site. Between1844 and 1851 the Triabunna Barracks were home to the 51st Yorkshire Regiment of Foot, who oversaw the convicts at Maria Island. In 1847 the majority of the Regiment were transferred to India. On 21 August 1851 Doveton was appointed the first Commissioner of Crown Land for the Goldfields, and the first Gold Commissioner in Victoria introducing the very unpopular licenses to dig and search for Gold in the Buninyong and Loddon Districts. Doveton was on the first staff at Mount Alexander (Castlemaine) Goldfields. He arrived at Ballarat along with Assistant Commissioner, David Armstrong on 19 September 1851 with a team of troopers and assisted by Captain Dana and the Native Police Troopers.

After Eureka Stockade upraising the Royal Commission in 1855 disband the government camps, abolished the Commissioners, and introduced the Mining Acts, Miner's Right and Mine Warden Courts. Local courts were elected shortly afterwards and many of the Commissioners of Crown Lands became magistrates or wardens. By 1855, Doveton became Chair of the Local Courts in the District of Hepburn. By 4 February 1858 he was acting as a Police Magistrate in the district of Daylesford, where he worked into the 1860s becoming Warden of the Goldfields, Police Magistrate and Chinese Protector between 1858 and 1860. He later became Coroner in Daylesford and held many inquests at Hepburn, which were reported in the local newspapers. Yet by 1866 he was declared insolvent due to lack of employment and carrying debt for others.

How is it significant?
The timber weatherboard cottage made up of at least four different sections dating from different periods located at 9 Raglan Street has historical and aesthetic significance and has associative significance to Hepburn Shire at a local level for its connection to the former Commissioner of Crown Lands, Francis Crossman Doveton (1817-1905 and potentially the State of Victoria for its archaeological significance.

Why is it significant?
The Cottage is historically significant for its association with a key event in Victoria's history and a defining moment in the development of Australia's character and culture. F.C. Doveton, the First Commissioner of Crown Lands in Victoria, who purchased the land and built the cottage, was directed to introduce the gold licensing system into Ballarat that led to the Eureka uprising. It is uncommon and rare to have a historic cottage that such a high degree of authenticity. *Criterion A: Criterion B.*

The Cottage is aesthetically significant due to recognition antiquity of the structure, its early sales in 1855, its visual contribution to the cultural landscape and surrounding area, its associated with Daylesford gold mining era, as well as its visual connections with Wombat Park estate, owned by Stanbridge, the run upon which Daylesford was established. *Criterion E.*

The Cottage is archaeologically significant for its high potential to contain evidence of its former inhabitants, F.C. Doveton, the First Commissioner of Crown Lands in Victoria, due to the relatively undisturbed nature of the site, and for its special association with the life and works of Doveton, who

was appointed Hepburn Police Magistrate and Chinese Protector, due to the relatively undisturbed nature of the site. *Criterion C: Criterion H.*

It is recommended that the cottage at 9 Raglan Street with sections dating from 1850s and 1860s is associated with and built by the First Commissioner of Crown Land on the central Victorian goldfields has high potential archaeological heritage. Following further archaeological investigation, a nomination for heritage listing on the Victorian Heritage Register as an historic archaeological site and for the 1850s and 1860s miners' cottage complex is recommended.

Historic timber house at 9 Raglan Street, the rear brick chimney is similar to early 1850s chimneys.

The following table summarizes the main heritage issues that have been discussed previously and form the basis of the recommended heritage conditions that if satisfactorily resolved would considerably reduce the potential impact on the heritage values of the place.

Column 1: Is a list of Heritage Issues that were identified in the Heritage Report 21 July 2022 in response to the Preliminary Planning Application 2022 Niche Planning Studio:
Application to Amend Planning Application – 9 Raglan Street, Daylesford PA 3530 Report. Preliminary Subdivision Planning Report /Niche Studio. JBA John Briggs Architect And Conservation Consultant, Heritage Impact Statement, 21 April 2022. NPS943-023 Middleton Field subdivision layout and Design Guidelines.

Column 2: Is a list of changes incorporated in the Readvertised Planning Plans 2023 Niche Planning Studio. *Application to Amend Planning Application PA3530- 9 Raglan Street, Daylesford Amended subdivision layout plan (version M) Amended Planning Report, Amended Intersection Layout Plan, Middleton Field Master Plan*

Column 3: Is a list of current Heritage Comments 2023 that References the above documents and responds to the changes proposed in the Readvertised Planning Plans 2023 Niche Planning Studio.
Heritage Report 21 July 2022 and this Heritage Report, March 2023.
Daylesford and Hepburn Springs Conservation Study, 1985, Perrott Lyon Mathieson Pty Ltd, and Andrew Ward, Architectural Historian. Hepburn Planning Scheme, Clause 15.03 & 15.03-1L, Heritage Policy, HO Clause 43.01.

Summary of Main Issues Outstanding.

1) Proposed Removal of tree from the 1918 Daylesford Avenue of Honour to allow access to 9 Raglan Street is not recommended without appropriate replanting adjacent, to retain the specific sequence of commemorative memorial planting of volunteer soldiers who were killed during World War One.

2) Landscape design showing the main access vehicular road 16 metres wide, that includes avenue planning of trees, species of trees, proposed watering system, grass verge, drainage, and materials.

3) Reduction in double vehicular access driveways throughout to enable regular planting and long term protection of establishment of an avenue of trees.

TABLE SUMMARIZING HERITAGE ISSUES FROM 2022 TO MARCH 2023.

Item	1) Heritage Comments 14/07/2022	2) Readvertised Planning Plans 2023 Niche	3) Heritage Comments 2023
1	A conservation management plan be prepared for the historic house complex. Include among others, condition audit and options for retention.	Not submitted. Structural Audit submitted that states the building is in a poor condition.	This is established, the purpose of the audit is to determine options for strengthening and retention of the historic structures. A CMP will assist in this matter.
2	Prior to demolition of the timber barn prepare an archaeological assessment management plan of the historic house complex to be completed to the satisfaction of Council.	Archaeological assessment management plan not submitted	Recommendation to retain this condition.
3	The proposed new lot around the historic house to be increased in size generally and by 5metres to the north in order to retain historic views, significant values and encourage retention of the place.	A 5m setback on the north and southern lots boundaries from the house has been implemented to achieve space around the house. In addition, the design of the north south road curves outwards from the heritage house lot to visually emphasise the house as it is passed along the road. Further design outcomes contributing to an open aspect such as fencing choice has been outlined in the Design Guidelines, submitted previously.	Satisfactory
4	Crossovers The proposed Heritage Design Guidelines (*Middleton Field Heritage Guideline*, Hygge Property, page 12 of this Report) recommends that the vehicular cross overs for each lot must be narrow- not wide or double width, to reflect the heritage character of the area (3- metre-wide single access entrances). *Clause 15.03-1L Discourage new vehicle crossovers that are inconsistent with the character of heritage places including multiple crossovers and wide crossovers.*	Change of crossover location for lot 501 to reduce the number of crossovers to Raglan Street More variety in lot sizes – lots now range from 609sqm to 1235sqm. Footpath now located on the eastern side of the north south road reserve. Lot count has been reduced from 22 to 20 and average lot sizes have increased as a result of the above changes.	A landscape plan of the main north south access road is required. The road design should reflect similar designs in the heritage precinct. This includes provision of sufficient space for the planting of an avenue of trees and pavements both sides of the road.
5	The subdivision layout establishes a buffer zone along the eastern boundary, which supports the protection of the row of historic cypress trees, allows their regeneration and protects the wetlands and springs that are located at the head of Spring Creek. The buffer zone encourages perimeter tree planting along the creek line	Other lots changes include increase in variety of lots sizes, which now range from 609sqm to 1235sqm, with an overall increase in average lot size. Drainage/sewer easements have also been added to lots 515, 512 and 505. To ensure these easements lie along lot boundaries and allow practical building envelopes, a reduction in lot numbers from 22 to 20 lots has	It is acknowledged that the proposed development extends cross several parcel of land and the cypress trees were previously planted along the western boundary of the Wombat Estate part arboretum. Nevertheless, replanting and retaining this row of cypress trees is

	thereby contributing to the heritage rural landscape	been proposed. 270m open space area has been added to align with natural drainage lines and connect to 17 Smith St and 4719 Midland Hwy	recommended and would satisfy heritage assessment of HO619.
6	Prepare landscapes plans showing the design of the entrance to the lot demonstrating how the Daylesford Avenue of Honour will be protected.	Completed demonstrates tree is recommended for removal. Our client is willing to seek an arrangement to improve the impact on remaining Avenue of Honour trees within the road reserve, which are currently trimmed extremely by Powercor for power lines. Currently, they are investigating opportunities to alter electricity infrastructure along the Middleton Field frontage to allow for trees within the road reserve to grow back to fuller canopy size. This will allow the Avenue of Honour to revert to its intended appearance along this entrance to Daylesford. This amendment seeks to remove the proposed crossover from lot 501, instead redesigning the lot so that access is provided from the internal north south road. This will reduce impact to the Avenue of Honour and Raglan Street, which is a higher order road controlled by the Department of Transport.	This requires the removal of a tree in the Avenue of Honour thereby disrupting the visually important avenue of honour at its beginning. The action will adversely impact upon the historic and social value and story of the avenue as a commemorative planting. In this area at the beginning of the Daylesford Avenue of Honour each tree represents or is a living memorial to a local volunteer soldier who was killed either at Gallipoli or the Sommes/Ypres area of the Western Front. The sequence of trees is important as often whole families of sons are commemorated together. It is a living tradition whereby families and successive generations of relatives will visit the trees each year. It is recommended that the tree be retained or replaced in the same location.
7	Establish boundary plantings and landscapes around and through the proposed subdivision layout to protect residential areas and opportunities for large canopy trees to improve visual views across the cultural landscape and shading. A landscape vegetation plan is required showing width and design of roads and pathways and opportunities for tree plantings.	No completed.	Recommended to retain this condition. A landscape plan of the whole subdivision is required. The current Master Plan photograph image of the developed site needs to be verified by a landscape plan. Currently the two visions do not match.
8	Introduce more through cycle and walking pathways increasing public connectivity that are separate from the vehicular road in this way the development will not become a sea of roofs. A fine detail circulation plan is required.	East West Road reserve has been added to connect to 4719 Midland Hwy. With the acquisition of the adjacent site to the west, the development now facilitates an urban design capable of accommodating the natural topography and a drainage line running north to south through	Recommended to retain this condition. The revised planning application subdivision master plan has been refined and incorporates many comments raised previously.

		Middleton Field (including 29 and 17 Smith Street, as well as 4719 Midland Hwy). As a result, a landscaped area now traverses part of the north-eastern portion of the subject site, which ultimately connects a walking path along the drainage line running through Middleton Field.	
9	Provide design guidelines for future subdivision pattern within each proposed lot, including density of housing and height limits.	Completed	No commitment to preventing further subdivision in the future.

Justification:

1.0 Hepburn Planning Scheme
Clause 15.03-1S (26/10/2018 VC155) Heritage Conservation
Objective
To ensure the conservation of places of heritage significance.

Strategies
1. Identify, assess and document places of natural and cultural heritage significance as a basis for their inclusion in the planning scheme.
2. Provide for the protection of natural heritage sites and man-made resources.
3. Provide for the conservation and enhancement of those places that are of aesthetic, archaeological, architectural, cultural, scientific or social significance.
4. Encourage appropriate development that respects places with identified heritage values.
5. Retain those elements that contribute to the importance of the heritage place.
6. Encourage the conservation and restoration of contributory elements of a heritage place.
7. Ensure an appropriate setting and context for heritage places is maintained or enhanced.
8. Support adaptive reuse of heritage buildings where their use has become redundant.

Clause 15.03-1L Heritage (10/02/2022 C80hepb)
Policy application
This policy applies to all land within a Heritage Overlay.

Strategies
General
9. Ensure new development is consistent with and interprets the significance of heritage places.
10. Design development to respect elements of the heritage place and surrounds including buildings, associated trees, garden settings, plantings, agricultural features within a landscape, and archaeological sites.
11. Respect and respond to the evolving history of buildings and their heritage significance that are demonstrated through extensions to the building fabric over different periods such as for miners' cottages and agricultural buildings.
12. Discourage new vehicle crossovers that are inconsistent with the character of heritage places including multiple crossovers and wide crossovers.

Gardens, Trees and Landscape Features
13. Conserve important gardens including culturally significant vegetation, trees and plantings, gardens, features and structures.
14. Encourage the retention of significant trees in a heritage place.
    Site and design buildings and works to respect significant trees, plantings and significant garden layouts and provide for the ongoing health of the tree without intruding into the tree protection zone.
15. Encourage replacement trees of the same species with advanced or mature specimens when significant trees have died.

Subdivision

16. Ensure that the subdivision of heritage places does not detract from the significance of the place. Ensure development that may result from the subdivision of a heritage place:
17. Respects the original layout of buildings.
18. Preserves the heritage significance of the place.
19. Retain view lines from public spaces to heritage places when new lots are created around heritage places.
20. Design subdivision to complement and be consistent with the rhythm and pattern of buildings and the subdivision pattern of a heritage place.
21. Align new lot boundaries and building envelopes to avoid the root or canopy zone of established trees.
22. Retain gardens and established trees and plantings (whether or not of heritage significance) that contribute to the setting of a heritage place within the same lot.

APPENDIX 1

Recommended Conditions as per Heritage Referral Report 21/07/2023, Mandy Jean.
Conservation Works

1) Prior to the commencement of any of the works approved by this permit, a suitably experienced heritage conservation architect, approved in writing by the Council, must be engaged to prepare a conservation management plan. This document should focus on a) identifying and describing fabric, stages of development, construction technology and levels of significance, and b) prepare an existing condition schedule, dimensioned sketch layout plans and elevations, and c) provide options for how the complex can be conserved, repaired and retained. The conservation management plan must include evaluation of the detached timber barn.

Clause 15.03-1L *Respect and respond to the evolving history of buildings and their heritage significance that are demonstrated through extensions to the building fabric over different periods such as for miners' cottages and agricultural buildings.*

2) Prior to the commencement of any of the works approved by this permit, a full scope of conservation repairs as outlined in Condition 1 including details for the repair of roof of the east timber addition must be provided for endorsement by the Council and once endorsed becomes part of the permit.
3) Prior to the commencement of any of the works approved by this permit, a suitably experienced heritage conservation architect, approved in writing by the Council, must be engaged to advise and assist as necessary the preparation of the documentation where any new intervention to the built fabric of heritage significance is involved and to provide relevant conservation advice to the permit holder during the carrying out of those works at Lot 517.
4) Prior to the commencement of any of the works approved by this permit, the approved conservation architect must prepare a final costed schedule and drawings of conservation works identified in compliance with Condition 1 and 2 for the approval and endorsement by the Council for the historic complex at Lot 517. Once endorsed these works become part of the permit and must be completed within the period of validity of the permit.

Archaeology

5) Prior to the commencement of any of the works approved by this permit, an Archaeology Management Plan (AMP) must be submitted and when endorsed must be implemented to the satisfaction of the Council. The AMP must include an evaluation of the place history and the potential of the site to contain historical archaeological features and deposits. If the site is likely to contain historical archaeological features and deposits, it may be necessary for it to be included on the Heritage Inventory. The AMP must include evaluation of the detached timber barn and site.

Clause 15.03-1L *Design development to respect elements of the heritage place and surrounds including buildings, associated trees, garden settings, plantings, agricultural features within a landscape, and archaeological sites.*

6) If this is the case, then a Consent (under Part 6 of Heritage Act) will be required to authorise the disturbance of any archaeological remains that may be affected by the proposed site works.

7) All works must cease, if historical archaeological artefacts or deposits are discovered during any excavation or subsurface works. The Council must be informed when the approved works have been completed.

Demolition of the Timber Detached Barn

8) Prior to the commencement of any of the works approved by this permit and following approval by Council of works completed according to Condition 1, 3, and 5 (significance of the timber barn and assessment of potential archaeological features by the approved conservation architect), the removal of the timber barn will be considered.

Clause 15.03-1L *Structural integrity of the heritage place has been lost and there are no options for structural stabilisation and remedial intervention.*

9) Prior to the commencement of any of the works approved by this permit, a conservation architect is to be appointed to carry out periodic inspections during the demolition phase to ensure that any previously hidden earlier fabric that is uncovered during the demolition works is identified and documented.

Cultural Landscape

6) Prior to the commencement of any of the works approved by this permit, the subdivision layout plan must be amended to create a 5 metre curtilage around the historic house complex which may increase the lot size shown on the subdivision layout plan.
5) Prior to the commencement of any of the works approved by this permit, the subdivision layout plan must be amended to create a buffer zone (5 metres) along the eastern boundary fence along the Spring Creek waterline from Raglan Street northwards. The buffer zone is to protect the Wombat Park mature conifers historic tree plantings and allow their regeneration where missing. The aim is to increase opportunities for more continuous canopy cover and pedestrian movement through the site which is separated from vehicles.

Clause 15.03-L1 *Design subdivision to complement and be consistent with the rhythm and pattern of buildings and the subdivision pattern of a heritage place.*

6) Prior to the commencement of any of the works approved by this permit, the subdivision layout plan must be amended to show planting of an avenue of trees along the central entrance spine inclusive of both the extent of HO698 and Lot, CA 35 SEC 2 TP 14100 PSH PWO. The avenue of trees must be uniform in appearance the length of the avenue, with regular spacing, paired trees of same species planted in a grassy verge with swale drains. The specimen trees selected for the avenue must be approved in writing by the Council. A significant feature of the Railway Precinct are the avenues of trees.

Clause 15.03 -1L *Design subdivision to complement and be consistent with the rhythm and pattern of buildings and the subdivision pattern of a heritage place.*

7) Accordingly, the vehicular driveway into each lot must be amended to show single 3 metre access and not double prior to the commencement of any of the works approved by this permit. This will create regular spacing for the establishment of a classically designed avenue of trees. The proposed Heritage Design Guidelines (*Middleton Field Heritage Guideline*, Hygge Property, page 12 of this Report) recommends that the vehicular cross overs for each lot must be narrow- not wide or double width, to reflect the heritage character of the area (3-metre-wide single access entrances).

Clause 15.03-1L *Discourage new vehicle crossovers that are inconsistent with the character of heritage places including multiple crossovers and wide crossovers.*

8) Prior to the commencement of any of the works approved by this permit, a detailed landscape layout plan that clearly demonstrates how the Daylesford Avenue of Honour will be protected must be submitted to Council for approval. The Daylesford Avenue of Honour is of high significance to the Railway Precinct, Daylesford, Hepburn Shire and Victoria.
9) Prior to the commencement of any of the works approved by this permit, a landscape vegetation plan showing width and design of roads, width of verge, channel details, pathways, all materials, as well as tree and grass plantings along the eastern buffer zone Condition 5 must be approved by Council.

10) Prior to the commencement of any of the works approved by this permit, a landscape plan showing cycle and walking pathways that are separate from the vehicular road must be approved by Council.
11) Prior to the commencement of any of the works approved by this permit a well-developed design guideline must consider the potential for future subdivision pattern within each proposed lot and whether multi-unit dwellings will be permitted within the Railway Precinct area. In my opinion the Heritage Section of the Design Guidelines is insufficiently developed to protect the cultural heritage features of the Railway Precinct. The following are relevant:-

    a. All Lots 500-522 (excluding Lot 517) must have a minimum front setback consistent with existing along Raglan Street or 5 metres and side boundary setbacks of 3 metres.
    b. Lot 517 must have side setbacks of 5 metres to the south and north. This may mean increasing the width of the lot.
    c. Lots 516, 517 and 518 must have front fencing at 1.2 metres consistent with other lots, reflecting historic neighbourhood pattern of development. The Heritage Impact Statement places more emphasis on trying to retain distant views of the historic complex, than retaining the significant features of the cultural landscape such as establishing avenues of trees, protecting Daylesford Avenue of Honour. Retention of the historic timber cottage complex can only be achieved if the lot size is increased.
    d. The requirement for landscape vegetation plans for each Lot 500-522 must be submitted for Council approval consistent with the Hepburn Planning Scheme.
    e. Access from Raglan Street and through the Daylesford Avenue of Honour must be included in the Design Guidelines. A detailed layout plan of the main access road must be submitted to Council for approval, which clearly demonstrates how the Avenue of Honour will be protected. This area of the subdivision layout plan is not resolved.
    f. The height limit of 9-10 metres is not consistent with the historic character of Raglan Street within the Railway Precinct.

Clause 15.03-1L *Ensure an appropriate setting and context for heritage places is maintained or enhanced.*

Niche Studio Subdivision Plan 2022 showing treatment proposed for the Daylesford Avenue of Honour, the main entrance driveway and double lot access of 10m (5m each) metres wide and no tree plantings marked.

Figure 5: Proposed subdivision

Niche Studio Subdivision Plan 2023

Doc code: 22/455 Sect 55 2022-01-24
Your ref: PA3530

CENTRAL HIGHLANDS WATER

24th January 2022

James McInnes
Acting Statutory Planner
Hepburn Shire Council
P.O. Box 21
DAYLESFORD VIC 3460

Dear James,

Application for Planning Permit, Multi-lot subdivision, removal of vegetation, demolition of a building, creation and alteration of access to a road in a Road Zone, Category 1, and associated works, 9 Raglan Street, Daylesford.

We refer to your letter received 24th December 2021 and advise that in accordance with Section 56(1)(b) of the Planning and Environment Act, this Authority does not object to the granting of any permit that may issue subject to the following conditions: -

1. Any plan lodged for certification will be referred to the Central Highlands Region Water Corporation pursuant to Section 8(1)(a) of the Subdivision Act.

2. Reticulated sewerage facilities must be provided to each lot by the owner of the land (or applicant, in anticipation of becoming the owner) to the satisfaction of the Central Highlands Region Water Corporation. This will include the construction of works and the payment of major works contributions by the applicant.

3. A reticulated water supply must be provided to each lot by the owner of the land (or applicant, in anticipation of becoming the owner) to the satisfaction of the Central Highlands Region Water Corporation. This will include the construction of works and the payment of major works contributions by the applicant.

4. The owner will provide easements to the satisfaction of the Central Highlands Region Water Corporation, which will include easements for pipelines or ancillary purposes in favour of the Central Highlands Region Water Corporation, over all existing and proposed sewerage facilities within the proposal.

5. If required the owner will provide easements to the satisfaction of Central Highlands Region Water Corporation for pipeline or ancillary purposes through other land in the vicinity, as it is considered by the Authority that such easements may be required for the economical and efficient subdivision or servicing of or access to land covered by the subdivision.

6. If the land is developed in stages, the above conditions will apply to any subsequent stage of the subdivision.

Yours faithfully,

Casey Boucher
Senior Officer Planning

Central Highlands Region Water Corporation
7 Learmonth Rd Wendouree VIC 3355 PO Box 152 Ballarat VIC 3353
T: 1800 061 514 **F:** 03 5320 3299 **E:** customerenquiries@chw.net.au **ABN:** 75 224 340 348
chw.net.au

Department of Transport and Planning

GPO Box 2392
Melbourne, VIC 3001 Australia
www.transport.vic.gov.au

Ref: PPR 38582/22-A

Julie Lancashire
Hepburn Shire Council
10 Duke Street
Daylesford VIC 3460

Dear Julie

PLANNING APPLICATION NO.:	**PA 3530**
DEPARTMENT REFERENCE NO:	**PPR 38582/22-A**
PROPERTY ADDRESS:	**9 RAGLAN STREET, DAYLESFORD VIC 3460**

Section 55 – No objection subject to conditions

Thank you for your correspondence, referring details of the above application to the Department of Transport and Planning (Head, Transport for Victoria) pursuant to Section 55 of the Planning and Environment Act 1987.

The application is for:

Multi Lot Subdivision, Removal of Vegetation, Demolition of a Building, Creation and Alteration of Access to Transport Zone 2 and associated works.

The Department has considered the application and in principle has no objection to the proposal, but would require that the following conditions be included in any Notice of Decision to issue a Planning Permit or Planning Permit:

1. Prior to the issue of Statement of Compliance the following roadworks on Raglan Street (Midland Highway) must be completed to the satisfaction of and at no cost to the Head, Transport for Victoria:
    a. Intersection of local road generally in accordance with provided plan from Niche Planning Studio titled Preliminary Subdivision Layout Plan dated 23/01/2023.
    b. Widening of shoulders on the north and south road reserve either side of intersection.
2. Prior to the issue of Statement of Compliance the redundant vehicle crossing must be removed and the area reinstated to the satisfaction of the Responsible Authority and at no cost to the Head, Transport for Victoria.
3. Prior to the issue of Statement of Compliance footpath must be constructed east of the intersection to the property boundary along Raglan Street to the satisfaction of the Responsible Authority and at no cost to the Head, Transport for Victoria.
4. All waste collection must be via the local road

5. During the construction of the internal local road and dwellings the developer must ensure the Midland Highway remains debris free and maintained in a fit and proper state so as not to compromise the ability of vehicles using the Midland Highway.

NOTES:

Prior to the works commencing, the applicant must enter into a Works Agreement with the Head, Transport for Victoria, confirming design plans and works approvals processes, including the determination of fees and the level of Head, Transport for Victoria's service obligations.

The proposed development requires removal of a street tree. Tree removal constitutes works within the Midland Highway road reserve and separate approval under the Road Management Act for this activity is required from the Head, Transport for Victoria.

Please forward a copy of the Planning Permit, Notice of Decision to Grant or Refusal to Grant a Planning Permit to the Department at western.mail@roads.vic.gov.au, as required under Section 66 of the Planning and Environment Act 1987.

Should you have any enquiries regarding this matter, please contact western.mail@roads.vic.gov.au

Yours sincerely

V. mcleod

Virginia Mcleod

Team Leader Statutory Planning - Grampians
REGIONAL TRANSPORT
DEPT. OF TRANSPORT AND PLANNING
Under delegation from the Head, Transport for Victoria
28/02/2023
Cc Applicant

TOWN PLANNING REFERRALS

ENGINEERING CONDITIONS

Application No	:	PA – 3530
File	:	102450P
Property No	:	102450
Address of Land	:	9 Raglan Street, Daylesford
Description	:	22 Lot subdivision

1. Stormwater Drainage

- Prior to Statement of Compliance, all underground and surface drainage works that are considered necessary by the Responsible Authority shall be constructed in accordance with professionally prepared plans and computations to be provided by the developer and approved by the Responsible Authority prior to the commencement of construction. The drainage works shall include the provision of an onsite stormwater detention system designed to ensure that the post development runoff does not exceed pre development runoff from the development. The drainage works shall be installed to transport stormwater runoff from the subject land and surrounding land and/or adjoining road(s) to an approved point of discharge. No concentrated stormwater shall drain or discharge from the land to adjoining properties. The drainage system must be constructed and completed prior to the issue of the statement of compliance.

  Return period for a Detention system is to be 20% AEP where there is overland escape path and 1% AEP if the failure of the detention system will cause property damage or inundation of freehold titles.

- All allotments shall be provided with drainage outfall (house connection) connected to the underground drainage system to the satisfaction of the Responsible Authority. House drainage connection shall be constructed in accordance with Infrastructure Design Manual Standard Drawing SD 510 or SD 505 with hot dip galvanised kerb adaptors.

- Stormwater shall be connected to the legal point of discharge to the satisfaction of the Responsible Authority.

- Prior to Statement of Compliance, all drainage easements deemed necessary by the Responsible Authority must be provided by the Permit Holder to protect and facilitate existing and future drainage infrastructure. Easements shall also be provided through properties between the development site and the nominated legal point of discharge. Minimum width of drainage easements shall be 2.0m for stormwater.

- A new stormwater easement and pipe shall be created/constructed along the Eastern boundary for the purpose of draining new lots and overland flow.

- Drainage easements shall be created to allow for gravity stormwater drainage to the satisfaction of Responsible Authority.

- If the proposed stormwater drainage system includes any works to be undertaken during house construction stage, the Owner must enter into a Section 173 Agreement with the responsible Authority under section 173 and 174 of the Planning and Environment Act,

Engineering Services – Hepburn Shire Council PO Box 21, Daylesford VIC 3460
Phone: (03) 5348 1633 Fax: (03) 5348 1304

requiring that such works shall be constructed and completed during house/building construction stage.

- The Owner must pay all of the costs and expenses including Responsible Authority's lawyers checking fees in relation to preparation, execution, registration, enforcement and cancellation of this Agreement including costs for obtaining necessary consents if required by the Land Titles Office before registration of this Agreement.

- It is the responsibility of the developer, to prepare a Stormwater Strategy Plan to identify and record the manner by which the quantity and quality of stormwater shall be managed for the catchment. The stormwater strategy plan must demonstrate how to avoid adverse impact on neighbouring properties and surrounding road network due to the development. Drainage design plans and legal point of discharge will not be considered until the drainage strategy has been established.
- Where stormwater detention is proposed on public land, including road reserve, the detention system shall be designed in such a way as to minimise the ongoing maintenance costs and maximise the public benefit of the area. No area used for stormwater detention shall be considered for the purposes of public open space.
- It is the responsibility of the developer to meet the requirements for stormwater quality as stated in the BPEM (Best Practice Environmental Management) Guidelines
  Note: Additional information for requirements can be found at https://www.epa.vic.gov.au/business-and-industry/guidelines/water-guidance/urban-stormwater-bpemg

2. New Intersection and Road Creation

- All Roads and drainage designs and constructions shall be based on sound engineering practice following the general principles of The Planning Scheme, the Austroads Guidelines, the Co-ordination of Streetworks Code of Practice, Relevant Australian Standards, VicRoads Road Design Guidelines, Infrastructure Design Manual [IDM] and to the satisfaction of Responsible Authority.
- Professionally prepared plans are to be submitted to the Responsible Authority for approval prior to construction.
- A Traffic and Pedestrian Impact study shall be conducted for the new intersection to the satisfaction of the Responsible Authority.
- All recommendations from the Traffic and Pedestrian Impact study, in particular provision for turning lanes, shall be implemented unless agreed to by the Responsible Authority.
- New roads shall include provisions for traffic calming in accordance with section 12.6 of IDM and to the satisfaction of the responsible authority.
- All internal roads within the development shall be in accordance with 'Table 2 – Urban Road / Street Characteristics' of IDM.
- Minimum width of the road reserve shall be in accordance with 'Table 2 – Urban Road / Street Characteristics' of IDM.
- The road pavement at a minimum, shall include
    - 200mm compacted depth class 3, 20mm FCR sub base and 100mm compacted depth class 2, 20mm FCR base pavement.

- 2 coat spray seal, 10mm primer seal/7mm rubberised final seal, or 40mm Type H, 10mm asphalt
- Kerb and channel
- 1.5m wide concrete footpaths
- Court Bowls must have a minimum radius of 12.5m and asphalt wearing course

- All no through traffic roads must terminate with a court bowl
- Unless stated otherwise by Regional Roads Victoria, kerb and channel shall extend along the frontage of the development at Raglan Street to prevent unauthorised parking. Plans for works on arterial roads shall be approved by Regional Roads Victoria and Council.
- The Supervising Consulting Engineer shall provide to Council a report of hold points and inspections for the construction and verification that the roads and drains have been designed and constructed in compliance with the above standards, by providing a list verifying the results of all tests undertaken and corresponding results. The minimum tests required to be provided to the Responsible Authority are:
  - Road Sub-grade (Proof Roll)
  - Pavement sub-base and base (density test and proof roll)
  - Pavement prior to sealing or asphalt application
  - Drainage trench and bedding
  - Drainage infrastructure prior to backfill
  - Drainage pits

3. Access

- Vehicle access/crossing to the land is to be located, constructed and maintained to the satisfaction of the Responsible Authority.
- Prior to statement of compliance the following will be constructed for approval.
  - Vehicle access/crossing to all lots is to be constructed in accordance with Infrastructure Design Manual Standard Drawing SD 240 or to approval of Responsible Authority.
  - Vehicle access/crossing to the land shall be located so that adequate sight distance is achieved to comply with Australian Standard AS2890.1:2004 Section 3.2.4 and as specified in Ausroad's Guide to Road Design Part 4A Section 3.4 - 'Sight Distance at Property Entrance'.
  - Minimum 10.0m and 9.0m clearance shall be maintained from any road intersection and between adjacent crossovers respectively.
  - Any proposed vehicular crossing shall have satisfactory clearance to any side-entry pit, power or Telecommunications pole, manhole cover or marker, or street tree. Any relocation, alteration or replacement required shall be in accordance with the requirements of the relevant Authority and shall be at the applicant's expense.
- The final location and construction of the vehicle crossing is to be approved by the Responsible Authority via a "Consent to Work within the Road Reserve", prior to

undertaking of works, unless shown on certified plans and constructed prior to statement of compliance.

4. Access and Mobility

- All footpaths shall be designed and constructed in accordance with the relevant Australian Standards, Infrastructure Design Manual [IDM] and to the satisfaction of the Responsible Authority.
- Minimum width of the footpaths shall be 1.5m and are to be constructed in accordance with IDM Standard Drawings SD 205 – Typical Footpath Detail.
- Footpaths shall be provided along one side of newly created roads within the development site and connect to the existing Council footpath network to the satisfaction of Responsible Authority.
- A new footpath connection shall be constructed from the development along the north side of Raglan Street to the existing footpath network at the corner of Smith and Reglan Streets.

5. Landscaping

- Prior to construction, the Developer is to prepare and submit a landscaping plan for road reserves and other open spaces to the satisfaction of Responsible Authority for review and approval. These plans are to comply with the Code of Practice for Management of Infrastructure in Road Reserves and shall provide following information:
    - Plant selection, layout and planting density
    - Landscaping design intent
- Street tree planting shall be designed to meet approximately 40% canopy coverage of new roads and must be selected and planted by a qualified horticulturist / arborist.
- The developer shall prepare an arborist report for all street trees within the construction zone
- The developer shall implement a construction plan showing how existing street trees shall be protected during construction works.
- Any existing street trees must be bonded for a period of 24 months at a value determined by a registered arborist. All new landscaping shall be bonded for a period of 24 months at minimum value of $400 per tree.

6. Boundary Lines

- Where a lot has significant cross fall, retaining walls and associated cut and fill shall be constructed along the lot boundary line including provisions for boundary fencing.
- All structural retaining walls shall have an engineering design and approval

7. Linemarking and Signage

- Appropriate signage and linemarking shall be provided to the satisfaction of the Responsible Authority

8. Street lighting

- Energy efficient LED street lighting shall be provided in accordance with the current issue of Australian standard AS/ANZ 1158 – Lighting for Roads and Public Spaces and to the satisfaction of the Responsible Authority.
- New lighting must be located outside the clear zones and meet the standards for category P lighting. Lighting requirements on arterial roads shall be included in the Traffic and Pedestrian Impact study.

9. Development Standard

- Prior to Statement of Compliance it is the responsibility of the developer to meet the requirements and standards as set out in the IDM (Infrastructure Design Manual) version 5.20

10. Prior to Construction

- Before any road, drainage and associated with the subdivision start following items must be satisfied.
  - Approval of the constructions plans by the Responsible Authority
  - A pre-construction meeting shall be held with the Responsible Authority, the Contractor and the Developer/Developer's Consultant Engineer to discuss and agree on hold point inspections, roadside management, traffic management and any other construction related matters.

11. Completion of Construction Works

- Prior to the issue of the Statement of Compliance for the relevant stage of the subdivision under the Subdivision Act 1988, the developer must construct and complete road works, drainage and other civil works in accordance with endorsed plans and specifications approved by the Responsible Authority and in accordance with Infrastructure Design Manual. Road works, drainage and other civil works to be constructed must include:
  - street and drainage in accordance with the approved construction drawings
  - construction of footpaths
  - underground drainage
  - intersection and traffic control/mitigation measures
  - signage and linemarking; and
  - high stability permanent survey marks
  - Lot access

12. As Constructed Drawings

- Prior to issue of statement of compliance, the Developer must provide as-constructed plans for all infrastructure created by this development and vested to the ownership and control of the Responsible Authority. Such plans shall be prepared by a registered surveyor

and/or qualified Engineer and endorsed by the Developer's Consultant Engineer and the Contractor.

- As-Constructed plans shall include:
    - An asset statement of each street including costs
    - as constructed' information for the entire work in each development stage detailing information as listed in the Infrastructure Design Manual
- Information to be presented in pdf. and dwg. formats, unless otherwise agreed in writing by the Responsible Authority.

13. Defects Maintenance and Bonds

- Prior to Statement of Compliance, the developer must enter into an agreement with the Responsible Authority regarding responsibilities for maintenance and correction of defects of all infrastructure works. Agreement must include the defects liability period, the amount of bond and the date of practical completion occurs.
- Prior to issue of Statement of Compliance, the developer must provide the Responsible Authority with a maintenance bond(s) of $5,000 or 5% of the total cost of infrastructure, whichever is greater.
- The bond(s) shall be an unconditional bank guarantee or cash for the predetermined amount. The Responsible Authority will hold the bond(s) until any and all defects notified to the developer before and/or during the liability period have been made good to the satisfaction of the Responsible Authority. A request must be made to the Responsible Authority for the release of maintenance bond(s) after the defects maintenance period.
- The Defects Liability Period for civil works shall be 12 months from the date of practical completion.
- The Defects Liability Period for landscaping shall be 24 months from the date of acceptance at a minimum bond of $400 per tree.

14. All costs incurred in complying with the above conditions shall be borne by the permit holder.

15. Plan Checking & Supervision Fee

- In accordance with the Subdivision Act 1989, Responsible Authority requires the following fees for works undertaken on this Subdivision.
    - Plan checking fee of 0.75% of the value of works
    - Supervision fee of 2.50% of the value of works

Prepared by: Ashley Goad – Engineering Development Officer
Date: 17/02/2022

Our Reference: 308265540
Your Reference: PA 3530

28 January 2022

Hepburn Shire Council
PO BOX 21
DAYLESFORD VIC 3460

Dear Sir/Madam

CONDITIONAL CONSENT TO ISSUE OF PLANNING PERMIT
APPLICATION NO: PA 3530
9 Raglan Street, Daylesford

Subject to the following conditions, Powercor Australia Ltd (the Distributor) does not object to the issue of a planning permit for the abovementioned application.

Conditions Required By the Distributor

1. This letter shall be supplied to the applicant in its entirety.

2. The plan of subdivision submitted for certification under the Subdivision Act 1988 shall be referred to the Distributor in accordance with Section 8 of that Act.

3. The applicant shall provide an electricity supply to all lots in the subdivision in accordance with the Distributor's requirements and standards.
Notes: Extension, augmentation or rearrangement of the Distributor's electrical assets may be required to make such supplies available, with the cost of such works generally borne by the applicant.

4. The applicant shall ensure that existing and proposed buildings and electrical installations on the subject land are compliant with the Victorian Service and Installation Rules (VSIR).
Notes: Where electrical works are required to achieve VSIR compliance, a registered electrical contractor must be engaged to undertake such works.

5. The applicant shall, when required by the Distributor, set aside areas with the subdivision for the purposes of establishing a substation or substations.
Notes: Areas set aside for substations will be formalised to the Distributor's requirements under one of the following arrangements:
    - RESERVES established by the applicant in favour of the Distributor.
    - SUBSTATION LEASE at nominal rental for a period of 30 years with rights to extend the lease for a further 30 years.
      The Distributor will register such leases on title by way of a caveat prior to the registration of the plan of subdivision.

6. The applicant shall establish easements on the subdivision, for all existing Distributor electric lines where easements have not been otherwise provided on the land and for any new powerlines to service the lots or adjust the positioning existing easements.
   Notes:
   - Existing easements may need to be amended to meet the Distributor's requirements
   - Easements required by the Distributor shall be specified on the subdivision and show the Purpose, Origin and the In Favour of party as follows:

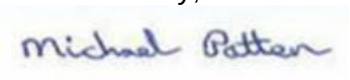
Easement Reference	Purpose	Width (Metres)	Origin	Land Benefited / In Favour Of
	Power Line		Section 88 - Electricity Industry Act 2000	Powercor Australia Ltd

***** END OF CONDITIONS *****

It is recommended that applications for electricity supply to each lot be submitted at the earliest opportunity so that the precise requirements of the Distributor can then be determined and accommodated. Applications for electricity supply shall be submitted via the Distributor's web portal, "mySupply" which can be accessed via the following link:
https://customer.portal.powercor.com.au/mysupply/CIAWQuickCalculator

Queries about this subdivision may be directed to the Customer Requests Team on 1800 771 434 or crr@powercor.com.au

Yours faithfully,



Michael Patten
Customer Requests Officer

NCCMA Ref: NCCMA-F-2022-00001
Council Ref: PA 3530
Date: 07 January 2022

James McInnes
Statutory Planner
Hepburn Shire Council
Po Box 21,
Daylesford Vic 3460

Dear James

Planning Permit Application No: **PA 3530**
Development Description: **Multi Lot Subdivision, Removal of Vegetation, Demolition of a Building and Roadworks**
Street Address: **9 Raglan Street Daylesford Vic 3460**
Cadastral Location: **Allotment 35, Section 2, Parish Of Wombat**
Applicant: **Naomi Beck, Niche Planning Studio**

Thank you for your referral under Section 55 of the *Planning and Environment Act, 1987* dated 24 December 2021, and received by North Central Catchment Management Authority (CMA) on 24 December 2021, regarding the above matter.

North Central CMA, pursuant to *Section 56* of the *Planning and Environment Act 1987,* **does not object** to the granting of a permit.

Advice to Applicant / Council

Information available at North Central CMA indicates that the location described above is not subject to flooding from any designated waterway based on a flood level that has a probability of occurrence of 1% in any one year. It would be in your best interest to contact the relevant Local Council regarding the impact of overland flows associated with the local drainage system.

Should you have any queries, please do not hesitate to contact me on **(03) 5440 1896**.
To assist the CMA in handling any enquiries and the supply of further information, please ensure you quote **NCCMA-F-2022-00001** in your correspondence.

Yours sincerely

Nick Butler

Nick Butler
Waterways and Floodplain Officer
Cc: Naomi Beck, Niche Planning Studio

Information contained in this correspondence is subject to the definitions and disclaimers attached.

ABN 73 937 058 422
628-634 Midland Highway, Huntly
PO Box 18, Huntly Victoria 3551

Telephone 03 5448 7124
Email info@nccma.vic.gov.au
www.nccma.vic.gov.au

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Attached: Definitions and Disclaimers

Definitions and Disclaimers

1. The area referred to in this letter as the 'proposed development location' is the land parcel(s) that, according to the Authority's assessment, represent(s) the location identified by the applicant. The identification of the 'proposed development location' on the Authority's GIS has been done in good faith and in accordance with the information given to the Authority by the applicant(s) and/or local government authority.
2. While every endeavour has been made by the Authority to identify the proposed development location on its GIS using VicMap Parcel and Address data, the Authority accepts no responsibility for or makes no warranty with regard to the accuracy or naming of this proposed development location according to its official land title description.
3. **AEP** as Annual Exceedance Probability – is the likelihood of occurrence of a flood of given size or larger occurring in any one year. AEP is expressed as a percentage (%) risk and may be expressed as the reciprocal of ARI (Average Recurrence Interval).

   Please note that the 1% probability flood is not the probable maximum flood (PMF). There is always a possibility that a flood larger in height and extent than the 1% probability flood may occur in the future.
4. **ARI** as Average Recurrence Interval - is the likelihood of occurrence, expressed in terms of the long-term average number of years, between flood events as large as or larger than the design flood event. For example, floods with a discharge as large as or larger than the 100-year ARI flood will occur on average once every 100 years.
5. **AHD** as Australian Height Datum - is the adopted national height datum that generally relates to height above mean sea level. Elevation is in metres.
6. No warranty is made as to the accuracy or liability of any studies, estimates, calculations, opinions, conclusions, recommendations (which may change without notice) or other information contained in this letter and, to the maximum extent permitted by law, the Authority disclaims all liability and responsibility for any direct or indirect loss or damage which may be suffered by any recipient or other person through relying on anything contained in or omitted from this letter.
7. This letter has been prepared for the sole use by the party to whom it is addressed and no responsibility is accepted by the Authority with regard to any third party use for the whole or any part of its contents. Neither the whole nor any part of this letter or any reference thereto may be included in any document, circular or statement without the Authority's written approval of the form and context in which it will appear.
8. The flood information provided represents the best estimates based on currently available information. This information is subject to change as new information becomes available and as further studies are carried out.

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www.nccma.vic.gov.au

cfa.vic.gov.au

Our patron, Her Excellency the Honourable Linda Dessau AC, Governor of Victoria

CFA Fire Prevention and Preparedness
8 Lakeside Drive Burwood East Vic 3151
Email: firesafetyreferrals@cfa.vic.gov.au

CFA Ref: **15000-684467-115978**
Council Ref: **PA 3530**

07 January 2022

Town Planner
Hepburn Shire Council
PO BOX 21
DAYLESFORD VIC 3460

Dear Town Planner,

CONDITIONAL CONSENT TO GRANT A PERMIT
CERTIFICATION AND COMPLIANCE REQUIRED

Application No: PA 3530
Applicant: Naomi Beck C/- Niche Planning Studio
Site Name: Multi Lot Subdivision
Address: 9 Raglan St, Daylesford

CFA, acting as a Referral Authority pursuant to Section 55 of the Planning and Environment Act does not object to the grant of a permit to Naomi Beck C/- Niche Planning Studio for the subdivision at 9 Raglan St Daylesford subject to the following conditions being attached to any permit which may be issued and a copy of the permit being forwarded to CFA.

– Start of Conditions –

1. Hydrants

Prior to the issue of a Statement of Compliance under the *Subdivision Act 1988* the following requirements must be met to the satisfaction of the CFA:

1.1 Above or below ground operable hydrants must be provided. The maximum distance between these hydrants and the rear of all building envelopes (or in the absence of building envelopes, the rear of the lots) must be 120 metres and the hydrants must be no more than 200 metres apart. These distances must be measured around lot boundaries.

1.2 The hydrants must be identified with marker posts and road reflectors as applicable to the satisfaction of the Country Fire Authority.

Note –CFA's requirements for identification of hydrants are specified in 'Identification of Street Hydrants for Firefighting Purposes' available under publications on the CFA web site (www.cfa.vic.gov.au)

2. Roads

Roads must be constructed to a standard so that they are accessible in all weather conditions and capable of accommodating a vehicle of 15 tonnes for the trafficable road width.

2.1 The average grade must be no more than 1 in 7 (14.4%) (8.1 degrees) with a maximum of no more than 1 in 5 (20%) (11.3 degrees) for no more than 50 meters. Dips must have no more than a 1 in 8 (12%) (7.1 degree) entry and exit angle.

2.2 Curves must have a minimum inner radius of 10 metres.

2.3 Have a minimum trafficable width of 3.5 metres and be clear of encroachments for at least 0.5 metres on each side and 4 metres above the access way.

2.4 Roads more than 60m in length from the nearest intersection must have a turning circle with a minimum radius of 8m (including roll-over kerbs if they are provided) T or Y heads of dimensions specified by the CFA may be used as alternatives.

– End of Conditions –

Bushfire Prone Area

CFA notes that the site is located within the Bushfire Prone Area (BPA) and no supporting bushfire information has been provided as part of the application. The site has direct interface with Classifiable vegetation (Grassland) and does not appear to address the bushfire risk and relevant policy contained at Clause 13.02. This policy requires a BAL 12.5 setback from 'classifiable vegetation'.

Lots on the western side of the subdivision may not be able to achieve a viable building envelope when a BAL 12.5 setback is provided. CFA suggest council seek a response to Clause 13.02 which may require the lot layout be re-considered with the inclusion of a perimeter road.

Additional Comments

CFA does not consent to the Certification of the Plan of Subdivision and Statement of Compliance for Subdivision at this stage.

If you wish to discuss this matter, please do not hesitate to contact Anthony Kacunic, Fire Safety Officer, on 0429 105 701.

Yours sincerely

Mark Holland
Service Delivery Team Leader
COMMUNITY PREPAREDNESS

cc: Naomi Beck
C/- Niche Planning Studio
286 Ferrars Street, South Melbourne Vic 3205

ATTACHMENT 10.3.13

GMW Ref: PP-22-00011
Doc ID: A4606706

Hepburn Shire Council
Planning Department
shire@hepburn.vic.gov.au

17 March 2023

Dear Sir and/or Madam,

Planning Permit Application - Subdivision - Multi-Lot Subdivision, Removal of Vegetation, Demolition of a Building and Roadworks

Application No.	PA 3530
Applicant:	Niche Planning Studio Pty Ltd
Location:	9 Raglan Street DAYLESFORD VIC 3460 V 10448 F 287 CA 35 Sect 2 Wombat

Thank you for your letter and information received 17 March 2023 in accordance with Section 55 of *the Planning and Environment Act 1987.*

Goulburn-Murray Water's (GMW's) areas of interest are surface water and groundwater quality, use and disposal. GMW requires that development proposals do not impact detrimentally on GMW's infrastructure and the flow and quality of surface water and groundwater. Applicants must ensure that any required water supplies are available from an approved source.

GMW understands that the applicant is seeking planning permission for a multi-lot subdivision, removal of vegetation, demolition of a building and roadworks. It is to be noted a site inspection was carried out by GMW (2018) on this site and the land to the north to determine the status of water features on site. It was found that potentially 2 springs are located on the eastern and western boundaries of the site in question, and a wide depression exists on the land to the north which may become soddon ground in winter. It is noted that a proposed subdivision to the north has made allowance for this topographical feature by incorporating a stormwater basin into the subdivision design.

The potential springs identified on the boundary of the site in question have not been considered in the current proposal. At the time of inspection (summer) two areas of green grass where identified (in an otherwise dry paddock) indicating seepage from potential spings/absorbent soils, however it was not considered that the springs are associated with any waterway/drainage line. During the summer period, the land at these points was not sodden but is likely to be over the winter and heavier rain periods. While there was not any drainage lines/waterways identified, spring activity could potentially create sheet flow across the site. The site is affected by ESO2 which recognises the necessity to protect mineral springs and groundwater.

PO Box 165 Tatura Victoria 3616 Australia
reception@gmwater.com.au
1800 013 357
www.gmwater.com.au

ABN. 46 761 336 846

The information provided and proposed subdivision layout did not address the potential spring activity and sheet flow across the site. GMW requested further information on 27 January 2022 and subsequently again on 27 July 2022, however no response was received. Therefore GMW has provided the conditions outlined below.

Based on the information provided and in accordance with Section 56 (b) of *the Planning and Environment Act 1987*, Goulburn-Murray Water has no objection to this planning permit being granted subject to the following conditions:

1. Any Plan of Subdivision lodged for certification must be referred to Goulburn-Murray Rural Water Corporation pursuant to Section 8(1)(a) of the Subdivision Act.

2. Each lot must be provided with connection to the reticulated sewerage system in accordance with the requirements of the relevant urban water authority.

3. All stormwater discharged from the site must meet the urban run-off objectives and Standard C25 as specified in Clause 56.07-4 of the Victorian Planning Provisions. All infrastructure and works to manage stormwater must be in accordance with the requirements of the Responsible Authority.

4. Prior to any works commencing on site a plan must be submitted to and approved by Goulburn Murray Water which clearly shows the following:

    a) The overland flow path of where water will be directed through the relevant proposed allotment(s) into the roadside drainage (comparing Figure 6 within the Stormwater Management Plan and the Preliminary Subdivision Layout Plan this appears to be lots 514 & 515, as well as lots 506/507-511).

    b) Proposed easements over the relevant allotment(s) for the flow of water in relation to 4 a) above. The easements approved by Goulburn Murray Water must be shown on any plan of subdivision submitted for certification.

If you require further information please e-mail planning.referrals@gmwater.com.au or contact 1800 013 357.

Yours sincerely

Ranine McKenzie
STATUTORY PLANNING PARTNER
Per: (original signed by Loretta Mulla)

[redacted]

Objection to Clause 56 Assessment p 16.
Multi lot subdivision page 31 53.01

Reason(s) for the objection -
The proposal of the 22 housing lots do not include a park or open public space.
This is a short sighted action which does not take into consideration the people and families who maybe living in this new community area today and in the future.

A park/open space /playground for residents to easily walk to supports healthy living and gives access to a safe space. A pocket park or green area available where residents esp children can walk to and do not have to cross the busy Midland Highway would be ideal. The plan mentions that people can walk to reach the botanical gardens, it does not mention the roads including the Midland hwy required to cross nor the various hills with their steep climbs and limited foot paths to walk up and down. Not easy for small children, a parent pushing a pram or carrying items nor are the Wombat Gardens suitable for many physical sports ie ball games due to the slope of the gardens.

A pocket park (with possibly space for a small community garden) provides a place for residents to meet, share their lives and develop a sense of community. To be close to your home while watching your family enjoy the outside park would be a huge benefit. A park, one lot size with supported planting on the 9 Raglan street development would certainly add to the beauty of the new development, be recognised as a aesthetic feature and respectful of the health, mental and physical, of the residents.

This is a park for now and tomorrow's residents.

I do not believe that giving the council a monetary % of the land value equals the significance of ensuring a green space in this very suburban setting that is being created in this new development of 9 Raglan street.

Copied from the report.

Multi-Lot subdivision report
Page 31. 7.1 Clause 53.01 – Public Open Space Contribution and Subdivision

Pursuant to clause 53.01, subdivision of land requires that a contribution of land or of an equivalent monetary value be paid to Council to enable the creation of public open space. The schedule to the clause stipulates that all residential, industrial and commercial subdivision within the Shire of Hepburn is subject to 5% of the value of land intended to be developed for residential purposes.
As the lot is subject to a residential Net Developable Area of 2ha, a total of 0.1ha is required to be contributed to Council, or the value of land to 0.1ha.
Our client would like to negotiate with Council to provide this contribution as cash contribution at statement of compliance. This contribution will be dealt with as a condition to any planning permit issued.

Responses to - Clause 56 Assessment
Page 16. Discusses the public space provision objections

[redacted]

[redacted]

Reason(s) for the submission/objection -

We object to -

Removal of vegetation,
Partial demolition of buildings in a heritage overlay,
Creation and alteration of access to a road in a Transport Zone 2, and associated works

And most importantly partial demolition of the town we love.

Planning is a dispassionate science. We have learned that. Whilst Council is seeking the best for the community and this is often complex, mixed with many pros and cons, it does appear to be impotent in the face of poor design and exploitation of planning rules backed by cashed-up developers. It has been made clear to us by various councillors that Hebpurn Shire does not have the financial resources to take on these developers.

And so do we all lay down and let this happen? Do we?

I have worked in comms all my life. I know graphic designers who make these pictures, knowing they are lying. They make it up. They are paid to paint a lie - to make it as pretty and green as possible. That's just to sell the dream. It’s not REAL. It has nothing to do with reality.

Raglan St will never look like this. It will just be an ugly housing estate, and maybe, if we are lucky, in a few generations it will look half as good as this.

[redacted]

But, if this is what the developer is selling, if he is sincere, then a condition of the permit must be to plant mature established trees as in the picture.

If this is what you are selling then build it.

If he refuses then the alternative is to destroy heritage buildings and old vegetation in one of the most picturesque parts of the area and replace it with a concrete urban jungle with eaves side by side and little to NO design quality - and certainly nothing to complement the soul of what Daylesford really is.

Have we come to this?

We know there is a desperate need for affordable accommodation in Daylesford. Developing long-term rental opportunities is a crucial policy for the region.

This development satisfies none of those needs.
I am sure it is argued or presented as such but it is clearly not the case given the prices they are asking in Smith St.

Surely we have not become so uncivilised in Daylesford that we open the doors to commercial exploitation whatever the cost. Time after time after time the greatest beauty of our world, our towns and our communities is ripped apart because planning is dispassionate and Councils are ill prepared and money is to be made.

This Saturday morning we bought coffees at Cliffy's. It was a freezing 10am. Raglan St was jam packed with cars. There were tourists everywhere. In the space of 10 minutes we saw a dozen tourist parties taking photos of Raglan St.

Let's forget that.

Why? Because an outsider sees a profit opportunity.

Maybe we have become so uncivilised. Or at least so uncivil.

We know this is a passionate plea. And we think Daylesford desperately needs development to address its pressing issues. But surely not at the expense of the town itself.

Ugly development, and be assured this is ugly, should not be allowed.

Planning laws don't consider 'ugly', but those of us who love this town do.

And hopefully that includes those of you working for and on the Council.

Many thanks

[redacted]

bí buíoch díot gach lá

[redacted]

[redacted]

Reason(s) for the submission/objection - [redacted] The Body Corp of the properties in Rosella Lane. We have discussed this new development at our recent AGM and request the following for consideration.

* For all new developments **bordering on the back of properties at Rosella Lane**, we request that proposed buildings are kept at **single story only** for the following reasons:-

- We have concerns for double story dwellings impacting our privacy.
- We have concerns that double story dwellings may have an impact on the light entering our properties.
- Some Rosella Lane properties have solar panels installed, and owners are concerned two story dwellings could prevent the maximum efficiency of the panels.

* We request that any trees planted at the back of the new developments on our fence line, are kept to a **minimum height of 3 metres** for the following reasons:-

- We are concerned about large trees shedding leaves on our properties.
- We are concerned that large trees may impact the amount of sunshine on our solar panels.
- We are concerned that large tree roots may impact on the infrastructure of our properties.

We trust our concerns are taken into account when this planning submission is discussed, and believe that our rationale for submitting these considerations are fair and equitable.

[redacted]

[redacted]

[redacted]

Reason(s) for the submission/objection -
Good afternoon,

We wish to raise objections for the multi-lot subdivision, removal of vegetation, partial demolition of buildings in a heritage overlay, creation of alteration of access to a road in a Transport Zone 2, and associated works for 9 Raglan Street Daylesford.

The details of our objections are as follows:

1. Stormwater: the developer is required to build a stormwater plan which takes into consideration the stormwater and overflow of the neighbouring properties. We refer to page 134 of the planning permit application. We are the adjoining landowner which is referred to in the statement *"There is also on overland flow path required in the southwest catchment to allow stormwater to flow to the basins across private land. If an agreement cannot be reached with the adjoining landowner, then the southwest catchment will need to provide a separate treatment and detention system."* To date no proposal has been presented to us in which we have, or would, agree to. One potential plan was presented with no further follow-up from the developer, we stated the "potential plan" was not acceptable. To date we have heard nothing back. On page 135 the proposed overland flow path shown has been advised to the developer this is not acceptable to us and we do not agree to this. No alternatives were presented to us. This proposed overflow path would remove significant sqm of usable land from our property to which the developer has provided no alternative for us to consider.

2. Vegetation: I specifically refer to tree 8. From the images on page 192, you are able to identify that this tree is a shared tree on our property border in which our side fence runs around. I refer to page 182 of the planning permit application in which this tree is identified as being a *"mature specimen provides significant canopy cover and is a dominant tree in the landscape and should be retained."* We do not support nor approve the removal of this tree. This is a home to multiple wildlife, including native animals. This tree is healthy, is in good condition and there is no need to remove this.

Further to the above objections, as we are the only property which borders on the developer's two developments (17 Smith St and 9 Raglan St) we would expect that we would be consulted regarding how these developments would impact our property, our stormwater, our vegetation, our fences and the liveability of our property. To date, we have met the developer once with little to no follow up of our concerns raised nor their request to place an easement across the width and down the fenceline of our property.

We thank you for reviewing and considering our objections.

Regards,

[redacted]

Dear planners,

Please accept this objection to **PA003530** in the hope it will help facilitate a better outcome for 9 Raglan st, and thus Daylesford.

Firstly I'd like to express my disappointment with the developers who had the chance to do a lot better on this permit after having heard community concerns throughout the 17 Smith st permit appeal. Objectors drew attention to the failing of that permit (PA 2503) to comply with our Planning Scheme to protect the character of our town. And this one does no better.

Poor permit application
It might have been easier to accept this application if it were more respectful of what we value. As is it's incomplete, riddled with errors and false claims and at times even confuses the addresses of the site. Reading it does not inspire confidence and using phrases like it only "seriously entertained" the recent Planning Scheme Amendment hardly shows a commitment to providing the high standards of compliance needed to ensure our precious character is not lost.

Questionable claims
On page 9, three questionable claims are made to justify subdividing the land. These may be acceptable within development and planning circles, they are not to locals.

They claim the **PA003530**

1. *Ensures efficient and compatible use of currently vacant land*

2. *Provides improved access and safety to residents within the Middleton Field estate*

3. *Provides much needed residential stock to the township, within the township*

boundaries

1. The land is not vacant

To describe the land as "*vacant"* is simply wrong. It is not vacant. It has rich soil, green grass, a weathered home and character filled old trees. Elements that are very present. This land is full of history, of memories of stories and meaning. It is a portal to another time. It is loved by many who have, over generations, etched it into their sense of place. It has significance, the red roofed farmhouse settled in its bones, trusty hills hoist and lemon tree by its side. It is a comforting sight along with the lone figure of the old mulberry tree rooted to the earth mid-landscape, moulded over the years by the harsh easterly winds. It's the lone battler surviving the elements. Just seeing it there, shaped by time and the wind makes me peaceful. It reminds me that we are all elemental and can survive the onslaught of bigger forces. Disturbing it seems sacrilegious.

It is hard to accept that there are those who don't see or feel the richness of something as simple as a tree, an old house and a hills hoist, washing blowing in the wind. It saddens me they will plough on regardless telling themselves there is nothing of meaning or value to see here, as to them the land is "vacant".

There is definitely something in this story that is vacant and it is not the land.

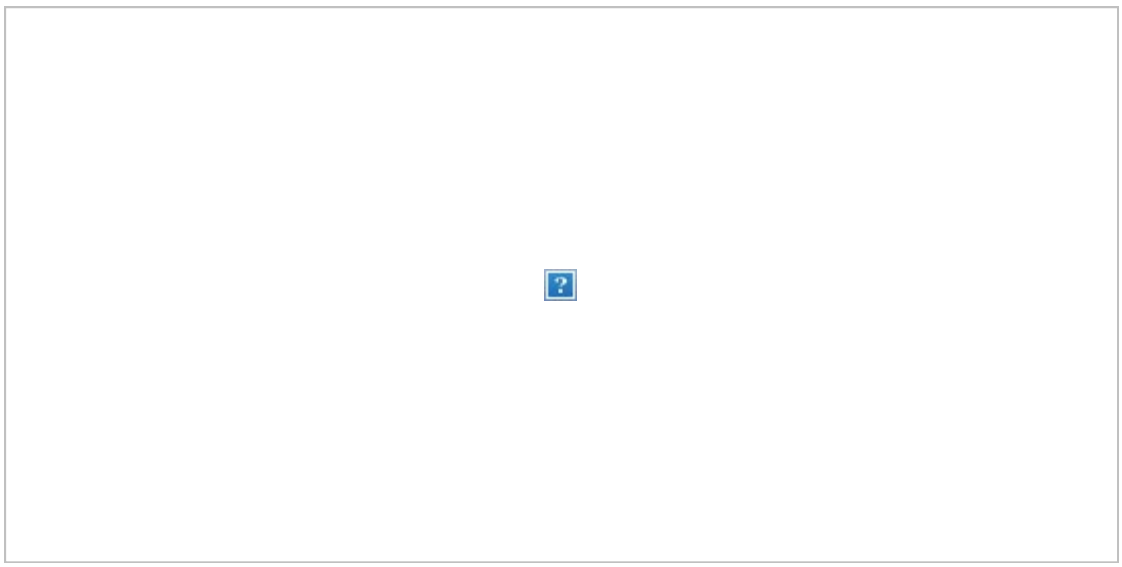


Photo 1: A portal to another dimension: local artist Alison Parkinson was inspired to paint this very landscape. Mulberry tree front & centre.

2. Safety

To claim the permit will provide "*improved safety*" for the future residents of #17 Smith street implies they are not safe enough without #9 Raglan being subdivided. If this is the case, that permit should not have been granted.

Interestingly when locals had raised concerns around the safety of the 17 Smith st permit

we were dismissed.

3. Housing needs: myth not fact & the demise of character

The third point is somewhat of an urban myth that should be nipped here in the bud. To claim the subdivision will "*Provide much needed residential stock"* is simply incorrect. What is *'much needed*' is not 1.6 million dollar homes for ex-Melbournites. (Realestate.com lot 107/17 Smith st) Creating a new suburb and market for Melbournians to move here to 'enjoy the Daylesford lifestyle' all the while destroying a beautiful part of Daylesford's rural and historic character and water catchment is not what is *'much needed*'. To claim as such is presumptuous. . While more houses may be built, at these prices it is unlikely they are *'much needed'* atall. One could argue they are superfluous. And creating a new market, drawing in a new population, not addressing the needs of those who currently live here Gentrification is never good for low income earners, of which we have many.

What is *'much needed'* however is homes of a price range and type these locals can afford. Many locals earn well below the poverty line, yet have lived quite happily here for decades. Low rent has enabled artists and musicians to concentrate on their art and music, , single parents to concentrate on being present while raising their kids and has filled the town with interesting characters not obsessed with just earning money. The town was home to many alternative folk who thrived outside of a mainstream economy. Small farmers could produce quality food and manage their properties within supportive neighbourhoods undisturbed by tramping tourists. All this is changing with gentrification. Such folk are being essentially driven out as land prices and tensions rise. How is adding fuel to the fire "*much needed"?* The irony of killing the very thing trying to be sold is clearly not apparent to all.

Daylesford also has a high percentage of run down houses and 'part-time' houses- airbnb's and holiday homes. What is needed for these to be freed up again for permanent residence. Council could facilitate the return of these homes to the permanent rental market by a change in policy from the single-minded pursuit of tourism.

Any new development claiming to *'provide much needed residential stock*' needs to be somehow bound to actually creating the kind of homes that are actually needed. Without this, prices will likely continue in the same vein as the new 17 Smith st site which advertised one of it's first home and land packages at a very unaffordable $1.64 million. Council could direct developers to partner with housing providers and to include a 50% allocation to actual affordable homes. This sort of commitment would need to be clearly included in any permit conditions to prevent the debacle that was the 17 Smith st application.* (see Appendix 1) For a minute there it looked like viable living spaces for a vulnerable group were to eventuate in the form of an eco-village. But as profit and greed took precedence this group is now ousted.

So, for developers who are radically changing the nature of the town's rural quirky

character by building expensive houses over prime fertile soil in an important catchment, while disregarding historical landscapes and ruining our very character, to claim they are somehow providing a service that is *'much needed'* is simply absurd.

Disturbing the Peace & Disrupting Neighbourhood Amenity

A major concern with mass development is the impact of heavy ongoing construction on current residents who border new developments. Noisy construction starting at 7am (as is happening at 17 Smith st) is incredibly disruptive to people already living there. . Country life is sought for its peace and quiet, yet constant construction noise, backyard fences being removed and digging trenches for pipelines is incredibly disturbing. Where is the consideration did the people's homing needs ? Will council help protect the mental health and well-being of those disrupted by mass development? Will council negotiate for later construction starting times or advocate for compensation for the disturbance of residential amenity and the loss of peaceful enjoyment of homes ? Does council, as the Responsible Authority acknowledge the emotional strain these big developments place on the people who already live in the neighbourhood? Some I doubt it even though it is duty bound to do so.

Is there a need?

There are hundreds of new housing lots being created in Daylesford and surrounds at the moment. Yet according to the Central Highlands Regional Growth Plan we are not a designated growth town, with a unique character, minimal public transport and meagre services. Our services and infrastructure are stretched. We are a country farming town built on an important water catchment with fertile soil. It is paramount we protect this and not allow development to compromise our integrity.

Our Council Vision reflects this sentiment, now is the chance to deliver on it's promise

Thankyou

Photo 2: 9 Raglan st shrouded in magical winter mists.

*__Appendix 1:__

In the case of the 17 Smith st application, a group of elderly women (WinC) wanted to buy land within the subdivision for the purposes of creating an eco-village. They collaborated with the developer to have the application taken out of VCAT on the basis it was to facilitate their affordable housing. No contracts were in place though. Their interest was taken as if they were an applicant in the permit application. Which they weren't. The permit was mistakenly treated by the Ministerial Committee as if it were housing for vulnerable women. Which it wasn't. One could say it went into the minister under false pretences. And now after the minister granted the permit, the women are no longer in the picture as no agreement on land price was reached. It seemed they were conveniently used as a means to get the permit accepted while not being party to the permit atall.

Objection to PA003530

To whom it may concern

I write to object to **PA003530** primarily on the grounds it **lacks character and contains no open space.**
Daylesford is attractive for it's gorgeous heritage village feel. This is perfectly encapsulated in the very site of 9 Raglan st that the developers want to turn into suburbia. What a lovely vista this site is. It warms the hearts of many who live near it or drive by every day. It's like one of the last bastions of the farming and mining town era that are being eroded daily. How sad this is. This ruination of our character alone should be enough to deny the permit. That and the fact there is little demand for such uninspired estates in this town.

Urban planning standards are not suitable for our small country village which prides itself on its historic rural character. This permit and the surrounding ones will
increase residential density to radically effect neighbourhood amenity and character. To those that live here there is no doubt these developments are intrusive and unwelcome. They lead to increased

- Illumination
- Noise pollution
- Air pollution
- Traffic
- Stress on services
- Stress on roads
- Stress on water quality and supply
- Stress on fire fighting capacity

I object to the nature and layout of the subdivision, cutting conservative rectangles into a beautiful historic landscape. Death by boredom.
Where is the playground for quality of life for kids ?

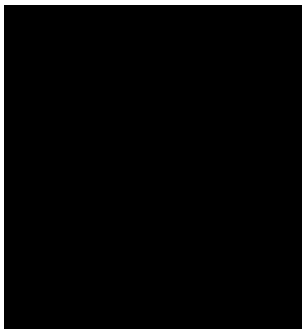
Parkland
To meet planning scheme requirements of heathy neighbourhoods, open space parkland must be within 400m of homes. The application disregards this claiming proximity to Botanical Gardens. The Gardens however are well over this distance away and are largely inaccessible by foot or pram. Instead of accepting the of cash contribution council must insist that parkland and a play area be provided in the new precinct.

Improvements sought

- Parks & play grounds needed
- Water way maintained
- open space along water way
- Swales & blue stone not concrete
- Low lighting
- Percentage affordable / social
- Ample Garden space
- Naming rights to First Nations People

- 50 % Affordable homes
- Variety of house types (incl units)
- Variety of tree types (not uniform)

Thankyou for your help in retaining what's left of Daylesford's character



Objection to permit applications:
PLN220263
PA003530
PLN 22/017

Dear Council,

I object to these applications as they stand, and recommend ways to bring them into alignment with the values of our rural town.

But firstly, when assessing permits our council must look at a range of factors and ask:

Do we actually need so many new houses, are they relevant to our population & can the town infrastructure & services cope?

- more houses does not guarantee affordability. (Please see report by local economist Karl Fitzgerald. He disproved the myth that housing supply trickles down into affordability.)

https://www.prosper.org.au/wp-content/uploads/2022/07/Staged-Releases-Prosper-Australia-web22.pdf

- with total subdivisions now in play to be serviced by Daylesford, we are looking at a potential population increase of 20%, I can't see how you prepared for the increased pressure on services and infrastructure.

Is Daylesford and are these sites suitable for such over/infill development?

1. the Central Highlands Growth Plan (2014) cites Daylesford is **not a growth area**
2. the town is of **high bush fire risk**
3. has **minimal public transport**
4. is popular due to its **distinctive historic and rural nature**
5. is in an **important water catchment** and recharge zone
6. has **extremely fertile soil** in a diminishing food bowl
7. has a **high ageing population**
8. has a **high low income** earning population
9. has **poor housing affordability**

If council, the developer and their architects mean what they say when they
- acknowledge dja dja Wurrung country,
- claim to want to protect the unique features of Daylesford's rural historic nature,
- talk of 'sustainable' planning and design,

then there are changes they could make to the permit applications to ensure they respect these intentions which add value to the town rather than detract from it.

Recommended changes all permits (general)

1. Consider the natural drainage pattern and preserve all drainage lines
    a. prevent building over them

   b. design around them all & enable natural above ground flow
   c. revegetate with location appropriate native plants
2. Insist upon 5% total area as actual open space, and not cash contribution
3. Require 10-20% homes actually affordable for low income residents.(define affordable)
4. Ensure minimal 35% garden cover
5. Provide wider roads, with footpaths on both sides
6. Use permeable materials for roadways, sidewalks, and driveways that allow water to infiltrate the soil and reduce runoff.
7. Incorporate swales and landscaping to encourage infiltration
8. Avoid concrete kerbs to promote passive irrigation off roads
9. Streetscape Water Sensitive Urban Designs in flatter areas to capture first flush
10. Construct rain gardens and bioswales in open space & areas of the development to capture and filter pollutants, reducing the amount of water that flows downstream.

Recommended changes to developer's "design/lifestyle guidelines"

1. Support rural life in design /lifestyle guidelines eg contrary to current developer guidelines, choose to allow visibility of garden sheds, water tanks, machinery, trailers caravans etc atm their design guidelines are very citicentric
2. Daylesford has cold winters and frequent power blackouts, so unsuitable for sole dependence on electricity.
3. Preserve visual amenity by minimising roof glare & incorporating dimmed solar powered street lighting (rather than blinding LED)
4. Retain acoustic amenity by encouraging quiet slow gardening
5. Encourage and educate environmentally friendly methods of gardening to reduce toxins in runoff water & protect waterways
6. Choose reclaimed wood seating over uncomfortable concrete which is both too hot and too cold.
7. Incorporate Electromagnetic Radiation (EMR) protection in home design

Recommended changes to specific permits:

1.PLN 220263: 31 townhouses in 17 Smith st (ecovillage)

1. Require maximum parking spaces as per Planning Scheme dictates (ie deny waiver request)
2. Provide enough parking in eco villages for visitors, carers & delivery vans, developers cannot assume, as they have, that owners will ride bikes as Daylesford is too hilly, wet & cold & full of elders.
3. Provide onsite parking for smaller social houses
4. Provide for single story homes for the ageing & infirm who find stairs challenging
5. Provide for alternatives to electric for heating due to Daylesford's cold climate and frequent power outages
6. Allow fenced yards for dogs

2. PLN22/017: 4719 Midland Highway

1. Investigate location of historic Defiance Tunnel and avoid building over

2. Design away from flood zones, determine where watertable is
3. Provide another exit road into Midland highway, ½ way between suggested and roundabout as too densely populated posing risk in a fire
4. Create wider verges at Wombat Park border for vegetated buffer between farm land & residential zone. Farmers have the legal right to shoot domestic dogs if they trespass onto farmland. Protection buffers needed between incompatible land uses to prevent tension.
5. To protect cedars, prevent further subdivision of large blocks and ensure build is away from permissible bushfire removal zones.
6. Encourage multiple occupancy for tiny homes, (not air bnns) on larger lots
7. Encourage Community Land Trust ownership of larger lots

3. PA003530: 9 Raglan st

1. Preserve historic house as potential community centre / milk bar
2. Redesign street layout so as to not build on the northern drainage line. (leading into 17&29 Smith st)
3. Redesign layout so as to front homes to landscaped featured drainage line walkway on 4719 midland hwy

Suggested Developer Contributions

1. Consult djarra people on naming of streets
2. Make a contribution for a new fire truck & station as the increase in population resulting from these developments will not be adequately serviced by current fire fighting vehicles
3. Make a contribution to wildlife shelters due to displacement of the resident kangaroo mob.

In addition I request a councillor briefing session
1. for the whole development now referred to as 'Middleton Fields' Master Plan

2. where the format be more interactive with
a) more than 3 minutes to speak,
b) possibility to question planners, councillors and developers

And a general request

3. that prior to land being zoned for non-agricultural purposes, hydrological and soil quality assessments must be conducted to determine suitability of land for development

Thank you for helping keep Daylesford special for this and future generations.

Sincerely

[redacted]

View from Midland Highway : precious fertile red soil being covered in bitumen on17 Smith st.

[redacted]

15 August 2022

Planning Department
Hepburn Shire Council
shire@hepburn.vic.gov.au

Objection to Application PA003530

Dear Planners

I object to application **PA003530.**

I am most unhappy to see rich farm soil be built over. In a time of rapidly depleting quality farm land we must appreciate what we have and reassess our zoning. Daylesford has a responsibility to protect its fertile soil and mineral waters which are fed through this catchment. The land may be zoned for housing but that does not mean every square inch should be covered. The land is better left for food production with minimal housing footprint. Houses can be built on less fertile soil that is not in a catchment area.

Just because a permit can be granted doesn't mean it should be. This is a planning motto I hear. In these changing times, as we have become more aware of the environmental impact of our actions and the finite capacity of our resources, we need to revisit decisions that were made in ignorance. I refer to the mistaken zoning of all the land in this catchment at the headway of a river system.

Please reconsider the zoning and if this is not possible do not allow houses to be built along the beginnings of a water system.

In hope.

Yours sincerely

[redacted]

Attn.: Hepburn Shire Council Planning dept.

Objection to PA003530

NATURAL FEATURES
- The permit does not have proper regard for the landscape's natural features and vistas
- Site contains prime food growing soil too good for building upon
- Seasonal water movement makes the north eastern section unsuitable for construction.
- Inadequate stormwater treatment will compromise groundwater and downstream flows.
- High attention to environmentally friendly drainage design needs to be paid.

HERITAGE CHARACTER
- This site is a prized feature of historic Daylesford with an old building and mature trees
- It is in a heritage overlay protected precinct.
- Modern development will irreversibly damage this existing and preferred heritage character of Daylesford.

NEIGHBOURHOOD CHARACTER
- The existing farmhouse is key to the area's character and history and has more cultural value than the intended characterless generic new housing estate.
  - if should be restored and retained as reference to the site's past
- The mature lemon tree and the old mulberry tree need be retained as part of the original character of the property.
- Permit design is not reflective of existing neighbourhood character
- Better consideration is needed in the siting & spacing of houses to help retain important rural character.
- wide roads & verges are a feature of local character so need to be mimicked in the subdivision

OPEN SPACE NEEDED
- Given the enormity of this whole estate, which in time could include some of 4719 Midland hwy, open space must be provided to service the new population.
- Council should not accept the cash payment option rather comply with Planning Scheme requirements and require adequate accessible parkland be provided
- Open space could also be provided along the existing water and wildlife corridor that runs north through all developments.

Thankyou for accepting my submission
Regards,

[redacted]

OBJECTION to PA003530, application to subdivide 9 Raglan st

Dear planning department,

Adding together the many new & intended developments, there will be easily a 20% * increase in population serviced by Daylesford

PA003530 intends to add another 22 lots to Daylesford. The issue for me is whether or not Daylesford's infrastructure and emergency services can cope with even more subdivisions as there are already so many.

Questions for council:

1. Does council know how many new households are expected to be serviced by Daylesford with all new subdivisions currently in play?

- Answer: approx 250 (see footnote 1.)

2. How will council ensure adequate services & infrastructure with all the infill development?

    - Do we have enough fire fighting capacity? (Answer : "no ", to quote local firefighter)

    - How will sufficient water be available to service homes?

        - water demand will increase

        - the application only caters for partial provision of water via rainwater tanks

    - Can our old clay sewage pipes cope as they are already so often being repaired?

3. Is council aware of who the target market is for this new precinct ? (Answer: "the 'overflow of Melbourne millennials" to quote one of 17 Smith st architects)

4. How will council ensure new homes are financially accessible to the average person?

   - ○ Is council insisting on a percentage of lots to be "affordable" housing

   - ○ Is council working with local advocates of afffordable housing like "Safe Place" to ensure low income housing needs are met within new developments?

   - ○ Will a variety of housing types be catered for as is needed by locals? (communal living, tiny houses, single bedroom units)

5. Daylesford Is a village with a small population of only approx 2400, with only one post office, one small library & one firetruck that services Daylesford proper. How will council ensure these services cope with a 20% increase in population without both endangering people and radically changing the town's character and amenity?

Planning Scheme requirements stipulate that granting of permits is contingent upon infrastructure and services being adequate to support the population generated. Council has a duty of care to carefully consider the costs and benefits of so many such large

developments in the town, and it needs to be clear about who bears the costs and who actually benefits.

Thankyou for looking at the big picture and ensuring the overload of new houses and incoming population isn't at the cost of social welfare the very things that make Daylesford special.

Kind Regards

[redacted]

Footnote 1:

New developments in & around Daylesford: (rough figures)

40 Smith.....29 lots
32 Jamieson....2
39 Jamieson....7

43 Jamieson...17

17 Smith....53/68

29 Smith.....5

9 Raglan.....22

4719 Midland..60*

Coomoora.....7

Glenlyon.....26

Glenlyon .....4 ———————

= 247 subdivision residences
ie around 494 new people (estimating @2 person/ households...
(excluding kids)

So let's say roughly another 500 people
That is an approx **20% increase in population using Daylesford's infrastructure & services**

*anticipated estimate
**excluding other permit applications of which there are many

[redacted]

Pln PA003530 9 Raglan Street, Daylesford

As a resident of Hepburn Shire I have points to raise about this proposed development.

Many points are concerning the fact that the area is an important recharge zone, replenishing our groundwater at the headwaters of the Loddon River. The land is very fertile and highly absorbant soil in an important catchment.
A major oversight in the application is that these features have not even been acknowledged and there is no mention of where the water table is.

I would like to offer some of these points to councillors and planners who hopefully can care about the situation to ensure they are taken into consideration in order to safe-guard these things towards the best outcome.

If there is sewerage seepage (which the developers do acknowledge) how will this work with a very high water table for half the year? Where has the water table been incorporated into the design, or addressed.

There are no swales and landscaping to encourage infiltration or landscaping to capture first flush.

Plus pesticides and herbicides need particular attention in this situation of building in a water recharge area. They need to be prohibited from the catchment and why is this not addressed at this planning stage.

If the developers want to work with the topography as they state there should be no building over seasonal overland flows of water heading into a waterway.
In addition they should not be building house lots on the eastern slope of 17 Smith Street.

Where is the concern for the magnificent heritage agricultural views out over this land which give Daylesford much of its intrinsic open country character.

While the placement of the road from the Midland Hwy to 4719 MIdland Hwy is better to be removed from Raglan St, there is the fact that where it is now proposed will be going into a waterway/drainage line.

It appears on the plan that there is no verge allowance wide enough for the required buffer plantings with neighbouring Wombat Park on the west east road from 9 Raglan Street to 4719 - a planning scheme requirement when resIdential area borders farmland.

270 sq m open space area has been added to align with natural drainage lines. Planning regulations, require developers to provide 5% value of land. 5% of this 2 ha site is 1000 sq m which makes it short by 730 sq m.

Other issues missing are the much needed affordable housing allocation, the 20% council has talked of.

Lastly the density of the development already is a concern and what stipulations can be put in place to restrict even further subdivision taking place.

It would be appreciated if there would be a briefing session for the whole master plan, or for each development. And if this could be of a format with opportunity to ask questions to planners and councillors.
Thank you.

Reason(s) for the submission/objection -

HERITAGE PRECINCT
Consideration to the impact on the heritage reputation of Daylesford.
This site is the second development of potentially three development sites (29 Smith St & corner Wombat Park) which will dominate the east entry to Daylesford.

NEIGHBOURHOOD CHARACTER
The existing house should be restored and retained as reference to the properties past. The fact the owners have ignored reports to reinstate the roofing iron and protect the building is indicative of disgraceful and disrespectful practices.
The existing house is part of the areas character and history and assists in avoiding the monochrome blandness of a new housing 'Estate'.
Consideration to the siting of houses, spacing between dwellings to be increased. Space between buildings providing glimpses of surroundinglandscape is a key component of township character.
The layout and form of the area forms it's character - single street with houses (22) either side of similiar sizes is not reflective of neighbouring precincts.
Proper consideration should be applied to the exisiting landscape's natural features and vistas.

STREETSCAPE CHARACTER
The lot sizes, house footprints (under 50%), landscaping, road width with wide nature strips & vegetation need to be reflective of the precincts on the north & west side of Wombat Hill, which include larger lots, wider streets and mature trees.
Consideration of the retenion of the existing fruit trees which represent the original character of the property.

PROVISION OF OPEN SPACE
The interconnectivity of 9 Raglan Street with the 29 Smith Street development and the future development of the tip of Wombat Park, should exclude the option of a 5% cash payment in favour of the provision of sizeable open public space.
The application refers to the development as an 'Estate', and as such should incude the provision of appropriate services for a large increase in population as the 3 sites effectively form the 1 'Estate'.

TRAFFIC
Is it an irony, the applicant for 29 Smith Street stated one entry/exist point was acceptable.
Yet, this appliction now plays on the need for an additional entry/exit point by linking 29 Smith St to 9 Raglan St.

To Whom It May Concern,

Please be advised that I formally object to permit application 3530 for 9 Raglan Street, Daylesford.

As a permanent resident of the town and a local business owner that relies on tourism, I have deep concerns over the current siting for the construction of a large scale housing estate of this size and density, it is completely inappropriate. Large scale housing estates should not be allowed at such high visibility entry points to a tourist town but sited on less impactful and more appropriately sited land.

Further, the full impacts of the whole of the proposed Middleton Fields Housing Estate are being underplayed by rolling out a staged development that staggers and attempts to minimise the impacts when if addressed as a whole are considerable, particularly, but not limited to, as they relate to road traffic management.

I have major concerns that an outside Planning consultant is being used, once that is arms length from Council and community accountability.

The following is a list of some of my concerns with proposed permit application.

1 Hepburn Shire C80hepb Planning Scheme Amendment
2 Inappropriate siting for large scale housing estate
3 Heritage Overlay - Lots 501, 517, 522
4 Bush Prone Area (BPA) l BAL Requirements
5 Traffic Management

Yours sincerely

[redacted]

Hepburn Shire Council
Planning Department
PA003530

This submission includes references in addition, to PA003529, 29 Smith Street Street, Daylesford, and to PLN22/0176 - On the corner of Raglan Street and 4719 Midland Highway.

2 September 2022

To the Mayor, Councillors, CEO and Planners

Objection to the planning application for 9 Raglan Street. Application number PA003530.

This land although largely flat, also includes a part of the eastern facing slope with **the groundwater recharge area of Spring Creek.** The land consists of deep red topsoil.

Headwaters of Spring Creek - a stream without a watercourse reserve

Spring Creek continues to the Hepburn Springs **mineral water precinct**.
To be at the headwaters is a privilege, and residents require Hepburn Shire Council and planners who make up the responsible authority, to please protect this precious resource from unsuitable development, **with the stormwater drainage to be right on top** of **part of the source** of the Loddon River system. Spring Creek is one of the tributaries of the Loddon, which flows all the way north through Victoria.

Already the Hepburn Pool further downstream is all muddied up from what is happening at the massive development just getting started next door at 17 Smith Street by the same developer.
The developers put nice words and charts in about how they will stop such. But we all know that this is not likely or maybe not even possible, even if they manage to get their boxes ticked, it won't be monitored and would be too late. The earth is very deep in the area, the topsoil being some of the best farmland in the Shire, if not the State and is absolutely unsuitable as a housing area. There is, alternatively, so much poor soil with virtually no topsoil over the clay, and this is where housing should allocated to - sturdy underfoot and not robbing us into the future of our rare and sort after food producing land; food security which we will need as the climate emergency increases.

T**he water table is so high** at the bottom of this **eastern facing slope** that the water runs above ground, over the land, for half the year.
Building and developing on a **groundwater recharge area** is against the Hepburn Planning Scheme in numerous clauses and this land **is unsuitable to receive multi-housing stormwater** for reasons mentioned above.

……..

Protect Significant Views and Vistas

In addition to the water issue, there is a **significant view corridor** facing exactly to the eastern slope which includes part of 9 Raglan St, 17 Smith Street, all of the proposed 29 Smith Street PA003529 subdivision, plus includes looking across the country at the corner of 4719 Midland Highway and Raglan Street - that being PLN22/0176.

The open areas on the town's boundary contribute to important views, as well as the heritage amenity of Daylesford. As mentioned earlier in my submission regarding 29 Smith Street, Daylesford, this particular exceptional view is identified with one of the red arrows for such on the Planning Scheme Map for Daylesford.

The red arrow on the map is from just north of the roundabout at the eastern entrance to Daylesford - from where a visitor comes towards town to Raglan Street and looks out to the magnificent country setting of the town. These red arrows indicate: ***"Protect Significant Views and Vistas"*.**

Dense subdivisions proposed here at the edge of Daylesford would be in full view of this important rural entrance to the town from the north and east which is designated to be protected in the Planning Scheme.

The early farmers of this excellent farmland surrounding the northeast entrance to Daylesford and in much of the east of Hepburn Shire, had foresight in their planning, and in their planting of the now mature and exceptional European and indigenous trees placed well for shading and shelter, and the visual significance of what our forebears created requires protection into the future.

Below is a photo taken from near the corner of 4719 Midland Hwy and Raglan Street - looking northwest, the same as the red arrow on the map, towards this view of the eastern slope which should not be built on. At the bottom of the slope in the dip, is the stream and water recharge area, and the area many residents suggest to be suitable for a walkway. The view of this slope includes the two manna gums of 17 Smith Street proposed to be cut down by the developer. On the left can be seen the back (northeast) corner of 9 Raglan Street. In the foreground is 4719 Midland Highway, PLN22/0176. On the right is the 29 Smith Street subdivision site with trees and bushes also proposed to be unnecessarily removed by the developer in order to squeeze in more houses.

Strategic Planning

The strategic planning is slated to be done for two years now, and the community has made it very clear through all the consultation, for this to be already in the Council budgeting as of last year. But as has been many residents' concern, the strategic planning has not happened fast enough if we are to save this **heritage entrance to Daylesford**, and developers are able to take advantage of the situation… calling it, as in one industry conference, "Central Victoria - too good to be true".

Even though these proposed subdivisions are technically within the town boundary, a proposal can be made that when attention is given in the strategic planning, the town boundary should better be placed around where the existing houses are, and not rope in paddocks which are actually part of the rural parkland agricultural entrance to the town. Even if this would make the town boundary not be a straight line. We need to protect our countryside.

This land in question at 9 Raglan Street, has a Heritage Overlay, and this setting is important as to why Daylesford is so enjoyed for visitors from Melbourne and beyond - that is, due to its farming heritage, its cultural heritage. Being part of Daylesford's heritage, this whole area should not be put into suburban style residential housing.

The heritage view must be preserved and we expect our Council Planners to observe the interests of Daylesford, as well as be guided by the objectives of the Planning Scheme, which is in line with what the community has expressed in the Community Vision and Sustainable Hepburn consultation undertaken. It would be **further insult and problem** to residents of Daylesford, many of whom put much effort into keeping development reasonable and fitting for a country town, to override the above. Any development in this area should not be like an urban development that would add further **detriment to the tourism industry and put so much strain on existing services**. How are those services to possibly cope?

The eastern half of the Shire is promoted by the government as one of the top tourist areas of the state. It's the distant views, and the setting of the towns, the mineral springs, the beautiful wooded landscape, and the high biodiversity it supports.

*Hepburn Planning Scheme, Clause 12.05: "**Maintain significant landscapes and views for the important contribution they make to the local and regional tourism economy."***

If we are serious about Hepburn Shire retaining its unique environment, and if we want to support the Shire's hospitality industry and its quality food production which is a growing economy in this region especially for young people to have the opportunity going forward that this offers, this heritage area cannot be turned into housing. This part of the Shire is among the most magnificent heritage views of this type in Victoria.
This view should be preserved!
We know that lawyers, businessmen, hired 'experts' and developers will find ways around rulings so there do need to be legal instruments of serious strength, those

being schedules to back up the Planning Scheme clauses.

Until the Daylesford town boundaries are considered, and the strategic planning is attended to, **all development should be on hold** in this area of contention.
At the very least if the zoning was for Rural Living, or Low Density Residential, then the land could be utilised for larger lots enabling small scale farming, vegetable and food production, orchards, with small and affordable houses that don't consume the whole area of the land.
These could constitute a bridge between the town on one side, and the Farming Zone on the other side. And would not result in such undue pressure on the **groundwater recharge area** or **the aquifer,** nor on **stretched town services.**

The kind of zoning where the developer does not make unaffordable urban houses packed in tight, on top farming land, those being **houses which are unable to meet the current shortage of affordable housing** in Daylesford:
"Low Density Residential which is set aside for development on lots of 0.4 to 2 ha. to reform rural zones to support further agricultural activities,"
according to government planning.

In my opinion the cultural landscape values of this parkland associated with historical farming system practices, and its high environmental value as a recharge zone, **require it to be documented and protected long term** for the benefit of all residents and visitors alike.
Agriculture is the main economy of Hepburn Shire; secondly is that of **tourism**, the backbone of which is based on '**if we continue to protect the land from development first'**.

Initiate a study into a development control over this land

In addition Daylesford, and Hepburn Springs, are high risk bushfire areas. What is council doing to limit new suburban development in Daylesford as per up-to-date State policy which requires this, as well as existing policy within Hepburn Shire's own Planning Scheme?

We can't put new residential development into high bushfire danger areas, catchments, water recharge areas, or important agricultural areas or in the significant view corridors, nor carry on destroying significant agricultural heritage like the old trees and hedges being removed for development.

These are issues Planning Panels Victoria has said should be done as a matter of urgency in the Planning Scheme review that constituted Amendment C80Hepb.

The opportunity should be taken NOW, to protect the entrances to the towns, in particular the magnificent historical farming landscape seen bordering the town when looking across towards Daylesford.

I hope a **study into a development control over this land** could be made to restrict subdivision and that this could be documented into the Planning Scheme **as an effective control**.

……

Walkway

A **low impact public walkway** following along the creek area leading north, would be an excellent asset for Hepburn Shire residents and visitors, and would constitute a real achievement for Hepburn Council.
While much of the Spring Creek system is on public land, most of this upper Spring Creek area is private land - a stream ***without a watercourse reserve.***

A **walkway through to Hepburn Springs** would be enormously popular, passing along the eastern boundary line of 9 Raglan Street, 17 Smith Street and 29 Smith Street, heading north towards Hepburn Reservoir, and potentially passing through bushland further north to Hepburn Springs where some tracks already exist and could be integrated into this walkway.

The following is from a study report from some 20 years ago:
UPPER SPRING CREEK RESTORATION PROJECT
MANAGEMENT PLAN
Daylesford Regional Landcare Group - July 2001
http://daylesford.net.au/landcare/proj/page16.htm
Community access, amenity and education
"While much of the Spring Creek system is on public land, most of the project area is private land without a watercourse reserve."

The upper section of this area with its diversity of vegetation and history of planting and water works along the creek has spectacular amenity and environmental education values which provide an opportunity for an interpretive trail along the gully.

"…this potential should be recognised by the community for this part of the creek especially for potential partnership with the adjacent schools for an integrated environmental studies program."

Many would feel better in the community if there was some pay back for all of the proposed development upheaval, if at least **this corridor would be respected and opened up**.

In addition, such a **public walkway** could relieve some of the road congestion that occurs on Sundays at the popular Sunday market as people would be able **to walk to the market** and enjoy such exceptional countryside as the heritage farmland views offer.

Public open space, green spaces, are a requirement, and a park-like walkway would cater well for that necessity.

……

Recommended items as follows:

Please make a public open walkway reserve in this area starting from 9 Raglan Street.
Utilise the waterlogged area for a public walkway, not for houses.
Council should not accept payment in lieu of this Victorian government Planning requirement of open spaces for developments.

Please initiate a study into a development control over this land.
One doubts if council is really realistic to be allowing potentially as many as a hundred new houses in Daylesford, considering services, close proximity to bushfire prone land, lack of public transport, minimal health services, traffic congestion and potential sewerage challenges.
Government recommendations are for development to not take place in such areas.

No trees should be given permission to be removed. They are helping with the drainage, the beauty, the heritage, the biodiversity, the climate.

No building on the aquifer, water recharge area, headwaters of Spring Creek, or ephemeral stream (as sometimes referred to).

Preserve this drainage area for the natural flow as currently, with no stormwater containing the **many toxins as stormwater is known to** consist of, that comes from housing.

Affordable two bedroom houses must be accounted for, with space around for productive vegetable gardens.

No permit be issued to subdivide this land at 9 Raglan Street in the way proposed.
The lots to be of different sizes with many affordable homes catered for, and no houses on waterlogged earth.

If our Planning Scheme and Community Vision is not followed we are ruining what makes Daylesford more and more unique in this day and age. Daylesford is stated as an area for "Contain Growth" in *Central Highlands of Victoria Regional Planning in Clause 11.01-1R Settlement - Central Highlands*
Adding this many new houses does not in anyway align with this Victorian Planning ruling.
……

I ask the Hepburn Shire Planning Department to hold off on the permits of 29 Smith St, 9 Raglan Street, and 4719 Midland Highway, **until the proposed Strategic Planning work is undertaken**, in fairness to residents of Daylesford.

In that way the community consultation undertaken for the Community Vision objectives and Sustainable Hepburn objectives, would be shown to be observed. In addition, objectives of the Hepburn Planning Scheme would be correctly observed as well, and not be just nice words. Long term profit is more important for a region than short term gain for a few.

I hope this is in agreement with our Shire Planners and Hepburn officers and

Councillors.

[redacted]

Dear Councillors,

I begin this letter with a quote from Joni Mitchell, songwriter and nature lover; "Don't it always seem to go that you don't know what you got til it's gone, they paved paradise and put up a parking lot", (or in this case housing estate). Once YOU destroy it, it's gone for good. We cannot reclaim that which is claimed by a selfish few.

As an owner/occupier of a Raglan street property in Daylesford for the last 16 years, I implore you to look beyond your own (relatively) short tenure as councillors, and take note of the long term impact your short term decisions are having upon our environment. Daylesford is unique in its charm and character because of the environment in which it is set. Caroline Springs is a man-made cookie cutter estate, already out-dated and degraded. There are so many estates like these popping up around our area- from Caroline Springs to Miner's Rest. Daylesford stands only to lose by adding cheap, out of character housing to its environment. Consider the tourism industry in suburban housing estates… nobody wishes to visit such suburbs for their intrinsic charm and historical value because they have none! And yet, this is what you are turning our town into; a soulless suburbia. History will reflect the buffoonery of council's decision when in 20 years' time these estates are cancers upon our beautiful town.

Please, please, I implore you to reconsider the decision to allow financial avarice to reign. The integrity of our town, in all its beauty and charm is either reflected by, or destroyed by the council elected to represent it. Please don't be a cookie cutter council. Step outside and smell the fresh air, take in the sweeping views of the country side, and reflect back what you see in your planning decisions. Don't destroy Daylesford. Take the strength required to be a part of positivity, rather than a shotgun progression toward destruction. Consider, what right do you as an individual have to destroy what is ultimately not yours for longevity?

[redacted]

[redacted]

Planning Dept Hepburn

PA 3530

9 Raglan Street Daylesford

I submit the following as an objection to the proposed subdivision of 9 Raglan Street Daylesford.

I object to the removal/demolition of the dwelling. The current owners removed the roofing iron last November in the hope that the building would rot away, and therefore be suitable only for demolition. With countless reports to Council, nothing was done. This is negligent. That dwelling should be retained and restored.

I object to the proposition that the heritage overlay on Raglan Street, be disregarded for this housing estate. The developer uses the word ESTATE to describe what is to become a monolith of a suburb within our gorgeous town. That is surely why a heritage overlay exists.

Change in land use. From vacant land of pastures for grazing, to all hard surfaces on these sites - roads, roofs and suburban little gutters will not deal with the deluge of rain renown in Daylesford. I think the developer (as we predicted) has had a battle to stop their diggings from creating an avalanche of mud on 17 Smith which is the site they are currently developing.

Interestingly the developer's application claims by developing 9 Raglan it increases the safety of those living at #17 which is a fascinating claim given such safety issues were raised by many and dismissed for the application at #17.

At a glance the developers have 3 claims of rationale for subdivision that can be easily refuted.

"1. Ensures efficient and compatible use of currently vacant land " - Daylesford is in the country, not the suburbs of a city;

"2. Provides improved access and safety to residents within the Middleton Field estate" - this ridicules the VCAT process and those Planners who determined that there were no safety concerns in the 17 Smith St application;

"3. Provides much needed residential stock to the township, within the township boundary" - what the town actually needs is affordable housing, and none of these lots will be 'affordable'.

It's no good looking at this in broken bits. Put it together:

17 Smith St I
29 Smith St I__ All these subdivisions = approx 30 acres. That's hundreds of

houses. There's no blending or merging that.
9 Raglan St I
Wombat Park corner I

This proposed suburban housing subdivision is at the entrance to town. The aesthetic character appeal of which Daylesford is famous, will be lost forever. Planners who implement rules and regulations have no ability in the scope of their brief to implement any design principles - indeed there is not one single designer in the whole Shire of Hepburn employed to consider design or the way a town might look and feel for future generations.

Daylesford is the tourist jewel in the crown for Regional Victoria. Council and Planners should do all in their powers to protect this precious town.

[redacted]

8 March 2023

Dear Council,

Please accept this document as a formal objection to the below:

PLN220263,
PA003530,
PLN 22/017

In relation to

29 Smith St
17 Smith St
9 Raglan St
4719 Midland Highway

WATER PURITY

- My primary objection is the environmental unsuitability of this site for development, due to the zoning & failings of Planning Scheme to provide critical protection to water quality.

- While the western tract of 17 Smith St is arguably more suitable for housing, the eastern portion extending through 9 Raglan & into 4719 Midland are not.

- This high-quality fertile soil is very porous, and an important catchment where the water table is high & has an important recharge function.

- The overland natural drainage lines are origin tributaries to the Loddon River. It needs protection not development. Yet, zoning has been predetermined, any development must have environmental protection standards enacted.

A main issue is the threat to water purity.

- Can Council make determinations on Stormwater Management when it does not employ a hydrologist or water engineer?

In the instance of the 17 Smith St application, the community of objectors were advised by a water engineer who analysed the developer's submitted Stormwater Strategy. He found it inadequate and lacking on many counts, nonetheless council had granted the permit. Experts were ignored.

Many more questions arise from this:

- How will Council enact Stormwater Management to protect the pristine purity of our water & waterways?
- Show the community that you have adjusted the developer's submitted plans to deal with and acknowledge the depth of the water table.
- Can you, as the responsible authority, assess merit of submitted Stormwater Management Report from an Integrated Water Management perspective, without an experienced water engineer?
- How can you ensure best practices of Integrated Water Management (IWM) is incorporated in the subdivision & consequent designs, as the application does not include the required Planning Scheme Landscaping Report?

RECOMMENDATION

1. Hire a water engineer as consultant in the project, who is experienced in IWM matters.
2. Document the high-water table in plans after first identifying it via website "Visualising Victoria's Groundwater " https://www.vvg.org.au
3. Demand the Landscaping plans be submitted as Planning Scheme requires, prior to application being granted, which has community viewing.

These are serious concerns and I am sure we all share the common desire to protect what is precious about Daylesford – I will be outlining my objections at a councillor briefing session.

Many thanks for your consideration.

Kind regards,

Sunday March 5th 2023

Dear Hepburn Shire Council,

I am writing to express my strong objection to the proposed planning permits **PLN220263, PA003530, PLN 22/017**.

As a resident of Smith Street, I am deeply concerned about the impact that these developments will have on the peaceful enjoyment of my property and those of my neighbors and wider community.

Furthermore, I have observed that the developers have repeatedly disregarded no standing zones on Smith Street, putting the safety of school children, bus drivers, and parents at risk. The developers have also shown blatant disregard for laws concerning noise and dust pollution, and the council has been unable to police their belligerent behavior. This has had and continues to have a serious impact on my heath and wellbeing and the health and wellbeing of my child and that of my neghbours.

If these proposals are allowed to move forward, our community stands the risk of being taken advantage of by uncaring developers who say all the right things but whose actions speak louder than their words.

In addition to these concerns, the proposed development does not fit with the character of our town and is not compliant with important aspects of our planning scheme. Daylesford is not a designated growth town due to its location in bushfire-prone forest, and the scale proposed for this development is not suited to the town. Further, there is no substantial public transport network to support such growth.

Thank you for your attention to this matter

Sincerely

[redacted]

Reason(s) for the submission/objection - I would like to object to the this planning application for the following reasons:

1. **Character**. The plans as submitted have building sites abutting Raglan Street and I believe this will downgrade the appearance of Daylesford for anyone approaching from the Eastern approaches to Daylesford. The appearance could be improved by the use of a green wedge along Raglan street; most likely by reducing the number of building sites. This could also be an opportunity for the developer to include a playground area into the development.

2. **Traffic**.
a. Anyone who has attempted to exit Smith Street at school drop-off and pick-up times knows that the time to exit onto Raglan St is greatly increased. By including this development into the overall plan the number of vehicles using Smith St will be greatly increased. The alternative to utilising Smith St to rejoin Raglan St then the only option is Hospital St which will most likely direct traffic past the Hospital and Medical Centre; the street is already congested along the medical precinct as it is. If traffic does not proceed down Hospital St then the Alternative is Jamieson St which presents its own challenges for vehicles rejoining Raglan St / Midland Highway.

b. 9 Raglan St traffic exiting onto Raglan Street. The proposed development simply proposes an uncontrolled entry exit onto Raglan St. Because of the issues highlighted above in exiting from Smith St it is likely residents (and other community members conducting school drop-off and pick-ups) will attempt to use this exit to rejoin Raglan St; this will not only be at the expense of residents but will move traffic congestion to this point of Raglan St.

Regards,

[redacted]

11 A RESILIENT AND SUSTAINABLE ENVIRONMENT

11.1 SOLAR SAVERS 2022/2023 - INTENTION TO DECLARE A SPECIAL RATES CHARGE

ACTING DIRECTOR INFRASTRUCTURE AND DELIVERY

In providing this advice to Council as the Sustainability Officer, I Manny Pasqualini have no interests to disclose in this report.

ATTACHMENTS

1. CONFIDENTIAL REDACTED - Declaration of a Special Charge Scheme for Solar Savers Program - 18 Apr [**11.1.1** - 10 pages]

EXECUTIVE SUMMARY

Council is making solar power more accessible to low-income households through the Solar Savers program. The program was first delivered in Hepburn in 2018, and 2022/2023 is the fifth round offered to eligible residents. Solar Savers enables households to install solar photovoltaic systems (solar PV) and pay them off through a special charge scheme over 8 years.

This report recommends Council initiate the declaration of a Special Charge Scheme under Section 163 of the *Local Government Act 1989* for the purposes of defraying expenses relating to the provision of solar energy systems on residential properties participating in the Solar Savers scheme. It is noted that provisions for declaring a Special Charge Scheme were not updated in the Local Government Act 2020.

The 15 residential properties listed in the attachment of this report have nominated to participate in the proposed scheme and have signed an agreement based on the quoted cost of the provision of a solar energy system at their property.

Council allocated $100,000 in the 2022/2023 budget to deliver the program. The total cost of the works is calculated at $85,672.48 GST exclusive, of which property owners will contribute the entirety over an 8-year period. The total cost of the program including the project management fee is $98,672.48 ex-GST.

OFFICER'S RECOMMENDATION

That Council:

1. *Agrees to proceed with the list of applicants to the Solar Savers program;*

2. *Gives notice of its intention to declare a special charge to the affected properties in accordance with Section 163 of the Local Government Act 1989, for implementation of the Solar Savers program.*

BACKGROUND

The program was first delivered in Hepburn Shire in 2018, and 2022/2023 is the fifth round offered to eligible residents. Solar Savers is amongst the first programs in

Australia enabling households to install solar photovoltaic systems (solar PV) and pay them off through a special charge scheme over 8 years. Council has committed through its Council Plan (2021-2025) and other programs that it supports, to not only reduce greenhouse gas emissions, but to support those most vulnerable to climate change impacts and increasing energy costs. This project is specifically aimed at pensioner households, who are more vulnerable to increasing energy costs. Over the four previous rounds, 86 solar systems have been installed for pensioner and health care card holders' properties in Hepburn Shire. Total greenhouse gas savings of approximately 650 tCO2e/year has been achieved through the Solar Savers program to date, as well as energy bill savings and improvements to residents' comfort and health.

Solar photovoltaic technology (solar PV) provides a wide range of community benefits including:

- Reduction in household energy bills
- Future-proofing against increasing costs of electricity
- Increasing the value of the home
- Reduction in household carbon footprint

In addition, the community benefits of the Solar Savers program are:

- Addresses the cost barrier of solar - Council pay the up-front costs which households gradually repay at no interest, making solar more affordable.
- Targets more vulnerable households, specifically pension card holders who may have a low income and experience energy bill stress.
- Solar Savers complete an energy bill assessment for the household to advise if solar will be a good financial option, and ensure they will not be out-of-pocket during the loan period.
- Solar Savers have independently evaluated and selected a trusted and accredited installer, to ensure the systems installed are of good quality and workmanship.
- Increased take-up of renewable energy increases the sustainability of the community.

The program was promoted to households in receipt of the rebate on their rate payments. To ensure that participating homes were aware of and agreed to the quoted system, price and the proposed special charge scheme, an agreement between Council and participants was developed (Householder Agreement available upon request). This agreement has been signed by the owner of each of the 15 households included in the proposed special charge scheme.

Solar energy systems of 3.3kW - 6.6kW were available through the program and have been sized to maximise the financial benefits to participating households. It is estimated that the average participating household will save $100 above their rate repayments in electricity bills over the first year based on current electricity pricing.

After 8 years households are expected to save in the order of $400 - $500 per year on electricity bills (although this will vary from household to household).

KEY ISSUES

Under Section 163 of the *Local Government Act 1989* (Act), Council is empowered to declare a special charge for the purposes of defraying any expenses in relation to the performance of a function or the exercise of a power of Council, if Council considers that the performance of the function or the exercise of the power is, or will be, of special benefit to the persons required to pay the special rate or special charge.

It should be noted that this was not changed with the updated *Local Government Act 2020*. Section 163 of the *Local Government Act 1989* is still current.

The installation of solar energy systems on properties, as part of the Solar Savers scheme, arises out of Council's functions of advocating and promoting proposals which are in the best interests of the community and ensuring the peace, order and good government of Council's municipal district and promotes the social, economic and environmental viability and sustainability of the municipal district. Each participating property has signed a Householder Agreement with Council to participate in the scheme, which includes the overall cost and rate repayments which would be paid by the property should the scheme be approved.

In September 2004, the Minister for Local Government issued a guideline for the preparation of special charge schemes, which remains current. The guideline specifically deals with the calculation of the maximum total amount that a council may levy as a special charge.

The guideline requires that Council identify the following:

a. Purpose of the works

b. Ensure coherence

c. Calculate total cost

d. Identify special beneficiaries

e. Determine the properties to include

f. Estimate total special benefits

g. Estimate community benefits

h. Calculate the benefit ratio

i. Calculate the maximum total levy

Full detail on the requirements and obligations of Section 163 of the *Local Government Act 1989* (Act) can be found in attachment - Proposed Special Charge Scheme for Solar Savers Program February 2023.

This attachment includes the following Appendices:

- Appendix A - Apportionment of costs
- Appendix B - Letter to households of intention to declare a special rates charge

POLICY AND STATUTORY IMPLICATIONS

Council Plan 2021-2025

A resilient, sustainable and protected environment
1.1 Adapt to and mitigate climate change to reach net-zero community emissions by 2030.

Environmental Sustainability

This project is consistent with Council Plan 2021-2025. The adopted project aims include to:

- Assist low-income households to save money, reduce emissions and stay cool in heatwaves
- Build capability and capacity within Victorian councils to use special rates charges to provide a stable underpinning finance model
- Catalyse private sector investment within a community sector traditionally viewed as high risk to investors
- Capture economies of scale and implementation efficiencies through a shared service delivery model
- Address market failures restricting low income and vulnerable households from installing solar systems

Human Rights, Equity and Inclusion

Council has committed through its Council Plan 2021-2025 not only to reduce emissions, but to support those most vulnerable to climate change impacts and increasing energy costs. This project was specifically aimed at pensioner households, who are more vulnerable to increasing energy costs.

Economic Development

It is estimated that the average participating household will save $100 above their rate repayments in electricity bills over the first year based on current electricity pricing. After 8 years households can save $400 - $500 per year. This represents potential funds that can be spent within the Hepburn Shire community rather than on utility bills.

The program has been undertaken with the Solar Savers project, a program delivered by Eastern Alliance for Greenhouse Action. On a longer-term basis this program has the potential to be rolled out Australia-wide creating many more solar installation opportunities for the solar industry, resulting in greater demand/jobs for that industry.

GOVERNANCE ISSUES

The implications of this report have been assessed in accordance with the requirements of the Victorian Charter of Human Rights and Responsibilities.

SUSTAINABILITY IMPLICATIONS

This project is consistent with Council Plan 2021-2025 and delivers strong environmental, financial, and social sustainability outcomes as described earlier in this report.

FINANCIAL IMPLICATIONS

Council allocated $100,000 for the project in the 2022/2023 annual budget to enable the Solar Savers project to install solar energy systems on homes receiving pensioner rate rebates through the establishment of a special charge scheme. The total program budget of $100,000 includes a $13,000 program management fee paid to the Solar Savers delivery team. The total cost of the program including the project management fee is $98,854.30 ex-GST.

Through an open tender process led by Procurement Australia and Solar Savers, Macedon Ranges Solar Power was appointed to provide quotes and supply and install the solar energy systems.

Should the proposed special charge scheme proceed, Council will pay $85,672.48 ex-GST for the supply and installation of the solar PV systems on the properties listed.

In accordance with their respective Householder Agreements, property owners will pay for the cost of the solar energy system by equal installments apportioned over an 8-year period, commencing from 31 October 2023.

Payments to Council by property owners for works via special charge schemes are GST exempt.

RISK IMPLICATIONS

As with any rates-based payment to Council, there is a risk that repayments of the Solar Savers special rates charge is not paid by a particular household. To minimise this risk, the program aims to reduce the cost of electricity to each household through the provision of a solar system. The entirety of the loan is effectively becomes a charge on the property and can be recovered in full when the property is sold.

COMMUNITY AND STAKEHOLDER ENGAGEMENT

The program was promoted to targeted households in receipt of the rebate on their rate payments.

Home visits have been provided to 27 homes to provide quotations for the Solar Savers program. The 15 participating households have all signed agreements to participate in the program based on quoted prices.

12 A HEALTHY, SUPPORTED, AND EMPOWERED COMMUNITY

12.1 CEO ANNUAL REPORT TO COUNCIL ON THE ACTIVITIES AND PERFORMANCE OF COMMUNITY ASSET COMMITTEES

CHIEF EXECUTIVE OFFICER

In providing this advice to Council as the Coordinator Governance, I Dannielle Kraak have no interests to disclose in this report.

ATTACHMENTS

1. CONFIDENTIAL REDACTED - Annual Report - Creswick Museum Community Asset Committee [**12.1.1** - 1 page]
2. CONFIDENTIAL REDACTED - Annual Report - Dean Recreation Reserve Community Asset Committee [**12.1.2** - 1 page]
3. CONFIDENTIAL REDACTED - Annual Report - Drummond Hall Community Asset Committee [**12.1.3** - 2 pages]
4. CONFIDENTIAL REDACTED - Annual Report - Glenlyon Recreation Reserve Community Asset Committee [**12.1.4** - 1 page]
5. CONFIDENTIAL REDACTED - Annual Report - Lee Medlyn Home of Bottles Community Asset Committee [**12.1.5** - 1 page]
6. CONFIDENTIAL REDACTED - Annual Report - Lyonville Hall Community Asset Committee [**12.1.6** - 1 page]

EXECUTIVE SUMMARY

Under the *Local Government Act 2020*, the CEO is required to submit a report to Council each year on the activities and performance of Community Asset Committees (CACs). This report covers the period from September 2021 to August 2022.

OFFICER'S RECOMMENDATION

That Council:

1. *receives and notes the report on the operations of Council's Community Asset Committees (CACs) as required in line with obligations set out in Local Government Act 2020; and*
2. *Thanks Committee members for their contribution throughout the year.*

BACKGROUND

A community asset committee is a committee established by Council, with members appointed by the CEO, for the purposes of managing a community asset in a municipal district (s65(2)).

Council has six Community Asset Committees:

- Creswick Museum Community Asset Committee
- Dean Recreation Reserve and Tennis Courts Community Asset Committee

- Drummond Hall and Tennis Courts Community Asset Committee
- Glenlyon Recreation Reserve Community Asset Committee
- Lee Medlyn Home of Bottle Community Asset Committee
- Lyonville Recreation Reserve Community Asset Committee

Under the *Local Government Act 2020*, the CEO is required to submit a report to Council each year on the activities and performance of Community Asset Committees.

Each committee has provided an Annual Report, attached.

Input has also been provided from officers who have engaged with committees during the reporting period.

KEY ISSUES

This report covers the September 2021 to August 2022 period.

Creswick Museum Community Asset Committee

Purpose of the Committee

The Committee has operational oversight of the Creswick Museum, the former Infant Welfare Centre, Cambridge Street, Creswick and the Museum Collection including, but not limited to, the following:

- Dr. E.J. Semmens Collection
- Lindsay Family Collection
- T.G. Moyle Collection
- W. Tibbits Collection
- Victor Litherland Collection
- Creswick Council Chamber Collection
- H.H. Pearce Collection
- Sir Alexander and Lady Peacock Collection
- H. Burkitt Collection
- The New Australasian No. 2 Mine Disaster Collection
- Alexander T Evans Collection
- Jean Baker Collection, and
- Heather Lay Collection.
- (being collections held in trust for Creswick & District residents)

The Committee also manages opening the museum to the public, undertakes research on request, manages inventory of the collection and acquisition of the new items for the collection, and arranging loan of items from other collections to make them available to the Hepburn Shire community. The Committee manages a group of volunteers who staff the Museum and support the work of the Committee.

Governance

The Committee was first established in 1997 as a Special Committee of Council under the *Local Government Act 1989*. The current Instrument of Delegation was authorised by the CEO on 28 February 2021 after the Committee was established under the *Local Government Act 2020.*

The Committee is required to have at least seven voting members under their Instrument of Delegation, with a current membership of six. The Committee is diligent in operating in line with the terms of their Instrument and regularly files minutes and financial returns as required.

The Committee has approximately $45,000 in cash reserves.

Relevant Plans and Strategies

Future development of the Arts and Culture Strategy.

Maintenance and Activities

A project to conserve the heritage to pay respect to the past and preserve our future commenced in October 2022 at Creswick Town Hall. An aim was to restore the buildings fabric in line with recommendations made in consultation with Heritage Victoria. Concern with water ingress through flagpole area are being addressed as raised by the Committee.

The Facilities Department assisted with removal of curtains and putting in place a security door due to renovations taking place.

The COVID-19 pandemic continued to impact the Committee and operation of the Museum which has also impacted visitor numbers.

Dean Recreation Reserve Community Asset Committee

Purpose of Committee

The Committee has operational oversight of the Dean Recreation Reserve and Tennis Courts including the soccer pitches, pavilion, toilet block and storage shed, Tennis Courts, shelter and fencing.

Governance

The Committee was first established in 1997 as a Special Committee of Council under the *Local Government Act 1989*. The current Instrument of Delegation was authorised by the CEO on 21 September 2020 after the Committee was established under the *Local Government Act 2020*.

The Committee is required to have at least five voting members under their Instrument of Delegation, with a current membership of six. There are a number of members listed in the Committee minutes who have not been appointed by Council.

Officers have reminded the Committee of the requirement to have all members formally appointed, and are working with the Committee to rectify this.

The Committee is currently meeting quarterly, and has filed minutes for their meetings over the last 12 months.

The Committee has approximately $14,000 in cash reserves.

Relevant Plans and Strategies

- Recreation Management Model Project

Maintenance and Activities

The two major events that were held by the committee—the Kite Festival and Sheepdog Trials—were a great success, and both were very well attended.

The money raised by the committee's raffles has been donated to the organisation 'Cops n Kids', who help children with cancer and other life-threatening illnesses by providing a fun camp experience in a safe and enjoyable environment.

Completed by Council in conjunction with the Committee:

- Fascia and eave replacement
- New door between men's toilet and main building
- Preparation and repaint of exterior of Reserve Building and Ladies toilets
- Update of key and padlocks to the Council restricted bi-lock system
- Re-instatement of power to lighting on the Oval which included new underground supply to each of the power poles, and
- Replacement of fencing within tennis court area due to extreme weather.

The Sport and Active Recreation Team has engaged with the Committee with respect to:

- Infrastructure development opportunities
- Club/Committee development opportunities, and
- As key stakeholders in Council's sport and active recreation planning projects that either have relevance specific to the CAC and/or facility users and/or invited to be conduits to their local community to help inform other Shire-wide planning projects.

Drummond Hall and Tennis Courts Community Asset Committee

Purpose of Committee

The Committee has operational oversight of the Drummond Hall consisting of Drummond Hall, including timber building, brick toilet block and tennis courts.

Governance

The Committee was first established in 1997 as a Special Committee of Council when it was established under the *Local Government Act 1989*. The current Instrument of Delegation was authorised by the CEO on 21 September 2020 after the Committee was established under the *Local Government Act 2020*.

The Committee is required to have at least five voting members under their Instrument of Delegation, with a current membership of six. The Committee has struggled to attract and retain members in recent years.

The Committee is diligent in operating in line with the terms of their Instrument and regularly files minutes and financial returns as required.

The Committee has approximately $2,800 in cash reserves.

Relevant Plans and Strategies

- Recreation Management Model Project

Maintenance and Activities

The downturn in bookings following the pandemic has continued, making the ongoing financial position challenging. In 2021, the Committee was able to reinstate their regular coffee newspaper chat, working bees and an annual Christmas BBQ, which have all been well attended.

In addition, the Committee regularly runs events to support and engage the Drummond community including movie nights, produce swaps, and casserole nights.

Tennis Court repairs and proposed new court lighting have been scoped to inform the consideration of future funding opportunities for delivery.

The Sport and Active Recreation Team has engaged with the Committee on:

- Infrastructure development opportunities
- Club/Committee development opportunities, and
- As key stakeholders in Council's sport and active recreation planning projects that either have relevance specific to the CAC and/or facility users and/or invited to be conduits to their local community to help inform other Shire-wide planning projects.

Glenlyon Recreation Reserve Community Asset Committee

Purpose of Committee

The Committee has operational oversight of the Glenlyon Recreation Reserve.

Governance

The Committee was first established in 1997 as a Special Committee of Council when established under the *Local Government Act 1989*. The current Instrument of Delegation was authorised by the CEO on 21 September 2020 after the Committee was established under the *Local Government Act 2020*.

The Committee is required to have at least five voting members under their Instrument of Delegation, with a current membership of 11.

The Committee regularly files minutes and financial returns as required.

The Committee has approximately $20,000 in cash reserves.

The committee received a donation from the Glenlyon Sports Club which was distributed to the Pony Club, the Adult Riding Group and to the committee itself. Upgrades and maintenance took place on the grounds, including the installation of new fencing and the eradication of invasive gorse and blackberry shrubs.

Relevant Plans and Strategies

- Glenlyon Recreation Reserve Masterplan (in progress)

Maintenance and Activities

The Committee is managing several maintenance issues, including:

- Fencing repair
- Replacement of the horse yards, and
- Control of blackberry, thistles and gorse.

Council completed soil contamination investigation at the reserve working with Environmental Protection Agency and Department of Environment, Land Water and Planning (DELWP). Septic pump works in relation to the public conveniences were completed over the Christmas holiday period.

The Sport and Active Recreation Team has engaged with the CAC on:

- Infrastructure development opportunities
- Club/Committee development opportunities, and
- As key stakeholders in Council's sport and active recreation planning projects that either have relevance specific to the CAC and/or facility users such as the Glenlyon Recreation Reserve Masterplan development and/or invited to be conduits to their local community to help inform Shire-wide planning such as the Hepburn Shire Aquatics Strategy.

Lee Medlyn Home of Bottles Community Asset Committee

Purpose of Committee

The Committee has operational oversight of the Lee Medlyn Home of Bottles consisting of the Former School Building, Factory and Public Toilet Block at 70 Bailey Street, Clunes and the Lee Medlyn Home of Bottles Collection including, but not limited to, the following:

- Lee Medlyn Bottle Collection
- Eberhard Factory (soft drink display), and
- other collectables and displays currently at the Home of Bottles, and as the committee obtains.

The Committee also manages opening the museum to the public, acquisition of the new items for the collection, and arranging loan of items from other collections to make them available to the Hepburn Shire community.

Governance

The Committee was first established in 1997 as a Special Committee of Council when established under the *Local Government Act 1989*. The current Instrument of Delegation was authorised by the CEO on 21 September 2020 after the Committee was established under the *Local Government Act 2020.*

The Committee is required to have at least seven voting members under their Instrument of Delegation, with a current membership of eight.

The Committee meets monthly and is diligent in operating in line with the terms of their Instrument and regularly files minutes and financial returns as required.

The Committee has approximately $16,000 in cash reserves

Relevant Plans and Strategies

Future development of the Arts and Culture strategy 2023.

Maintenance and Activities

The Committee has undergone a number of renovations and improvements, as have the grounds of the property, including the installation of solar panels and improvements to lightning protection and storm water drainage – the latter two being completed by Council. The committee has also looked at plans for window and roof remediation as well as an accessibility entry upgrade.

During the period the facility has also had completed:

- Installation of a security camera in the Gallery
- Gardening

- Heating for their office space
- Repainting of internal doors
- Construction of a new display area
- Repairs to the roof

New items have also been added to the committee's collection and are available to be viewed by the public.

Lyonville Hall Community Asset Committee

Purpose of Committee

The Committee has operational oversight of the Lyonville Hall consisting of a timber hall, outside toilets and reserve land.

Governance

The Committee was first established in 1997 as a Special Committee of Council when it was established under the *Local Government Act 1989*. The current Instrument of Delegation was authorised by the CEO on 21 September 2020 after the Committee was established under the *Local Government Act 2020.*

The Committee is required to have at least five voting members under their Instrument of Delegation, with a current membership of seven.

The Committee is currently meeting monthly, and has regularly filed minutes and financial statements as required.

The Committee has approximately $66,000 in cash reserves.

Relevant Plans and Strategies

Nil.

Maintenance And Activities

The Hall was impacted by the June 2021 storm event. While the Hall itself was not damaged, the site was without power for several days and many trees were felled or damaged. The electricity connection box was replaced to be able to restore power.

The Hall itself was used regularly for Café de Lyonville, a revenue stream for the committee, which has operated on Sundays, pending COVID restrictions.

As part of their engagement with the community, the Committee asked its volunteers for ideas for projects for the Hall. The projects which grew from those suggestions included:

- Renovation of the toilet block which is not in keeping with the quality of the rest of the hall

- Upgrade the entry to the hall grounds to provide a weather resistant car parking surface and enhanced landscaping of the forecourt area, and
- Construction of the covered area next to the pizza oven once permits and quotes have been finalised.

POLICY AND STATUTORY IMPLICATIONS

Council Plan 2021-2025

A healthy, supported, and empowered community
2.2 Increase the availability and accessibility of services in the Hepburn Shire area to support liveability, health, and wellbeing.

A dynamic and responsive Council
5.3 A sustainable and agile organisation with strong corporate governance that supports excellent operations

GOVERNANCE ISSUES

During the preparation of this Annual Report, a number of governance issues were identified, such as:

- Committees not advertising their meetings publicly,
- Committees not providing copies of their minutes to Council, and
- Committee members who have not been appointed by Council.

Officers have contacted the relevant Committees to remind them of their requirements under their Instruments of Delegation and provide guidance on rectifying these issues.

The implications of this report have been assessed in accordance with the requirements of the Victorian Charter of Human Rights and Responsibilities.

SUSTAINABILITY IMPLICATIONS

There are no sustainability implications associated with this report.

FINANCIAL IMPLICATIONS

There are no financial implications associated with this report.

RISK IMPLICATIONS

There are no risk implications associated with this report. Should the CEO not submit this report to Council, there is a risk of a breach of the requirements set out in the *Local Government Act 2020.*

COMMUNITY AND STAKEHOLDER ENGAGEMENT

Engagement has been undertaken with the Council staff regularly working with and supporting Community Asset Committees throughout their functions. As support to

these Committees stretches across many functions within Council, a collaborative approach in the preparation of the report was taken.

The committees are invited to provide a report to Council as well.

13 DIVERSE ECONOMY AND OPPORTUNITY

13.1 CENTRAL HIGHLANDS TOURISM VISITOR ECONOMY PARTNERSHIP – NEW ENTITY CHIEF EXECUTIVE OFFICER

In providing this advice to Council, as the Manager Economic Development and Recreation, I Kendall Sinclair have no interests to disclose in this report.

ATTACHMENTS

- Nil

EXECUTIVE SUMMARY

In 2021, 738 jobs in Hepburn Shire relied on the visitor economy, with an output of $122M making it the largest industry when associated industries are aggregated. (Data source: Remplan 2021). Ensuring that the sector is supported by growing its brand and investing in industry development will be vital for a sustainable and robust visitor economy in Hepburn Shire.

Over the past eight months, an extensive consultation process has taken place in the form of a working group run by an independent facilitator and involving the local government areas of Ballarat, Moorabool, Pyrenees, Hepburn and Golden Plains, Ballarat Regional Tourism, Regional Development Victoria and the Department of Jobs, Skills, Industry and Regions. Council was last briefed on this in November 2022.

In February 2023, City of Ballarat Councillors formally endorsed the formation of a new Visitor Economy Partnership (VEP). Pyrenees, Golden Plains and Moorabool Shire Councils are also endorsed to be part of the partnership.

The establishment of this entity is estimated to commence following ratification by the five participating LGAs and the endorsement by the Department of Jobs, Skills, Industry and Regions, with a view to be fully-functioning by 1 July 2023.

Hepburn Shire Council currently receives excellent value for money as members of Daylesford Macedon Tourism (DMT), which has been key to the rebound of the sector over the past 12-18 months. The opportunity to join a new VEP as well as being a part of DMT provides additional marketing, advocacy and industry development opportunities, particularly in the western part of Hepburn Shire.

The purpose of this report is for Councillors to consider support for Hepburn Shire Council joining the new Visitor Economy Partnership for Ballarat and the surrounding regions. This will consist of Ballarat, Pyrenees, Moorabool and Golden Plains (south) and cost $15,000 ex GST annual membership fee. It is also proposed that, for the first year, $5,000 ex GST is allocated to participate in marketing and industry development activities conducted by the new entity.

Officers will continue to notify members of the Central Highlands Tourism Work Group and DMT of progress.

OFFICER'S RECOMMENDATION

That Council:

1. *Endorses the new Visitor Economy Partnership at a membership cost of $15,000 ex GST per annum; and*

2. *Includes $20,000 ex GST ($15,000 ex. GST membership fee and $5,000 ex GST for marketing/industry development) in Council's 2023/2024 budget.*

BACKGROUND

In September 2020, the Victorian Government released the Visitor Economy Recovery and Reform Plan (VERRP). This plan was informed by the findings of the Regional Tourism Review, which was commissioned by the Victorian Government in March 2019 to ensure regions get the support and opportunities they need to grow tourism.

In order to align with the objectives of the Plan, an opportunity has been identified to join a collaborative, cross-regional Visitor Economy Partnership for the Central Highlands region which has been led by City of Ballarat.

In May 2022, the Visitor Economy Unit in the State Government (then Department of Jobs, Precinct and Regions) approached Ballarat Council for permission to investigate the potential of a new Visitor Economy Partnership for the wider region.

This was following advice from Tourism, Events and Visitor Economy (TEVE), which is responsible for strengthening the profile of tourism for the Department of Jobs, Skills, Industry and Regions (DJSIR), which made the decision to cease funding the Victorian Goldfields Tourism, in which Ballarat and Bendigo were represented, by June 2022. This was a key outcome of the Visitor Economy Recovery and Reform Plan.

Council was invited to be a part of these discussions and agreed owing to the fact that the western part of the Shire aligns closely with the broader tourism product and market.

Currently, Council is a member of Daylesford Macedon Tourism (DMT). DMT is the peak regional tourism organisation for the State Government-defined tourism region, Daylesford and Macedon Ranges. DMT have been exceptional at promoting the region and providing both advocacy and industry development opportunities for the tourism sector in recent years, indicated by the region's exceptional recovery over the past two years.

Council currently has a Partnership Agreement with DMT (as does Macedon Ranges Shire) that recognises the business relationship that exists between Hepburn Shire Council and DMT. It defines the level of agreed support to be provided to Hepburn Shire Council by DMT, in line with Council strategies and operational objectives. The Agreement sets out in specific and measurable terms, support provided, delivery

roles, activities and responsibilities the duration and administration of the Agreement to support the strategic and operational development of tourism in the region.

The purpose of a Visitor Economy Partnership for the region (as per the Visitor Economy Recovery & Reform Plan) is to:

- Provide strong leadership and links between community, councils, government and industry,
- Advocate for and enable investment from state and local government,
- Support recovery, innovation and growth,
- Position the region as a destination to visit and live,
- Ensure all parties are represented through an elected board with clear remit,
- Ensure services are delivered efficiently, without duplication and with clear roles and responsibilities, and
- Position the region as a best practice example.

Over the past eight months, an extensive consultation process has taken place in the form of a working group run by an independent facilitator and involving the local government areas of Ballarat, Moorabool, Pyrenees, Hepburn and Golden Plains, Ballarat Regional Tourism, Regional Development Victoria and the Department of Jobs, Skills, Industry and Regions.

This group agreed to work towards the formation of a partnership based on the successful model of Tourism Greater Geelong and the Bellarine, which has resulted in a suggested structure for a Visitor Economy Partnership for the region.

This Visitor Economy Partnership requires the formation of an independent entity that is responsible for the supply and demand side of visitor economy, including advocacy, business support, development of visitor economy experiences and products and delivery of marketing activities.

Individual LGAs will retain responsibility for visitor servicing, including the management of Visitor Information Centres for their regions.

City of Ballarat, Pyrenees, Golden Plains and Moorabool Shire Councils are all endorsed to be part of the partnership.

KEY ISSUES

- The new entity will be fiscally supported by annual investment from DJSIR (state government) and membership buy-in from all five LGAs, with the opportunity for industry to contribute via a partnership model. The financial contribution from the Victorian Government is to be confirmed.
- The immediate financial implication for Hepburn Shire Council will be a $15,000 membership contribution.

- Additional Action Plan buy-in for marketing/industry development opportunities at a cost of $5,000.
- The activity of the new entity will be set following the development of a Destination Management Plan (DMP) and annual action plans, and guided by a skills-based board, which includes representation from the five LGA members, five elected industry board members and an observer from the Victorian Government.
- The board will be run by an independent remunerated Chair.
- The new entity will be resourced by the City of Ballarat's Visitor Economy Unit, with additional resources added to the team to support any further work that looking after a broader remit will bring.
- The Executive Director of this new entity will report to the City of Ballarat's Director of Economy, Experience and Commonwealth Games.
- Governance for the entity is outlined in the Statement of Purposes and Rules, agreed to by all members.
- The establishment of this entity is estimated to commence following ratification by the five participating LGAs and the endorsement by DRPSIR, with a view to be fully-functioning by 1 July 2023.
- Hepburn Shire Council will continue to be a member of Daylesford-Macedon Tourism and look to participate in discussions of developing a VEP for the Bendigo region.

POLICY AND STATUTORY IMPLICATIONS

Council Plan 2021-2025

Diverse economy and opportunities
4.3 Support and facilitate a diverse and innovative local economy that encourages an increase of local businesses with diverse offerings to achieve positive social, economic and environmental impacts.

4.3.7 Support local and regional tourism campaigns to support the local offer.

5.1.4 Actively participate in community and government networks and regional alliances.

GOVERNANCE ISSUES

The implications of this report have been assessed in accordance with the requirements of the Victorian Charter of Human Rights and Responsibilities.

SUSTAINABILITY IMPLICATIONS

There are no sustainability implications associated with this report.

FINANCIAL IMPLICATIONS

Becoming a member of the new Visitor Economy Partnership for the Ballarat and Central Highlands region will incur a cost to council of $15,000 ex GST per annum. It is also proposed that, for the first year, $5,000 is allocated to participate in marketing and industry development activities conducted by the new entity.

It is envisaged that the annual membership fee will remain the same or similar in the first four years as the Board establishes itself, however it is important to note that fees will most likely be reviewed and need to be agreed to by the Board over time.

The financial contribution from the Victorian Government towards the new entity is to be confirmed.

RISK IMPLICATIONS

If Council does not agree to become a member of the new Visitor Economy Partnership for the Ballarat and Central Highlands, this has the potential to decrease the opportunity for future tourism/industry development opportunities in the west of Hepburn Shire (Creswick and Clunes), complementing Council's existing arrangement with DMT.

COMMUNITY AND STAKEHOLDER ENGAGEMENT

An industry consultation session was held in late November 2022 with nominated businesses from within each local government area to engage on the proposed structure of the new VEP. Over the past eight months there has been extensive collaboration with state and local governments as part of the project working group and co-design process to develop the new VEP.

Following the Councillor Briefing on 4 April 2023, Officers notified members of the Central Highlands Tourism Work Group and Daylesford Macedon Tourism of this report progressing for consideration at the Ordinary meeting of Council on 18 April 2023.

Officers will notify members of the Central Highlands Tourism Work Group and Daylesford Macedon Tourism of Council's decision following the outcome of the Ordinary meeting of Council to be held on 18 April 2023.

14 A DYNAMIC AND RESPONSIVE COUNCIL

14.1 APPROVAL OF INTERSTATE TRAVEL TO ATTEND THE NATIONAL GENERAL ASSEMBLY OF LOCAL GOVERNMENT 2023

CHIEF EXECUTIVE OFFICER

In providing this advice to Council as the Chief Executive Officer, I Bradley Thomas have no interests to disclose in this report.

ATTACHMENTS

1. Nil

EXECUTIVE SUMMARY

The purpose of this report is for Council to consider the approval of travel arrangements for the Mayor, Cr Brian Hood, and Chief Executive Officer Mr Bradley Thomas to attend the National General Assembly (NGA) of Local Government 2023, and 2023 Australian Council of Local Government (ACLG).

The purpose of the NGA is to build the profile of local government on the national stage and demonstrate to the Australian Government the strength and value of working with local government nationally.

The 2023 ACLG will be held on Friday 16 June 2023 in Canberra, following the Australian Local Government Association's (ALGA) 2023 National General Assembly of Local Government from 13-15 June.

The annual forum will put leaders of local government and the Commonwealth in one room, allowing Ministers to directly hear about the issues impacting the local government sector.

OFFICER'S RECOMMENDATION

That Council:

1. Approves the interstate travel for the Mayor Brian Hood and Chief Executive Officer Mr Bradley Thomas to attend The National General Assembly of Local Government 2023 and 2023 Australian Council of Local Government; and;

2. Notes that the Mayor and the Chief Executive Officer to prepare a report regarding the conference for a future Ordinary Meeting of Council upon their return.

BACKGROUND

The Mayor, Cr Brian Hood, and Chief Executive Officer Mr Bradley Thomas are proposing to travel to Canberra for the National General Assembly.

Under Council's Expenses and Resources Policy 2020, interstate travel by a councillor requires approval from Council.

The majority of Councils will be represented at the event, some by the Mayor and CEO, others have multiple Councillors attending.

The purpose of the NGA and ACLG is to build the profile of local government on the national stage and demonstrate to the Australian Government the strength and value of working with local government nationally.

The theme of the 2023 NGA is *Our Communities, Our Future*.

KEY ISSUES

Council's Notice of Motion

As part of the NGA, debate on motions was introduced as a vehicle for councils from across the nation to canvas ideas, and solutions to the challenges facing Australia's councils and communities. Outcomes of debate on motions (NGA Resolutions) could then be used by participating councils to inform their own policies and priorities, as well as their own advocacy to the Federal Government and Federal MPs.

At the March 2023 Ordinary Meeting, Council also adopted a motion to be considered by the Assembly:

> *"That the National General Assembly supports the 2026 Census topic review being conducted by the Australian Bureau of Statistics and recommends adding the topics of gender, variations of sex characteristics and sexual orientation to help the information collected in the Census remain relevant and strengthen community support for the Census."*

Council considered this essential to ensure the accuracy of Census data and safety of community members. This data would enable minority groups to be acknowledged as part of Australian society, inform policy decisions, promote funding for support services, and underpin further research.

As Council has submitted a motion, there is an expectation that a council representative will be present at the NGA to move and speak to that motion.

Travel information

The following table shows the details of interstate travel undertaken in an official capacity by a Councillor or any member of Council staff for the period.

The total cost to Council includes all the costs of the travel including conference fees, flights, incidentals and accommodation costs.

Officer/Councillor	Cr Brian Hood
Date	12-16 June 2023
Destination	Canberra
Accompanying Staff	Bradley Thomas – Chief Executive Officer

Purpose and Benefits	Council to engage directly with the Federal Government, to develop national policy, and to influence the future direction of our councils and our communities. A networking opportunity with other Local Government agencies. Enable Council to present and respond to questions regarding the Notice of Motion.
Strategic Objectives	A dynamic and responsive Council 5.2 Actively communicate, inform and engage with our Community about events and decision-making 5.3 A sustainable and agile organisation with strong corporate governance that supports excellent operations
Costs	Approximately $8,000 including airfare, airport transfer, accommodation, meals and conference attendance for both the Mayor and CEO.
Funding	Existing Council Budget

POLICY AND STATUTORY IMPLICATIONS

Council Plan 2021-2025

A dynamic and responsive Council
5.3 A sustainable and agile organisation with strong corporate governance that supports excellent operations

Council Expenses and Resources Policy

6.3 Procedure for applying for interstate and international travel

a) Councillors seeking to travel interstate or internationally must first provide a report to the Mayor and CEO outlining their proposal. The report must contain the following elements:

- *State the travel location, reason for travel and period of travel*
- *Provide details of the travel including any external funding*
- *The objectives of the travel together with the potential benefits to the Hepburn Shire Council and its stakeholders*
- *Accompanying staff and their role*
- *Identify the relationship between the proposed travel and the Strategic Objectives in the Council Plan and any other Council policy, strategy or program.*

b) Provide the estimated cost including

- *Airfares, including class of travel, accommodation, fees and other expenses such as day to day incidental costs;*
- *The cost associated with any accompanying Council staff member*
- *A statement confirming that the costs relating to the proposed travel will be met from an existing budget allocation*
- *Contain a recommendation to Council to approve the proposal.*
- *Assessment of each application will be made on the merits of the proposal and the alignment of the request with the Council Plan or other interests of the Hepburn Shire Council.*
- *Councillors seeking to travel internationally must prepare and present a report to an Ordinary Meeting of Council which contains the elements outlined above.*

c) Where the proposal is supported by Council it will be approved and:

- *Nominate the Councillor(s) to undertake the travel*
- *Recommend an amount to cover the travel costs relating to airfare, accommodation, fees, expenses and incidentals*
- *Identify a maximum estimated amount for "incidentals" covering costs not pre-paid by Council*
- *Note that the Councillor/ member of delegated committee will prepare a post travel report within 14 days of their return from approved travel.*

d) Any proposal in relation to overseas travel to be undertaken by the Mayor will follow the same format. During the consideration of any travel proposal relating to the Mayor, the Deputy Mayor or other Councillor will take the Chair.

e) Councillors shall await the decision of the Mayor and CEO for interstate travel, or Council for international travel, which will be evidenced in writing, prior to making any bookings or incurring any costs associated with the proposed travel arrangement.

GOVERNANCE ISSUES

The implications of this report have been assessed in accordance with the requirements of the Victorian Charter of Human Rights and Responsibilities.

SUSTAINABILITY IMPLICATIONS

There are no sustainability implications associated with this report.

FINANCIAL IMPLICATIONS

Council will cover the full cost of travel as there is no external funding available, the estimated costs are $8,000. **Please note these are an estimate of costs for Mayor and CEO, subject to change upon booking confirmation.*

RISK IMPLICATIONS

There are no risk implications associated with this report.

COMMUNITY AND STAKEHOLDER ENGAGEMENT

There are no community or stakeholder engagement implications associated with this report.

15 CONFIDENTIAL ITEMS

15.1 CLOSURE OF MEETING TO MEMBERS OF THE PUBLIC

Pursuant to section 66(1) of the *Local Government Act 2020* (the Act) Council or delegated committee must keep a meeting open to the public unless the Council or delegated committee considers it necessary to close the meeting to the public because a circumstance specified in subsection (2) applies.

The circumstances detailed in section 66(2) of the Act are:

a) the meeting is to consider confidential information; or
b) security reasons; or
c) it is necessary to do so to enable the meeting to proceed in an orderly manner.

RECOMMENDATION

That in accordance with sections 66(1) and 66(2)(a) of the Local Government Act 2020, the meeting to be closed to members of the public for the consideration of the following confidential items:

1.1 CLUNES CARAVAN PARK - NEW LEASE PROPOSAL

This agenda item is confidential information for the purposes of *section 3(1) of the Local Government Act 2020* as:

- *it is Council business information, being information that would prejudice Council's position in commercial negotiations if prematurely released (section 3(1)(a)); and*
- *it is private commercial information, being information provided by a business, commercial or financial undertaking that— (i) relates to trade secrets; or (ii) if released, would unreasonably expose the business, commercial or financial undertaking to disadvantage (section 3(1)(g)).*

16 CLOSE OF MEETING