

## **5.1 T230342 PA - Use of the land for Rural Industry (hemp-based mud brick manufacturing) at 565 Murray Road, Vervale 3814**

**Responsible GM:** Lili Rosic  
**Author:** Dean Haeusler

### **Recommendation**

That Council resolve to issue a Notice of Decision to Grant a Permit for Planning Permit Application T230342 for use of the land for Rural Industry (hemp based mud brick manufacturing) at 565 Murray Road Vervale, subject to the following conditions:

#### **Prior to the use commencing**

1. Prior to the commencement of the use, 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 to form part of the Planning Permit. The plans must be consistent with the plans assessed by Council but modified to show:
  - a. Fourteen (14) car parking spaces designed in accordance with Clause 52.06-9 (Design Standards).
  - b. Plans to satisfy condition 2.
2. Prior to the commencement of the use, an Environmental Management Plan to the satisfaction of the Responsible Authority must be submitted to and approved by the Responsible Authority. The plan must detail:
  - a. Management measures of airborne and/or wastewater emissions generated as a result of the hemp processing and product manufacture.
  - b. Biosecurity measures to be implemented during the operation, including how these will be enforced and how any breaches managed and reported.

When approved, the plans will be endorsed and will then form part of the permit.

3. Before the use commences, all proposed areas set aside on the approved plan/s for access, circulation and car parking must be constructed to the satisfaction of the Responsible Authority. Once constructed, these areas must be maintained to the satisfaction of the Responsible Authority.

#### **General**

4. The use as shown on the endorsed plans must not be altered without the written consent of the Responsible Authority.

#### **Rural Industry**

5. Prior to the commencement of the use, the hemp crop as shown on the endorsed plans must reach harvesting maturity and must be inspected by the Responsible Authority. Photographic evidence must be submitted to meet this condition.
6. The use must only operate in conjunction with the cultivation of hemp on the land as shown on the endorsed plans.
7. The use must utilise hemp grown on the subject site as a primary source of earthen filler for the mud bricks to the satisfaction of the Responsible Authority.

8. All buildings associated with the use must not exceed a combined gross floor area of 500 square metres.
9. The Rural Industry approved under this permit may only operate between the following hours:
  - Monday to Friday: 7:00am – 8:00pm; and
  - Saturday: 7.00am – 1:00pm.
10. Any deliveries to and from the subject site must occur within the approved operating hours.
11. No more than ten (10) employees associated with the use are permitted on-site at any one time.
12. Unless with the written consent of the Responsible Authority, retail sales are not permitted from the subject land.
13. The use and development must not detrimentally affect the amenity of the area, through the:
  - a. Transport of materials, goods or commodities to or from the land;
  - b. Appearance of any building, works or materials;
  - c. Emission of noise, artificial light, vibration, smell, fumes, smoke, vapour, steam, soot, ash, dust, waste water, waste products, grit or oil;
  - d. Presence of vermin.

Or in any other way, to the satisfaction of the Responsible Authority.

14. Any waste material generated from the activity must be removed from the subject land in accordance with the endorsed Environment Management Plan. All vehicles removing waste must have fully secured and contained loads so that no wastes are spilled or dust or odour is created to the satisfaction of the Responsible Authority.

#### Amenity

15. All external plant and equipment must be acoustically treated or placed in soundproof housing to reduce noise to a level at all times satisfactory to the Responsible Authority.
16. External lighting must be designed, baffled and located to the satisfaction of the Responsible Authority to prevent any adverse effect on adjoining land.
17. Noise levels associated with the use must at all times comply with the Environment Protection Regulations under the Environment Protection Act 2017.

#### Expiry:

18. This permit for the use of land expires if—
  - a. the use does not start within **two (2) years** after the issue of the permit; or
  - b. the use is discontinued for a period of **two (2) years**.

In accordance with Section 69 of the *Planning and Environment Act 1987*, an application may be submitted to the Responsible Authority for an extension of the periods referred to in this condition.

AND

That Council authorise the Manager Planning and Design to instruct Council's Statutory Planners and/or Council's Solicitors on any future application for review at the Victorian Civil and Administrative Tribunal.

### Attachments

1. T230342 PA - Site and floor plan [5.1.1 - 2 pages]
2. T230342 PA - Legal advice obtained by applicant [5.1.2 - 8 pages]
3. T230342 PA - Applicant proposal and town planning response [5.1.3 - 13 pages]
4. T230342 PA - Officer Report [5.1.4 - 18 pages]
5. CONFIDENTIAL REDACTED - T230342 PA - Objections [5.1.5 - 11 pages]
6. T230342 PA - Letter response to dust concerns from author of study [5.1.6 - 2 pages]

### Application Details

<b>APPLICATION NO.:</b>	T230342
<b>APPLICANT:</b>	Mr Andrew Little
<b>LAND:</b>	CA 17 SEC N Parish of Koo-Wee-Rup East, 565 Murray Road, Vervale VIC 3814
<b>PROPOSAL:</b>	Use of the land for Rural Industry (hemp-based mud brick manufacturing)
<b>PLANNING CONTROLS:</b>	Special Use Zone – Schedule 1 Land Subject to Inundation Overlay
<b>NOTIFICATION &amp; OBJECTIONS:</b>	The application was put on public notice in accordance with Section 52 of the Planning and Environment Act. Notices were sent to neighbouring properties and signage erected on-site for fourteen (14) days.  Six (6) objections have been received to date.
<b>KEY PLANNING CONSIDERATIONS:</b>	<ul style="list-style-type: none"> <li>• Land use characterisation</li> <li>• Appropriateness of land use</li> <li>• Viability of the horticultural pursuit</li> <li>• Impacts to existing rural activities and properties</li> </ul>
<b>REASON FOR MEETING:</b>	Four or more objections received (six objections).
<b>RECOMMENDATION:</b>	Notice of Decision to Grant a Permit

### Executive Summary

The purpose of this report is to consider Planning Permit application T230342 to use the land for Rural Industry (hemp-based mud brick manufacturing).

The application proposes to use an agricultural building approved under Planning Permit T220398 for the purpose of Rural Industry. Industrial hemp is intended to be grown on the land (an activity that does not require planning permission) that will be processed to form the basis of the bricks to be manufactured. The bricks are formed to a mould that is air dried before the bricks are stored for distribution and use in the building industry.

The relevant Planning Scheme provisions and policy clearly seek to ensure that agriculture, and primarily soil-based agriculture, remain the primary land uses for land located in the Special Use Zone 1. The application demonstrates a commitment to the cultivation of industrial hemp on the land, evidenced by progress to securing water rights and dam approvals, and Cannabis licencing permissions that provide more certainty that the hemp crop will be the substantive activity on the land and the basis of the Rural Industry proposal under assessment. Having regard to the scale and intensity of the proposed Rural Industry activity and the high composition of hemp in the proposed mudbricks, a genuine nexus between soil-based agriculture and the associated Rural Industry is established.

The proper categorisation of the proposed activity has been a matter of detailed consideration. The application is supported by legal advice on the definition of 'Mud Brick' and land use categorisation. This advice was peer reviewed by lawyers appointed by Council where the real and substantial use was affirmed as 'mud brick manufacturing.'

In addition, amendments to the existing Planning Permit T220398 for the agricultural building have been resolved to enable this current use application to be considered as submitted.

### **Deferral and additional information**

The application was listed for the Town Planning Committee meeting on 6<sup>th</sup> May 2024 but deferred to allow consideration of new information including grounds from two new objections received against the application and clarification regarding water entitlements.

### **Consideration of further objections**

Two further objections were received by Council on 6<sup>th</sup> May that have since been considered.

In addition to grounds that are discussed in the officer report, the objections also raise new concerns:

- Potential biohazard impacts of the activity; and
- food and health safety risk of hemp dust with reference to a journal paper *"Assessment of Worker Exposure to Occupational Organic Dust in a Hemp Processing Facility"* authored by Melinda Gardner, Sue Reed and Maggie Davidson (2020).

In response to these concerns, the applicant has provided a response from one of the authors of the cited journal paper, Dr Maggie Davidson, Senior Lecturer Environmental Health, and Occupational Hygiene – Western Sydney University who states:

*"The organic nature of the (hemp) dust, primarily poorly soluble, low toxicity plant material, means that it should not pose a biosecurity nor food safety risk to adjacent food crops any more so than other wind generated aerosols, or dust clouds generated by other agricultural activities in the region."*

A copy of the response from Dr Davidson is attached with this report.

The applicant has also provided high-level detail of dust management measures. The building is fully enclosed with mechanical ventilation proposed that will filter dust enabling it to be removed as bagged product and either re-used in the manufacture process or transported off-



site. The mixing or batching plant is a sealed unit operated by computer that calculates weights, minimising the likelihood of dust or waste product.

In consideration of the above, officers are satisfied that emissions can be managed effectively to avoid off-site impacts to adjoining farms. Further detail will form part of an Environmental Management Plan which is a condition of the recommendation to be satisfied before the use can commence.

### **Water entitlements**

Discussions with Southern Rural Water have confirmed that the document lodged with the planning application is an agreement between landowners and a separate permission is required through Southern Rural Water to transfer the licence. A one-year transfer of the licence was authorised to the transferee (permit applicant) previously but expired in 2022. As the agreement between the landowners remains valid, the permit applicant can apply to Southern Rural Water to re-new this transfer of the licence, which is issued in yearly increments.

The recommended conditions of approval ensure that the Rural Industry is contingent on the growing of hemp on the subject land. The growing of hemp on the site does not require planning permission. The applicant believes irrigation is not likely required based on the crop type and annual rainfall however has provided the agreement as additional assurance of their ability to access water if required. Ultimately if sufficient water is not available to support the crop raising on the land then the Rural industry cannot operate.

### **VCAT mediation**

Planning Permit T220398-1 was recently the subject of an appeal before the Victorian Civil and Administrative Tribunal (VCAT) pursuant to Section 89(1)(a) of the *Planning and Environment Act* (1987) to cancel Council's granting of this permit.

An agreement between all parties was reached on 10<sup>th</sup> May 2024 that required the permit applicant to lodge an amendment to the permit to alter the wording of condition 4 and add greater detail to the limitations of the use condition for the shed.

The condition read:

4. *The building may not be used for human habitation.*

The condition now reads:

4. *The building may not be used for human habitation. The building may only be used for the storage of vehicles, equipment and goods for the purpose of any as of right section 1 use under the applicable zone. Any section 2 use of the shed is subject to the grant of a planning permit.*

The amendment was issued by the Planning Department on 15 May 2024.

This condition does not prevent the shed from being used for Rural Industry but draws attention to the need to apply for planning permission for any Section 2 use.

## **Relevance to Council Plan**

### **5.1 We practise responsible leadership**

5.1.1 Build trust through meaningful community engagement and transparent decision-making.



Builder/Designer: ADL Home Building & Constructions  
Practitioner: Andrew Little DB-U 43766  
Address: PO Box 4179 Narre Warren South VIC 3805

Phone: 0400 988 255  
E-mail: andrewlittle77@live.com

Site Summary

Land Area

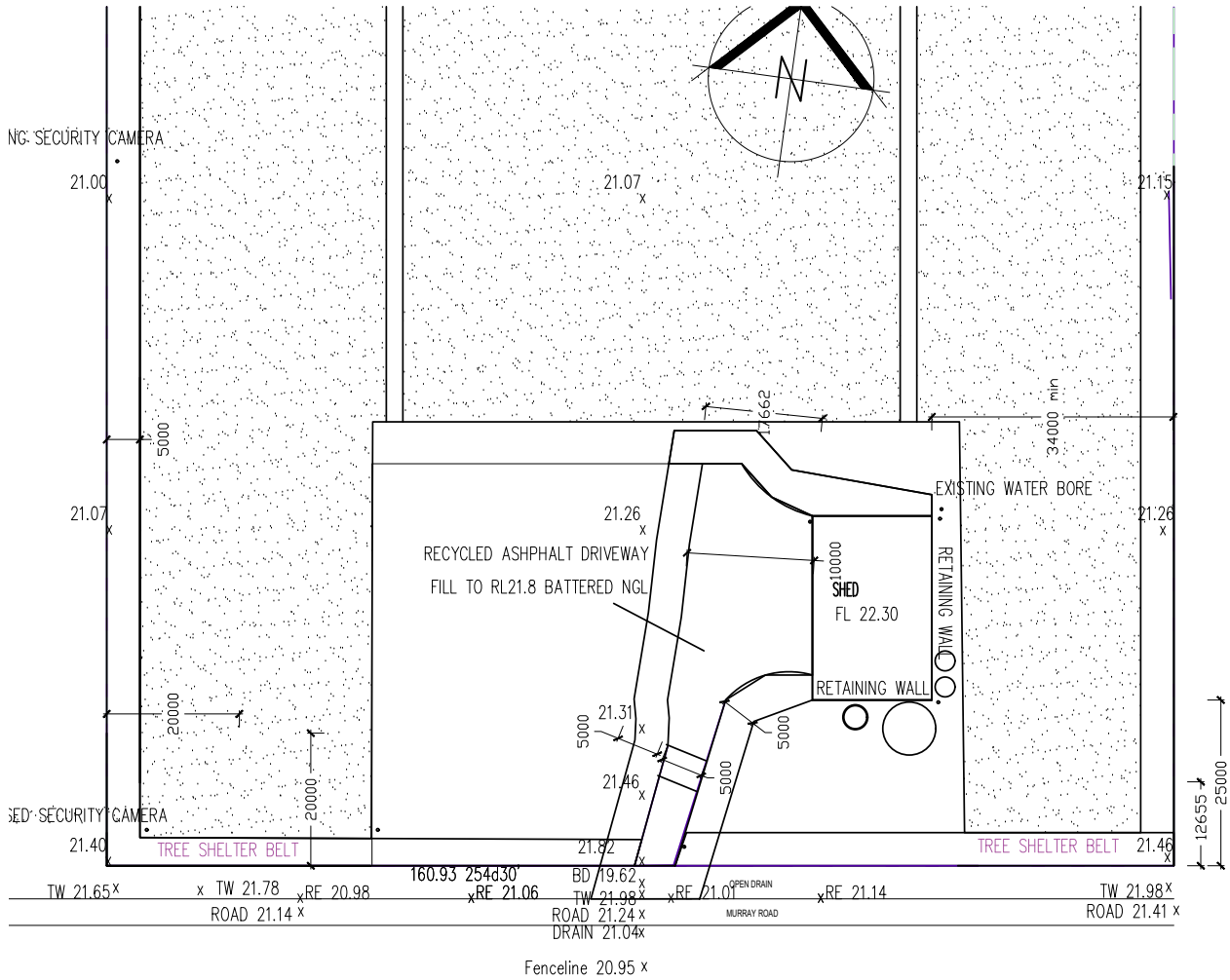
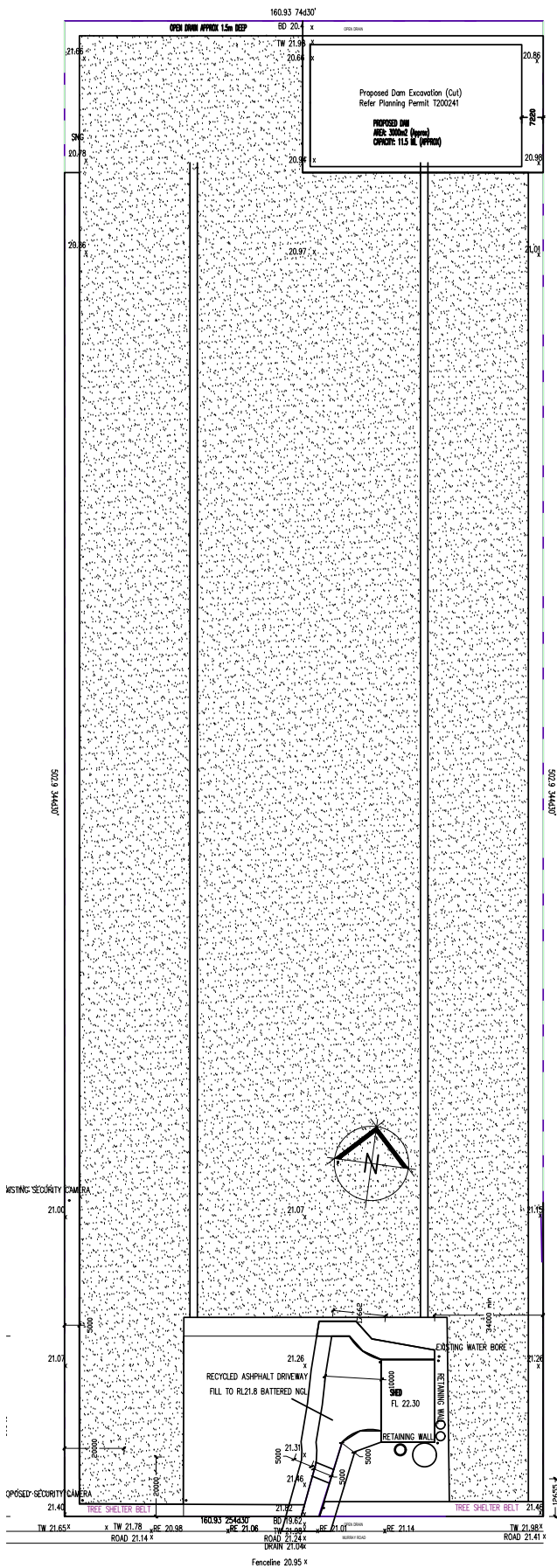
80931 m2 (8ha)

Crop Area (hatched)

63000m2 (estimated)

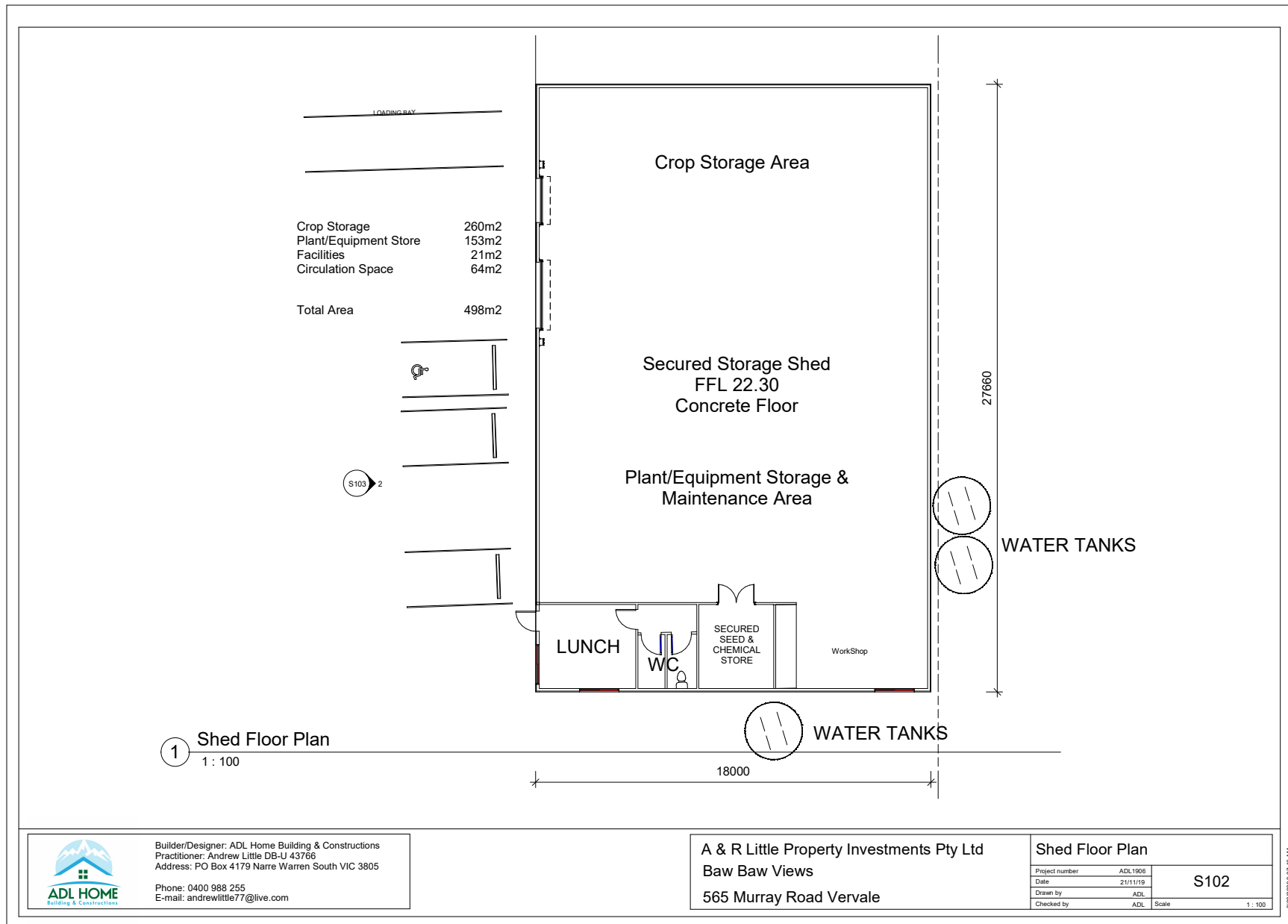
Maximum Area on Licence

70000m2



Site Plan

A&R Little Property Investments Pty Ltd		Site Plan - Shed	
565 Murray Road Vervale		Project number	2000.01
		Date	9/06/2023
		Drawn by	ADL
		Checked by	ADL
		Scale	NTS
		VER-001-R2	



Builder/Designer: ADL Home Building & Constructions  
Practitioner: Andrew Little DB-U 43766  
Address: PO Box 4179 Narre Warren South VIC 3805

Phone: 0400 988 255  
E-mail: andrewlittle77@live.com

A & R Little Property Investments Pty Ltd  
Baw Baw Views  
565 Murray Road Vervale

**Shed Floor Plan**

Project number	ADL1906
Date	21/11/19
Drawn by	ADL
Checked by	ADL
Scale	1 : 100

**S102**

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Kate  
Lyle

Barrister

kate.lyle@vicbar.com.au  
0439 733 938

Room 24.01  
Owen Dixon Chambers West  
L24, 525 Lonsdale Street  
Melbourne, 3000

Foley's List  
205 William  
Melbourne, 3000  
9225 7777

## MEMORANDUM OF ADVICE

### Planning Permit Application T230342 PA – Land use characterisation

#### Introduction

1. My advice is sought on the proper land use characterisation of the proposed use of the land at 565 Murray Road, Verdale (**Subject Land**) for rural industry.
2. On 10 July 2023, Cardinia Shire Council (**Council**) issued a permit for building and works on the Subject Land allowing for construction of a farm shed and earth works.
3. On 13 July 2023, Mr Andrew Little, on behalf of ADL Home Building and Constructions, lodged an application for a planning permit (**the planning permit application**) to allow for use of the Subject Land for rural industry. Mr Little proposes to manufacture mud bricks comprised of hemp on the Subject Land.
4. The Subject Land is located within the Special Use Zone - Schedule 1 and is affected by the Land Subject to Inundation Overlay. A permit is required to use the land for rural industry.
5. In response to the planning permit application, on 10 August 2023 Cardinia Shire Council (**Council**) requested further information from Mr Little. In relation to the land use characterisation, Council provided:

#### *LAND USE DEFINITION*

*Council is of the opinion that the proposed product as described in the application does not constitute mud bricks by its ordinary meaning.*

*Liability limited by a scheme approved under Professional Standards Legislation.*

*Furthermore, Council adopts the position established by Little v Cardinia SC (2022) VCAT 477 in relation to the broader interpretation of how the proposed activity fits within the broader definition of Rural Industry as a land use.*

*Council believes the most appropriate definition of the proposed activity is 'Industry' which is categorised as a Section 3 use under the Special Use Zone – Schedule 1 and would be a prohibited activity.*

6. In order to assist Mr Little in responding to Council's concerns, I have been asked to provide my opinion as to whether the manufacture of hemp based bricks falls within the meaning of "mud bricks" in the Cardinia Shire Planning Scheme (**Scheme**).
7. In forming my opinion, I have had regard to the materials in my brief including:
  - a. Planning Permit T220398PA;<sup>1</sup>
  - b. The application material filed with the planning permit application;
  - c. Council's Request for further information dated 10 August 2023,
  - d. Draft letter in response to Council's RFI request including instructions about the materiality and process proposed, and
  - e. *Little v Cardinia SC* [2022] VCAT 477.

### **Background**

8. Mr Little has previously sought planning permission to use the Subject Land for rural industry to manufacture hempcrete panels. The application for a permit was considered on review by the Tribunal in *Little v Cardinia SC* [2022] VCAT 477 (**Little**).
9. Among other matters, the Tribunal was required to consider whether the manufacture of hempcrete panels was correctly characterised as Rural Industry or Industry.
10. The Cardinia Planning Scheme defines Rural Industry as land used to:
  - a. handle, treat, process, or pack agricultural produce;
  - b. service or repair plant, or equipment, used in agriculture; or
  - c. manufacture mud bricks.

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<sup>1</sup> I am instructed that an application to amend this permit is currently underway. The suggested changes have no impact on the conclusions reached in my advice.

11. The Tribunal focused its assessment on whether the proposed land use fell within the meaning of land used to “handle, treat, process or pack agricultural produce”. It was not required to consider whether the production of hempcrete panels was considered to fall within the meaning of “manufacture mud bricks”.
12. The current planning permit application proposes to manufacture mud bricks comprised of hemp on the Subject Land. I am instructed that the size and materials required to manufacture prefabricated hempcrete panels differs from the size and materials required to manufacture mud bricks. In this way, the current application differs from the earlier proposal considered in Little.
13. Council will be aware that the earlier application before the Tribunal proposed hempcrete panels constructed at 1200mm x 900mm in various thicknesses. The production of Hempcrete Panels involved the mixture of hemp hurd, lime binder and water.
14. Under the current planning permit application, I am instructed that:
  - a. The current Application proposes to manufacture bricks that differ from the earlier hempcrete panels in size and material composition.
  - b. The blocks are proposed in two sizes: 600 x 300 x 120mm and 600 x 300 x 150mm. The blocks are intended to be a uniform size that align with the current blocks that are imported from overseas.
  - c. The production of the blocks involves the mixing of hemp hurd, water, binder and sand. A different binder is proposed under the current application which introduces sand into the binder to form the bricks. Lime binder is no longer proposed to be used.
  - d. It is proposed that a geopolymer binder will be used, which has a higher percentage of sand than other forms of standard masonry binders.
15. I have been asked to consider whether the proposed manufacture of bricks comprised of hemp may fall within the definition of “manufacture mud bricks” as contemplated by the Planning Scheme.

### **Summary of opinion**

16. In my view, the proposed manufacture of mud bricks comprised of hemp falls within the meaning of “mud bricks” contemplated by the Scheme.
17. The Scheme does not provide a definition of “mud bricks”, and so the ordinary meaning must be considered. The dictionary definitions of “mud bricks” and “mud” are broad and allow for flexibility in process and materiality.

18. When compared to the manufacture of ordinary mud bricks, the manufacture of mud bricks comprised of hemp includes:
  - a. hemp hurd that performs like straw as filler. This performs as the organic matter contemplated by the definition;
  - b. a geopolymer binder that performs like cement. This creates the sludge texture also contemplated by the definition, and
  - c. sand that performs as clay or soil. Sand is an express material included within the definition of “mud”.
19. Overall, the definition of “mud” is sufficiently broad to allow a decision maker to conclude that these materials form mud, especially as their consistency is consistent with the “*soft, moist, glutinous*” texture contemplated by the definition.
20. As the materials in bricks comprised by hemp form “mud”, it follows that once shaped and air dried they form “mud bricks”.
21. The land use term “Rural Industry” allows for a permit to issue for the manufacture of mud bricks. In my opinion, the ordinary of meaning of “mud bricks” is sufficiently broad that it does not prevent their materiality being comprised of hemp and geopolymer filler. Rather, the manufacture of mud bricks comprised by hemp shares many common material and process characteristics with ordinary mud bricks to allow a permit to issue.

## Analysis

### *Amendment VC103*

22. On 5 September 2013, the Minister for Planning amended the Victorian Planning Provisions to, among other matters, amend the definition of Rural Industry. The amendment included the “manufacture of mud bricks” within the definition:

Rural industry	Land used to:	Abattoir	Industry
	a) handle, treat, process, or pack agricultural produce; <del>or</del>	<b>Sawmill</b>	
	b) service or repair plant, or equipment, used in agriculture; <del>or</del>		
	<u>c) manufacture mud bricks.</u>		

23. The amendment followed a Rural Zones Report prepared by the Reformed Zones Ministerial Advisory Committee dated 28 February 2013. The Committee recommended that the Government implement a



number of changes to support the implementation of the varied rural zones, including amending the meaning of “Rural Industry” to include the “manufacture of mud bricks”.<sup>2</sup>

24. The Government provided a response to the Report advised that the recommended changes, including amending the meaning of the land use term:

*These are important reforms to remove planning red tape for horticultural and crop support structures, farm gate produce sales and mud brick manufacturing, and improve the effectiveness of rural zone reforms.*<sup>3</sup>

25. Amendment VC 103 subsequently followed implementing the recommended changes into the Scheme.

26. The Government’s response to the Report and the VC103 Explanatory Report provide that the changes to the Scheme and the reformed rural zones were intended to “**provide greater flexibility, reduce requirements for use, development and subdivisions, facilitate business and tourism uses and improve the zone purpose statements**”.<sup>4</sup>

*Meaning of “mud brick”*

27. The term “mud brick” is not defined within the Scheme.
28. Clause 73 of the Scheme provides that a term used in the Scheme has its ordinary meaning unless that term is defined.
29. Further, it is commonly understood that the starting point for statutory interpretation is the ordinary and grammatical sense of the statutory words to be interpreted, having regard to their context and legislative purpose: *Prahran Orrong Park Developments Pty Ltd v Stonnington CC* [2017] VCAT 1021 at [20].
30. The Oxford English Dictionary defines “mud-brick” as “*a brick made of (usually unfired) mud*”.<sup>5</sup>
31. The Oxford English Dictionary defines “mud” as “*soft, moist, glutinous material resulting from the mixing of **water** with soil, **sand**, dust or other earthy matter, mire, **sludge***”.<sup>6</sup>
32. The Oxford English Dictionary defines “sludge” to mean “*thick, soft, wet mud or a similar viscous mixture of liquid and solid components, especially the product of an industrial or refining process*”.<sup>7</sup>

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<sup>2</sup> Rural Zones Report prepared by the Reformed Zones Ministerial Advisory Committee dated 28 February 2013, Recommendation 19.

<sup>3</sup> Reformed Zones Ministerial Advisory Committee: Government Response August 2013, page 6.

<sup>4</sup> Amendment VC103 Explanatory Report.

<sup>5</sup> See <https://www.oed.com/dictionary/>

<sup>6</sup> *Ibid.*

<sup>7</sup> *Ibid.*

## Mud brick

33. The ordinary meaning of “mud-brick” is broad.
34. It does not prescribe a certain combination of materials or a process that must be followed to form a “mud brick”. Consistent with the dictionary definition, bricks comprising hemp are similarly unfired. Rather, after they are formed and pressed into shape, they are left to air dry.
35. In order for a product to be considered “mud brick” it must be made of “mud”.
36. The definition of “mud” is equally broad. It focuses on two parts: the consistency of mud and the materials that comprise mud.
37. It suggests a wide ranging combination of a variety of materials that may be used to form mud. The use of the word “or” in the definition suggests that it is not intended to be an exhaustive list of materials but rather an indication of the types of materials that may form “mud”. The definition does not require that:
  - a. all of those materials listed are used;
  - b. a specific combination is necessary, or
  - c. a certain percentage or volume of each type of material.
38. Rather, the definition is wide ranging and flexible in its application.
39. Among the materials that are listed, there is an overlap between the materials used to form “mud” and the materials used to form bricks comprising hemp. In particular, both require the mixing of sand, water and organic material.
40. I am instructed that where a geopolymer binder is used, both the dry weight in kilograms and the cubic mass of the bricks, indicate a high proportion of sand. The following tables provided in my brief show the amount of sand compared between a standard hemp masonry binder and a geopolymer binder:

**Table 1 – Dry Weight in Kg of Product**

Product	Mud (Sand or Soil)	%	Alkaline Earth	%	Waste Prod.	%	Fillers (Hurd)	%
Aust Hemp Masonry Binder	17.54	39.0%	17.46	38.8%	0	0.0%	10	22.2%
<b>Geopolymer Binder</b>	<b>28.10</b>	<b>61.1%</b>	<b>2.05</b>	<b>4.5%</b>	<b>5.85</b>	<b>12.7 %</b>	<b>10</b>	<b>21.7 %</b>
Geobind (NZ) Binder	12.96	28.8%	12.96	28.8%	2.88	6.4%	16	35.6%
Ordinary Mud Brick	15.75	35%	6.75	15%	0	0%	22.5	50%

**Table 2 – Cubic Mass of Products**

Product	Mud (Sand or Soil)	%	Alkaline Earth	%	Waste Prod.	%	Fillers (Hurd)	%
Aust Hemp Masonry Binder	18.6	14%	20.4	16%	0	0%	9	70%
<b>Geopolymer Binder</b>	<b>32.8</b>	<b>25%</b>	<b>2.4</b>	<b>2%</b>	<b>7</b>	<b>5%</b>	<b>9</b>	<b>68%</b>
Geobind (NZ) Binder	15.2	9%	15	9%	3	2%	14.5	81%
Ordinary Mud Brick	18.4	11%	8	4%	0	0%	14.9	85%

41. The tables illustrate a high proportion of sand required to form the bricks when mixed with water. Given that the use of sand is expressly contemplated as a material that forms mud, the use of sand and water together may form “mud” within the meaning of the ordinary dictionary meaning of “mud”.
42. The description of “earthy matter” is not defined in the dictionary. Generally, it may be considered soil or earth yet its generalised description implies an organic quality. Hemp hurd is a similarly organic matter, comprising of hemp stalks processed into small solid pieces:<sup>8</sup>



43. The ordinary meaning of mud expressly considers “sludge” to be a component of mud. When mixed with water and binder, the hemp hurd takes on the character of sludge due to the processed nature of the material that includes solid components. In practicality, the hemp hurd sludge is a substitute for straw/hay based sludge found in ordinary mud bricks. Both share an organic quality.
44. Finally, the definition of “mud” characterises the substance as a “*soft, moist, glutinous material*”. I am instructed that once the hemp hurd is mixed with the water, sand and binder it similarly takes on a soft, moist and glutinous character. The ratio of water to dry mix being added is enough to enable the mixture to make pliable forms, a process not to dissimilar to adding water to sand at the beach to make sand castles. In this case, with the inclusion of binder, the water triggers chemical reactions and bonds to occur with the dry mixture that when dry creates a permanent form.

<sup>8</sup> Photo provided as indicative of hemp hurd: <https://www.hemp-squared.com.au/hemp-hurd/>

45. In my opinion, the manufacture of bricks comprised of hemp falls within the meaning of mud bricks on the following bases:
- a. The mixture used to create the bricks may be considered “mud”.
  - b. The consistency of mud made with hemp aligns with the consistency of mud contemplated in its ordinary meaning.
  - c. A number of the materials anticipated by the definition of “mud” are included within the hemp brick mixture, including sand, water, organic matter and sludge.
  - d. The proportion of sand in bricks made from hemp is higher than the proportion of soil in traditional mud bricks. Sand is an express component of mud and so if sand can be considered to form ordinary mud bricks, its role in bricks made from hemp should not be overlooked as an express component.
  - e. The definition of mud bricks does not require certain materials to be included or a certain process be carried out to manufacture the bricks. The definition remains broad to allow some flexibility in its interpretation.

#### **Manufacture of mud brick**

46. The Tribunal’s decision in Little turned on whether the manufacture of the hempcrete went beyond the processing of the primary produce. It ultimately determined that “unlike the initial processing of hemp to become hurd, fibre and leaf, the process of forming the hurd into hempcrete, including storage and drying, fits more appropriately into the Scheme definition of Industry and is therefore prohibited on the subject site”.<sup>9</sup>
47. The meaning of Rural Industry allows for the manufacture of mud bricks. That is, manufacturing mud bricks comprising hemp is permissible beyond the initial stage of processing the hemp.
48. In my opinion, as the proposed bricks comprising hemp fall within the meaning of “mud brick”, then their manufacture is permissible on the Subject Land without needing to distinguish between the stages of the production and the processes that occur on the site. A permit is required under the Special Use Zone, but the land use is not prohibited.

**Kate Lyle**

**Owen Dixon Chambers West**

**9 October 2023**

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<sup>9</sup> Little at [81].

13/7/2023

## 565 Murray Road Vervale

Proposed Land Use as Rural Industry  
(Manufacture Hemp based  
Mudbricks)

Andrew Little

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## Overview

<b>Subject site</b>	565 Murray Road, Vervale
<b>Proposal</b>	Land use of approved building and surrounding land for Rural Industry (Manufacturer of Hemp based Mud Bricks)
<b>About the site</b>	<ul style="list-style-type: none"><li>• The subject site is located on the north side of Murray Road, and east of Dessent Road, in Vervale.</li><li>• The site is rectangular in shape with a frontage to Murray Road of 160.9m and a total site area of 8.093 hectares.</li><li>• The site is effectively flat.</li><li>• The subject site is currently being developed with<ul style="list-style-type: none"><li>○ Approved Planning Permit T200241 for the construction of the dam has commenced work but was on hold pending subsequent planning applications.</li><li>○ Planning Permit T220398 was approved on 10 July 2023 for the construction of the storage shed &amp; access road.</li></ul></li><li>• The site has some temporary buildings that will be significantly scaled back/removed upon completion of the works on planning permit T220398.</li></ul>
<b>About the area</b>	<ul style="list-style-type: none"><li>• The area is characterised by large rural allotments.</li><li>• The majority of these allotments are the same size as the subject site with aggregated ownership and others some had the titles merged into single large allotments.</li><li>• The surrounding sites nearby are used for crop raising and agriculture (cattle grazing)</li><li>• Some sites have existing dwellings and larger sheds like the site to the west, while other have dwellings that are derelict.</li></ul>
<b>Zoning</b>	Special Use Zone, Schedule 1
<b>Overlays</b>	Land Subject to Inundation Overlay

## About the Proposal & Characterisation of Use as Rural Industry

The proposal is to use the approved storage shed from T220398 and surrounding area for Rural Industry, manufacture of hemp based mud bricks. The land use terms defined Clause 73.03 of the VPP define rural industry as *“Land used to:*

- a) handle, treat, process, or pack agricultural produce;*
- b) service or repair plant, or equipment, used in agriculture; or*
- c) manufacture mud bricks.”*

The Australian Government website *“yourhome.gov.au”* define mud bricks as follows:

*“Basic mud bricks are made by mixing earth with water, placing the mixture into moulds and drying the bricks in the open air. Moulds can be made from timber or metal — anything that can be shaped to provide the desired size for the bricks. Straw or other fibres that are strong in tension are often added to the bricks to help reduce cracking. Mud bricks are joined with a mud mortar and can be used to build walls, vaults and domes.”*



In so far as it applies to this application, the component of “earth” for the bricks will be derived from lime, magnesium and some minor other earth based materials to be imported into the site. The earth component will make about approximately 28% of the bricks.

The majority of the brick materials, approximately 68% will be derived from fillers derived by processing industrial hemp grown on the site into its components of Hurd and Fibre. This is achieved through a process known as decortication that separates the stalks. The majority of the filler will come from the Hurd by some fibre is expected to be used to add strength to the our skin of the bricks to minimise cracking.

The components are then combined in a batching plant, similar to bricks or cement-based products and pressed into moulds. After being pressed into the shape desired, the bricks are then stored for drying for between 2 and 4 weeks, depending on climate and weather conditions.

While it is generally considered that *mud bricks can be made by the owner–builder, but are very labour intensive. Some companies now make commercial versions of mud brick.*

The “*Reformed Zones Ministerial Advisory Committee Rural Zones Report February 2013*”<sup>1</sup> recommended to:

*“Amend the land use term for rural industry to include the manufacture of mud bricks to make this activity permit required instead of prohibited. This would allow small scale manufacture of mud bricks often used in rural areas.”*<sup>1</sup>

The Minister for Planning responded on behalf of the government in August 2013 agree in part with the report stating

*“These are important reforms to remove planning red tape for horticultural and crop support structures, farm gate produce sales and mud brick manufacturing, and improve the effectiveness of rural zone reforms.”*<sup>2</sup>

Its clear from both the panel recommendation and the minister response that a commercial manufacturing process was in mind when adding manufacturing of mud brick to the land use terms of the VPP.

Many VCAT decisions about whether a process is “Industry” vs “Rural Industry” focus on the intensity of process in determining the land use, including *Little v Cardinia SC [2022] VCAT 477*<sup>3</sup>. This decision did not interrogate the mud brick criteria, nor the Panel Report and Ministers response that resulted in the mud brick definition.

The level of intensity of process is not explained in neither the Ministers response or the Panel Report recommending Mud Brick, but its commercial intent is clear as the Ministers foreword states *“it will now be easier for farmers to build and install agricultural based developments”*<sup>2</sup> and *“these are significant changes that will boost productivity and growth in regional Victoria”*<sup>2</sup>.

So the question now is, is hemp based mud bricks rural industry or industry?

To make a measured and balanced decision on this question, we should interrogate and consider the intensity of process associated with the commercial production of the products.

Appendix 1, "Equipment used to manufacture mud brick", considers in detail the machinery and equipment needed to extract, produce and manufacture mud bricks, as a rural industry defined in the VPP, as a commercial operation on a farm. While it maybe reasonable to contend this is not what was consider by the Minister and the Panel in the writing of the report, these are a reasonable conclusion of the type of machine necessary to produce mud bricks on a commercial scale.

Appendix 2, From Crop to Cladding - VCAT Decision, considers the Members Perlstein's interpretation of the process from Little v Cardinia SC [2022] VCAT 477<sup>3</sup>.

Appendix 3, From Crop to Cladding - Our Process, considers the actual process that is required to product a hemp based mud brick.

When interrogating appendixes there are clear differences in terms of equipment and process to what was considered in Member Perlstein decision. It is our view that this information, combined with the new information present around the addition of Mud Brick as land use of rural industry in 2013 if considered and interrogated correctly would materially change the interpretation of proposed use to Rural Industry.

The key difference is about the continuum of process. Appendix 2 does not provide for any time for retting or drying of the crop before processing or decortication. The decision process of appendix 2 does define the processing of hemp as rural industry up to the point where the crop ceases to be the primary product. It does not consider that the processed hemp can be used as a filler in the manufacturing of mudbricks, much in the same way as straw can be used as a filler.

Appendix 3 shows that the crop to be dried before processing or decortication begins. It shows that once processed the crop continues through the manufacturing process until it becomes the end product, a mud brick.

If you consider the levels of intensity of in each of the processes, appendix 1, the equipment used to at scale produce mud bricks at commercial scale and appendix 3, the equipment used to product hemp based mud bricks at the same scale, the intensity is substantially reduced while the equipment use in the brick manufacturing steps remains the same.

Therefore, when considering all aspects of the process, including the intensity, and the best fit test, it can be concluded that the processing of industrial hemp into version of mud bricks is best defined as Rural Industry as defined in the VPP.

## Zoning

The subject site is located within a Special Use Zone – Schedule 1 (*see plan above*). Clause 37.01 of the Cardinia Planning Scheme governs use and development in this zone. Schedule 1 to the zone is titled 'Horticultural Preservation'. This includes the following objectives:

- To preserve land of high agricultural quality for horticulture and other farming activities.
- To discourage non-agricultural and non-soil based uses establishing on soil of high agricultural value.
- To protect the area from the encroachment of urban and rural residential type development.
- To minimise the potential for conflict between residents and normal farming practices that are related to the conduct of agricultural activities.
- To encourage sustainable farming activities based on whole farm and catchment planning principles on an individual and community basis.



Subject to the Table within Schedule 1 the use of Rural Industry is a Section 2 use and requires a permit.

The proposal is entirely consistent with the purposes of the zone. The proposal aims to extend the use of existing approved buildings and works, and in no way would result in the loss of land of high agricultural quality. Below indicates land use summary:

Land Size	80931 m2	
Crop Raising	65710 m2	81.2%
Tree Shelter Belt & Buffers	9452 m2	11.7%
Driveway & Shed Area	2043 m2	2.5%
Dam & Buffer	3726 m2	4.6%

## Overlays

The site is also within a Land Subject to Inundation Overlay (LSIO). Clause 44.04 governs development in this overlay. The purposes of this overlay are as follows:

- To implement the Municipal Planning Strategy and the Planning Policy Framework.
- To identify land in a flood storage or flood fringe area affected by the 1 in 100 year flood or any other area determined by the floodplain management authority.
- To ensure that development maintains the free passage and temporary storage of floodwaters, minimises flood damage, is compatible with the flood hazard and local drainage conditions and will not cause any significant rise in flood level or flow velocity.
- To reflect any declaration under Division 4 of Part 10 of the Water Act, 1989 where a declaration has been made.
- To protect water quality and waterways as natural resources by managing urban stormwater, protecting water supply catchment areas, and managing saline discharges to minimise the risks to the environmental quality of water and groundwater.
- To ensure that development maintains or improves river and wetland health, waterway protection and flood plain health.

Planning Application T220398 was referred to Melbourne Water and consent was granted. With this permit being solely about a land use application there is no change or negative impact that affects the LSIO.

## State and local policies

The site that is the subject to this application is covered by the following state and local policies:

Clause 14.01-1S – Protection of Agricultural Land

Clause 21.04-2 – Agriculture

Clause 22.05 – Western Port Green Wedge Policy

Clause 14.01-1S – Protection of Agricultural Land

This Clause states the following objective:

*To protect the state's agricultural base by preserving productive farmland.*

Many strategies are listed and effectively seek to limit smaller lot subdivision, the establishment of dwellings without an agricultural purpose, and avoiding the permanent removal of agricultural land.

Clause 21.04-2 – Agriculture

This Clause emphasises the sustainability of agricultural land. It states the following strategy:

*“Protect agricultural land, particularly areas of high quality soils, from the intrusion of urban uses, inappropriate development and fragmentation which would lead to a reduction in agricultural viability, the erosion of the right of farmers to farm land, and ultimately the loss of land from agricultural production”*

#### Clause 22.05 – Western Port Green Wedge Policy

This Clause is explained best by the policy basis, which includes the following:

*The Western Port Green Wedge encompasses the southern mainly rural areas of Cardinia Shire Council and the City of Casey. It covers an area of approximately 746 square kilometres, incorporating land within both the City of Casey and the Cardinia Shire. Approximately 615 square kilometres of this Green Wedge land is located within Cardinia Shire.*

*The Western Port Green Wedge is home to important assets that have value in their own right and have a significant role to play in making Melbourne a great city. A large proportion of Cardinia's Western Port Green Wedge has some of the best agricultural soil in Melbourne, providing much of Victoria's asparagus, celery, leeks, herbs, silver beet and beef production.*

The 'Vision' for the Cardinia Western Port Green Wedge includes the following:

*The Cardinia Western Port Green Wedge will be a permanent green and rural area. It will remain an internationally significant biodiversity habitat, while also strengthening its agricultural and horticultural role to become a truly innovative and productive farming district. Agriculture, horticulture and soil based food production for the long-term food security of Victoria is at the heart of this vision.*

The site falls within Precinct 1 which outlines that the future directions and preferred land uses:

*Support rural industry to allow farmers to value add to their produce.*

#### Summary

The proposal clearly meets the multiple Council policies that seek the preservation of farmland for horticultural produce.

#### Conclusion

The only decision that needs to be made in relation to this application relates to the characterisation of the land use. Rural Industry is permitted as a land use with a planning permit. Councils own Western Port Green Wedge Policy precinct encourages council to support farmers to value add to their produce, in this case the growing of industry hemp as a crop.

When considering that an experienced state planning panel undertook a detail assessment of rural industry and recommended to the minister for planning to include manufacture mud bricks to the land use of rural industry in 2013, they did so with a clear understanding and a commercial intent in mind.

With all these factors considered we recommend that council support this application and approve a planning permit for the use of Rural Industry, manufacture hemp-based mud bricks.

#### Referenced Documents

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<sup>1</sup> Rural-Zones-Progress-Report

<sup>2</sup> Government-Response-Table\_Rural\_Zones-15-August-2013

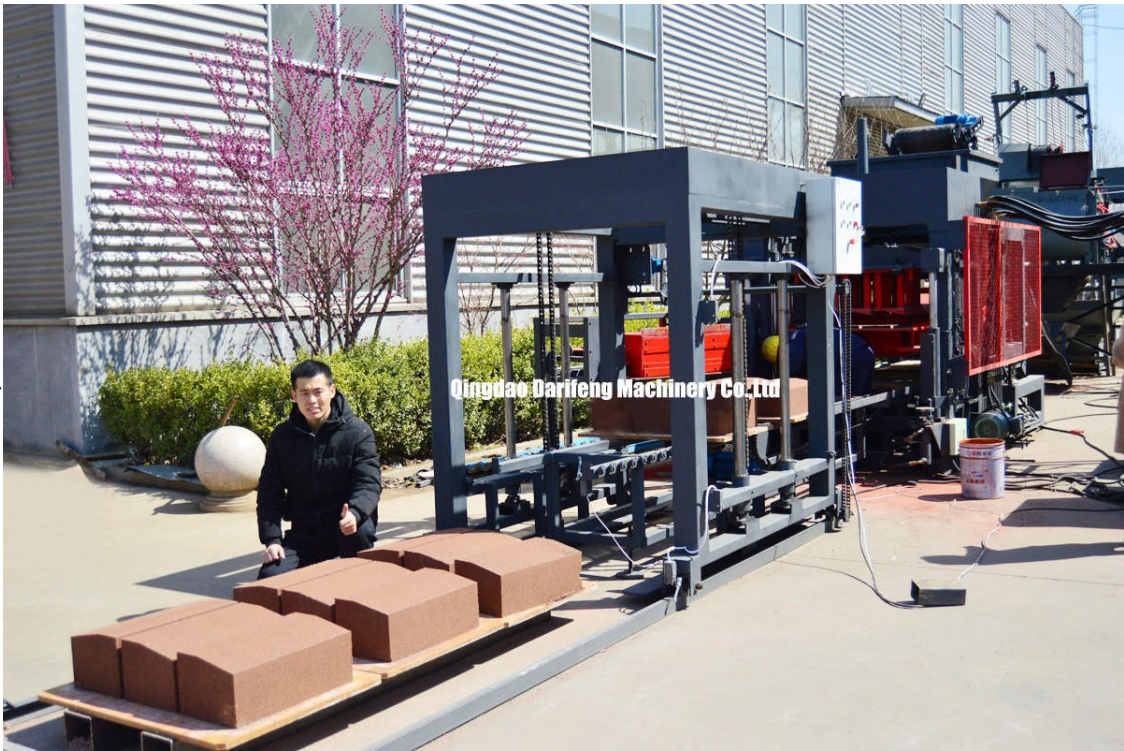
<sup>3</sup> Little v Cardinia SC [2022] VCAT 477



# EQUIPMENT USED TO MANUFACTURE MUD BRICK (A RURAL INDUSTRY)



Stacked Product Stored for Drying 4 weeks  
min



QT12-15 Block Press & Stacker



Batching Mixer  
Contains Clay, Cement  
& Other Additives



# Member Perlsteins Decision Process

Industrial Hemp Crop Harvest



Baled into  
Round Bales



Bales Unrolled to Input  
Tray for Processing



Output

Fibre Packaged/Onsold (Insulation  
Batts/Weed Matting  
Leave Mulched for Reused on Farm

Hurd Stored to Dry

Decortication, Cleaning & Dust  
Extraction Machinery



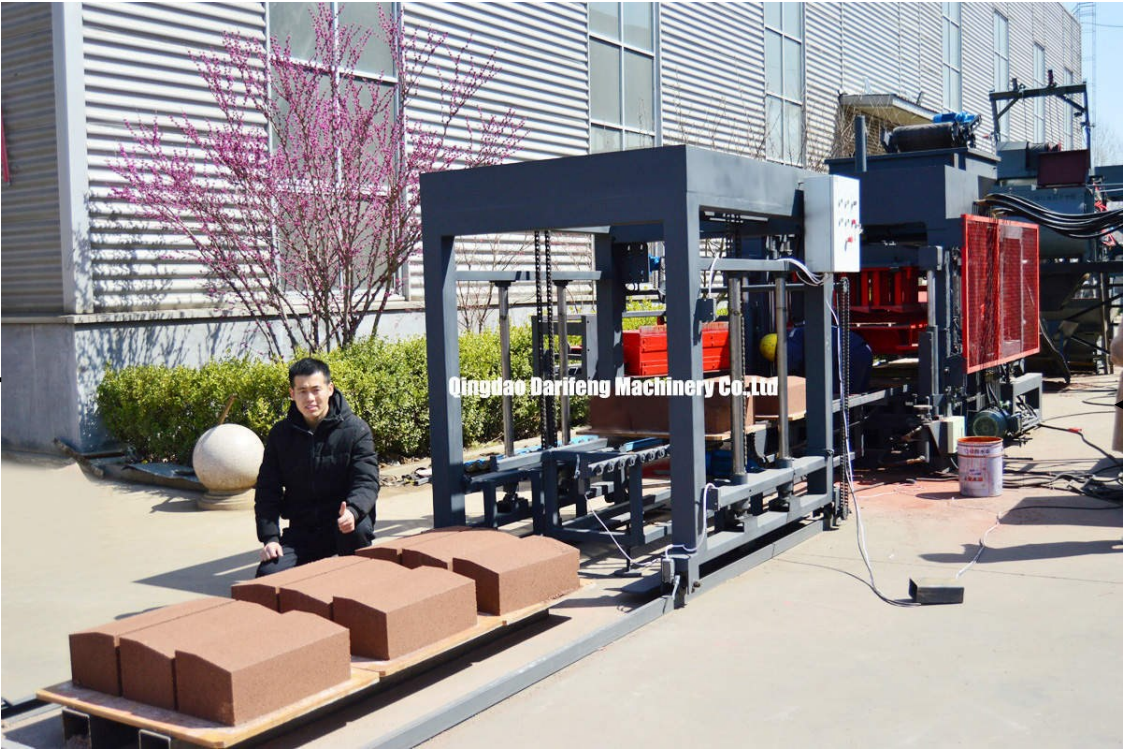
Bales off the Farm Processed  
(No Drying Time)

Rural Industry

Industry



Stacked Product Stored for Drying 3-4 weeks  
(Drying Time Similar to Mud Brick)



QT12-15 Block Press & Stacker

Direct Feed from  
Output



Batching Mixer  
Contains Hurd & Lime  
Binder, Water Added

Machinery & Process used to Manufacture Mud Bricks—An Existing Approved Rural Industry)



# End to End Process of Crop to Finished Product

Industrial Hemp Crop Harvest



Baled into  
Round Bales



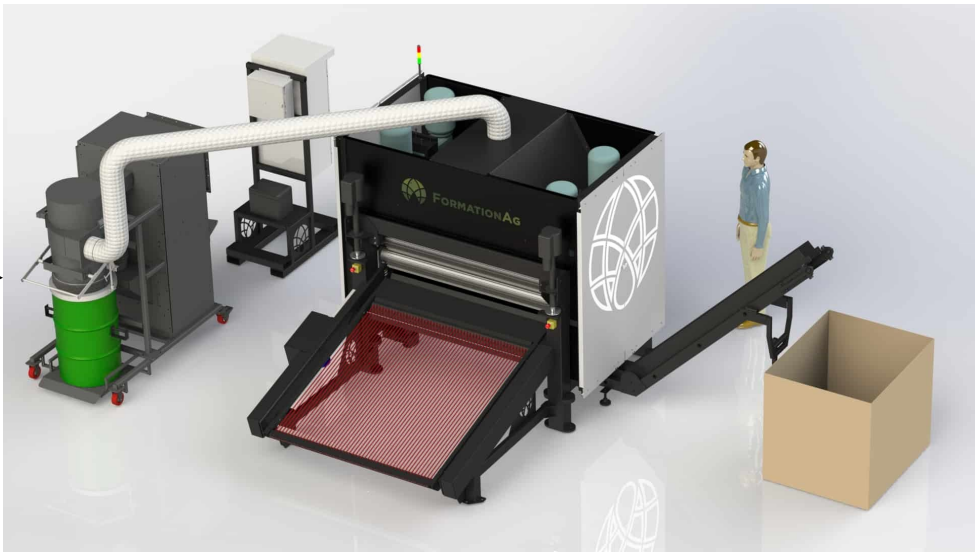
Bales Stored  
for Drying



Dried Bales Ready for Processing



Bales Unrolled to Input  
Tray for Processing



Decortication, Cleaning & Dust  
Extraction Machinery

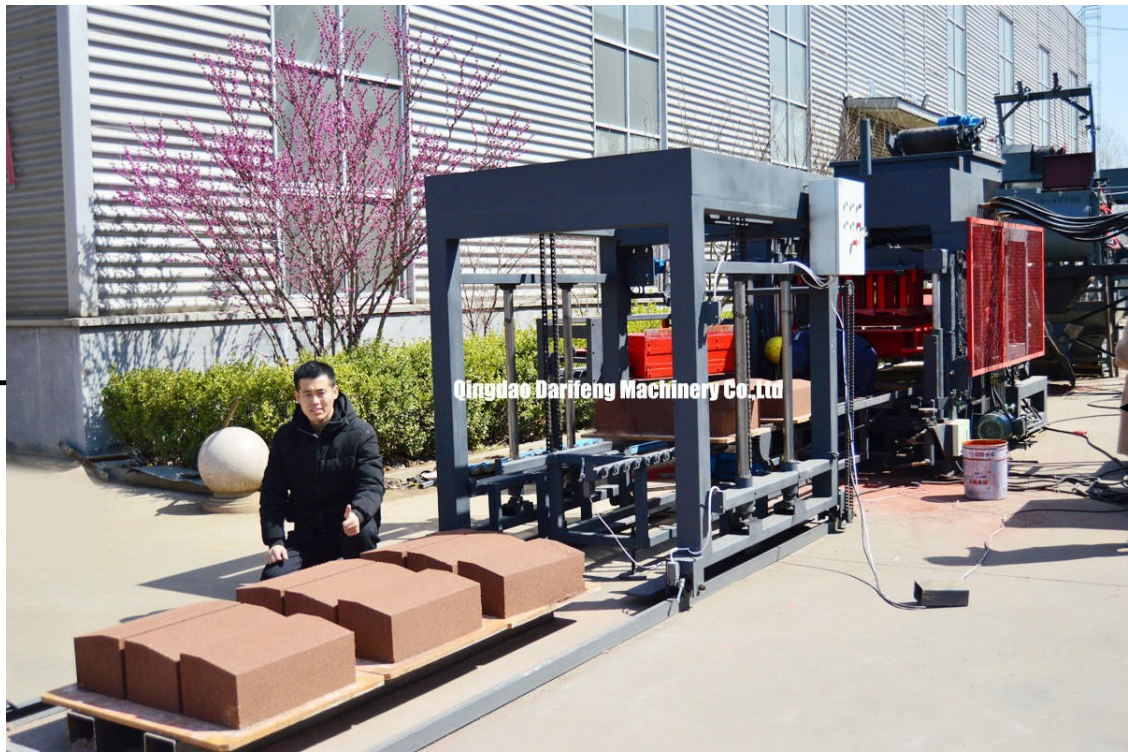
Output

Fibre Packaged/Onsold  
(Insulation Batts/Weed Matting  
Leave Mulched for Reused on

Hurd



Stacked Product Stored for Drying 3-4 weeks  
(Drying Time Similar to Mud Brick)



QT12-15 Block Press & Stacker

Direct Feed from  
Output



Batching Mixer  
Contains Hurd & Lime  
Binder, Water Added

(Machinery used to Manufacture Mud Bricks—An Existing Approved Rural Industry)



**LAND USE**

**1. Detailed description of the proposed operational details including, but not limited to: a. Estimated yield from the crops and volume of final product to be generated per annum;**

For each crop based on a 6.3ha area the yields would be as follows:

	Low Yield	Typical Yield	High Yield
Biomass Crop Harvest	44 tonnes	63 tonnes	81 tonnes
Finished Product	4580m2	6554m2	9175m2

Crop variety trials have been and are ongoing about different varieties for different growing windows (ie: late winter/early spring plant and mid summer plant).

**b. The number of employees to be employed on-site for the activity;**

During a full harvest were production to be occur a total of 8-10 people on farm and in the building. Outside of harvest times the production would require a maximum of 6 people to operate all the aspects of the process dependent on production volume required.

**c. Details of the frequency and timing of deliveries for supplementary product (lime, magnesium etc) and how these are to be stored.**

Supplementary products would come in bulk bag quantities stored on shipping pallets on racking within the building. For an typical harvest as indicated in point 1, we would require about 12 pallets of bagged materials

**d. Confirmation of whether the product is to be wholesaled or sold directly to consumers from the subject site;**

Sales will occur to both owner builder consumers and building material distributors. However a direct sales presence will not be done from within the building, only distribution of product. The sales process will be online quoted and materials made to order then delivered to either wholesale distributor or direct delivery to a customers building site.

**e. Proposed hours of operation, specifically in reference to the decortication, mixing and pressing stages of the process.**

Hours of operation would be inline with the farm and rural industry practice guidance around noise and decibel limits.

Should the responsible authority wish to place limits on the operation of the decortication, batching/pressing equipment then we would suggest that the hours of operation for those specific processes be limited to 7am to 8pm Monday to Friday and 7am to 1pm on Saturdays.

The machinery would not operate at a noise above that of normal construction equipment and the above times are from EPA noise guidance for construction sites.

**2. A written response identifying any potential off-site amenity impacts that are anticipated, and how these impacts are intended to be managed.**

It could be argued by some that the resultant deliveries that could occur as a result of this proposal. However vehicle movements coming or going to the entry will be no different to any other farm or property in the surrounding areas so we do not consider that there is any off site amenity impacts.

**SITE PLAN**

**3. Updated site plan to show where the hemp crop is currently and/or proposed to be grown.**

Plan has been updated removing hatching to tree shelter belts and existing approved buildings and fill pads. A new hatch has been show to illustrate the crop areas.

**WATER RIGHTS**

**4. Copies of any water entitlements or licences registered to the property. If there are no existing entitlements, please detail how the crop is proposed to be irrigated and where the water used for the processing of the product will be obtained.**

A copy of the current water lease agreement for 20.2ml of water is attached.

**WASTEWATER**

**5. Details of how wastewater from the production process will be treated (if required) and managed.**

There is no waste water created from the production process, however any waste water that may occur is non toxic and can be reused in future mixes.

APPLICATION FOR CONSIDERATION  
NOTICE OF DECISION - OFFICER REPORT



**Application Details:**

<b>Proposal</b>	Use of the land for Rural Industry (hemp based mud brick manufacturing)		
<b>Applicant</b>	Mr Andrew Little ADL Home Building and Constructions		
<b>Date Received:</b>	13 July 2023		
<b>Statutory Days:</b>	176		
<b>Section 50/50A/57A Amendment</b>	<input checked="" type="checkbox"/> <b>None</b>	<input type="checkbox"/> <b>Yes, date:</b>	
<b>Application Number</b>	T230342		
<b>Planner</b>	Dean Haeusler		
<b>Land/Address</b>	CA 17 SEC N Parish of Koo-Wee-Rup East, 565 Murray Road, Vervale VIC 3814		
<b>Property No.</b>	5000028087		
<b>Zoning</b>	SUZ1 - Special Use Zone - Schedule 1		
<b>Overlay/s</b>	LSIO - Land Subject to Inundation Overlay		
<b>Permit Trigger(s)</b>	<ul style="list-style-type: none"> <li>Pursuant to Clause 2.0 of Schedule 1 to the Special Use Zone, a permit is required to use the land for Rural Industry.</li> </ul>		
<b>Aboriginal Cultural Sensitivity</b>	<input checked="" type="checkbox"/> <b>No</b>	<input type="checkbox"/> <b>Yes; a CHMP is:</b> <input type="checkbox"/> <b>Not required</b> <input type="checkbox"/> <b>Required</b>	
<b>Section 55 Referrals</b>	<input checked="" type="checkbox"/> <b>None</b>	<input type="checkbox"/> <b>Yes, list below:</b>	
<b>Registered restrictions on Title</b>	<input checked="" type="checkbox"/> <b>None</b>	<input type="checkbox"/> <b>Yes, list below:</b>	
<b>Recommendation</b>	<input type="checkbox"/> <b>Permit</b> <input checked="" type="checkbox"/> <b>NOD</b> <input type="checkbox"/> <b>Refusal</b>		
<b>Documents relied on</b>	<ul style="list-style-type: none"> <li>Development Plans prepared by ADL Homes Building and Construction</li> <li>Town Planning Submission prepared by the applicant (Andrew Little)</li> <li>Title Documents</li> </ul>		

	<ul style="list-style-type: none"> <li>Legal Advice prepared by Kate Lyle</li> <li>Legal Advice obtained by Council, prepared by Marcus Lane Group</li> </ul>
Plans to be endorsed?	<input type="checkbox"/> Yes,
	<input checked="" type="checkbox"/> No, amended plans required

## Proposal

Approval is sought for the use of land for Rural Industry through the manufacturing of hemp-based mud bricks.

The bricks are to be manufactured in a 498 square metre farm shed approved for the south-east corner of the site. The permit was issued in July 2023 via Planning Permit T220398 and later amended October 2023 to vary Melbourne Water conditions and a condition restricting the use of the building for activities associated with crop raising only. Construction has not yet commenced.

The shed will be separated into crop storage, plant equipment store and a general facilities and circulation area (See Figure 2). Access and parking areas are located west of the building to be sealed and finished in recycled asphalt. Three spaces are shown indicatively.

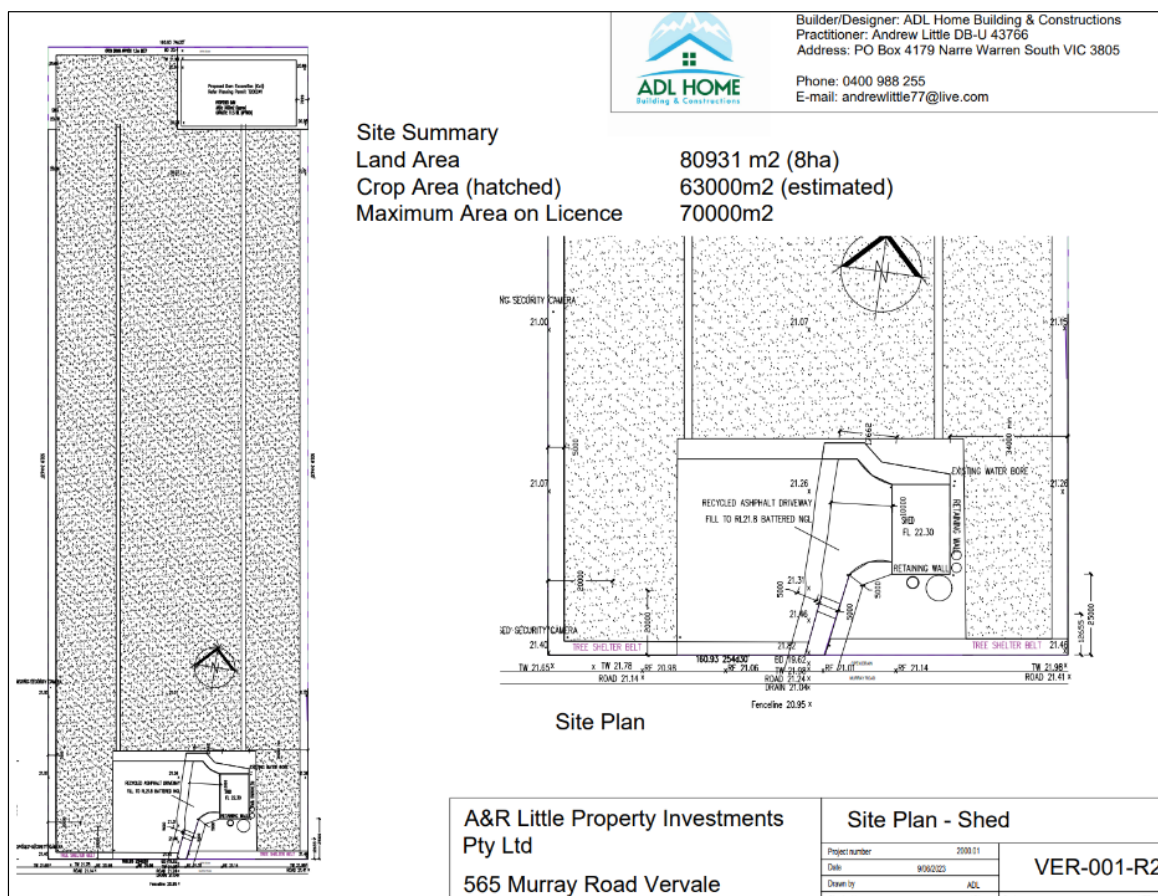


Figure 1: Site and land use plan

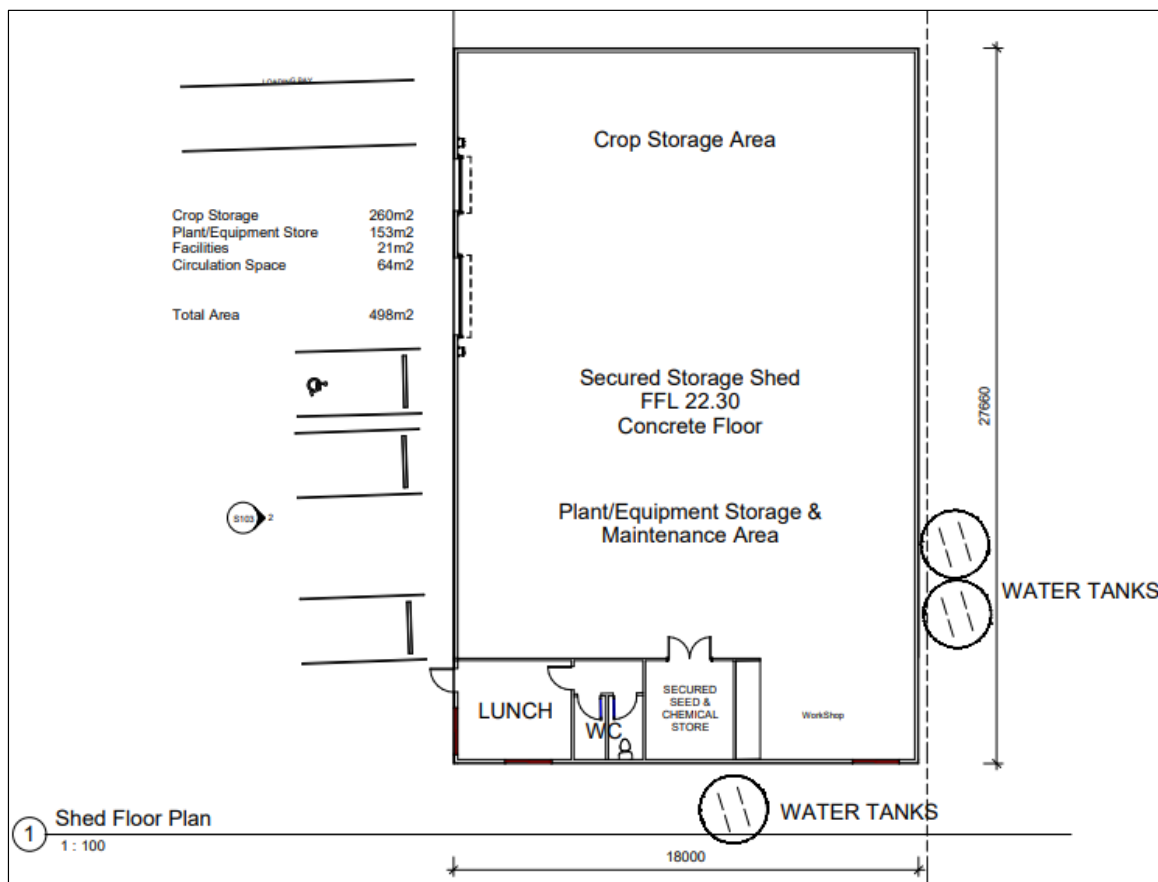


Figure 2: floor plan

### Manufacture process

Stage	Process
1	Hemp is grown, harvested and bailed on the subject site.
2	Unprocessed hemp is left to dry inside the approved shed.
3	The hemp is processed into hurd and fibre through a process of decortication that separates stalks.
4	Water, sand, binders (Geopolymer binder) and processed hemp are combined in a batching plant.
5	The mixture is to be pressed into 600x300x120mm or 600x300x150 mm moulds.
6	Bricks are stored for drying between 2 and 4 weeks, depending on climate conditions.

Decortication of the hemp, batching and pressing processes are to occur between **7am – 8pm Monday to Friday** and **7am – 1pm Saturdays**.

A **maximum of 10 people** for the proposed use during full harvest are projected, reducing to 6 persons outside of harvest times depending on volume of harvest and demand. re

The applicant estimates a typical annual yield of 63 tonnes (harvested unprocessed industrial hemp), equating to 6554 cubic metres of finished hemp bricks.



### **Product sale/distribution**

The product is to be sold to owner builders and building material distributors. Product will be ordered online and distributed from the site only; there will be no retail presence for customers.

### **Water rights and irrigation**

The applicant has commenced construction of a 11.5 megalitre dam, approved under Planning Permit T200241. This permit remains valid.

The landholder has also secured a licence transfer of 20.2 Megalitres of ground water annually, to be extracted by bore. The licence is valid until 1 July 2026.

### **Further documentation – Authority for low-THC Cannabis**

An Authority for low-Tetrahydrocannabinol (low-THC) Cannabis has been supplied to support the application. The authority is registered to the subject site and authorises the possession, process, cultivate and supply of Cannabis seed and plant. The authority is valid, dated from 20 December 2022 to 19 December 2025.

### **Changes to proposal**

In response to Council's request for further information, concern was raised with whether the proposed hemp-based bricks met the definition of mud brick. In response the applicant changed the binder from Lime to Geopolymer Binder that is understood to contain a high proportion of sand.

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## **Subject site & locality**



Figure 3: Aerial image of subject site (Source: Nearmap 13 Feb 2024)





Figure 4: Aerial image of surrounding area (source: Nearmap 13 Feb 2024)

The site is located within an established horticultural district on the north side of Murray Road, approximately 3.7 kilometres east of the township of Cora Lynn. The site is rectangular in shape, with a frontage to Murray Road of 160.9 metres and a total site area of 8.01 hectares.

A crossover is located roughly in the centre of the frontage, with a small bridge over an irrigation drain.

The site is mostly void of buildings, with the exception of some small structures in the south-east corner.

There are ongoing works being undertaken for a dam at the northern end of the property associated with an approved permit and some test cropping in the south-west of the lot.

The topography of the land is flat and surrounding vicinity is flat.

635 Murray Road (comprising four lots) adjoins the land to the east and is currently developed with a dam and used for agriculture (crop raising). The lot adjoining the subject site forms part of a broad-acre market garden and contains a large rural shed and derelict dwelling.

1710 Main Drain Road (comprising multiple allotments) bounds the site to the north, north-west and west and is currently used for crop raising.

465 Simpson Road lies adjacent to the site, south of Murray Road. The property is used for grazing agriculture and extends across multiple allotments to Fallon Road.

Land in the vicinity is characterised by large rural allotments, many of which are currently used for agriculture (primarily crop raising). In terms of development, there are examples of dwellings and large outbuildings however they are subordinate in the broader vicinity.

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## Permit/Site History

The history of the site includes:

- Planning Permit T180116 for the use and development of the land for a host farm and caretakers house was refused on 24 May 2018.

- Planning Application T190712 (Refused 21 December 2020): *Use and development of the land for Rural Industry and Caretakers Dwelling associated with Industrial Hemp*
  - *Little v Cardinia SC [2022] VCAT 477 (2 May 2022)*: Decision of Responsible Authority affirmed.
- Planning Permit T200241 (Issued 21 July 2020): *Construction of dam including excavation and fill greater than one (1) metre*. Plans were amended via secondary consent on 9 November 2021.
- Planning Permit T220398 (Issued 10 July 2023): *Buildings and Works (Construction of a Farm Shed, Earthworks)*.
  - Planning permit T220398-1 was issued 12 October 2023 to amend conditions of the permit.

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## Planning Scheme Provisions

### Zone

The land is subject to the following zones:

- SUZ1 - Special Use Zone - Schedule 1

### Overlays

The land is subject to the following overlays:

- LSIO - Land Subject to Inundation Overlay

### Planning Policy Framework (PPF)

The relevant clauses of the PPF are:

- Clause 13 Environmental Risks and Amenity
- Clause 13.02-5 Noise Management
- Clause 11.01-1R Green wedges – Metropolitan Melbourne
- Clause 14.01-1S Protection of agricultural land
- Clause 14.01-2S Sustainable agricultural land use

### Local Planning Policy Framework (LPPF)

The relevant clauses of the LPPF are:

- Clause 21.01 Cardinia Shire Key Issues and Strategic Vision
- Clause 21.04-2 Agriculture
- Clause 22.05 Western Port Green Wedge Policy

### Relevant Particular/General Provisions and relevant incorporated or reference documents

The relevant provisions/ documents are:

- Clause 51.02 Metropolitan Green Wedge Land: Core Planning Provisions
- Clause 53.10 Uses and activities with potential adverse impacts
- Clause 65.01 Approval of an Application or Plan
- Cardinia Western Port Green Wedge Management Plan, (reference document)

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## Planning Permit Triggers

The proposal requires a planning permit under the following clauses of the Cardinia Planning Scheme:

- Pursuant to Clause 2.0 of Schedule 1 to the Special Use Zone, a permit is required to use the land for Rural Industry.

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## Public Notification

The application has been advertised pursuant to Section 52 of the *Planning and Environment Act 1987*, by:

- Sending notices to the owners and occupiers of adjoining land.
- Placing a sign on site.

The statutory declaration was submitted to Council on 8<sup>th</sup> January 2023, confirming that signage has been erected in accordance with Council's direction.

Council has received four (4) objections to date.

The key issues that were raised in the objections are:

- Land use characterisation.
- Inconsistency with the purpose and decision guidelines of the Special Use Zone – Schedule 1.
- Use of the approved farm shed for rural industry and concerns with the approval the amended planning permit T220398-1.
- Effect of permitting the proposal on land prices.

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## Referrals

External Referrals/Notices:

Referrals/ Notice	Referral Authority	Brief summary of response
Section 55 Referrals	None	N/A
Section 52 Notices	Agriculture Victoria	Notice of the application was made to the Authority under Section 52 on 25th January 2024.  A response was received 13 February 2024 outlining that the proposal is not something the Planning and Advisory Service has expertise in but noting that Hemp cultivation is prohibited unless approved by the Victorian or Commonwealth Government.  The applicant has provided Council a copy of the relevant licence.

Internal Referrals:

Internal Council Referral	Advice/ Response/ Conditions
None	N/A

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## Assessment

### Planning policy framework

**Clause 13 Environmental Risks and Amenity** identifies that Planning should identify, prevent and minimise risk to the environmental and human life via land use compatibility and effective controls to prevent and mitigate risk, and that any development or mitigation is not to the detriment of the environmental and natural processes.

**Clause 13.02-5 Noise Management** acts to assist in management of noise effects on sensitive land uses to ensure community amenity and health is not adversely impacted by noise emissions through design and separation techniques that mitigate impacts to residential and other land uses.

**Clause 14.01-1S Protection of Agricultural Land** acts to preserve the state's agricultural base by preserving productive farmland. The policy includes a range of strategies such as a protection of strategically significant farmland, consideration of off-site impacts to primary production and compatibility between the proposed and surrounding land. **Clause 14.01-1R Protection of Agricultural land** emphasises regional importance to protection Metropolitan Melbourne's green wedges to void permanent loss of agricultural land.

**Clause 14.01-2S Sustainable agricultural land use** includes a range of strategies such as ensuring agricultural and productive rural land use activities are managed to maintain the long-term sustainable use and management of existing natural resources. It also acts to support the development of innovative and sustainable approaches to agricultural and associated rural land use practices. The policy also encourages diversification and value-adding of agriculture through effective agricultural production, processing and rural industry while assisting genuine farming enterprise to embrace opportunities and adjust flexibly to market.

**Clause 17.03-2S Sustainable Industry** seeks to facilitate the sustainable operation of industry with strategies to provide adequate separation and buffer areas between sensitive uses and offensive and dangerous industries and encourage manufacturing and storage industries that generate significant volume of freight to locate close to transport terminals.

**Clause 22.05 Westernport Green Wedge Policy** recognises the important natural resources of area that extend from high quality agricultural soils that contribute to the food bowl of the region and sand extractive resource areas.

The plan builds on local policy **21.04-2 Agriculture** outlining a local vision for Green Wedge land generally bound by Princes Freeway and Westernport Bay to ensure land use is managed and guidelines provided for particular activities such as tourism, agricultural, schools and places of worship.

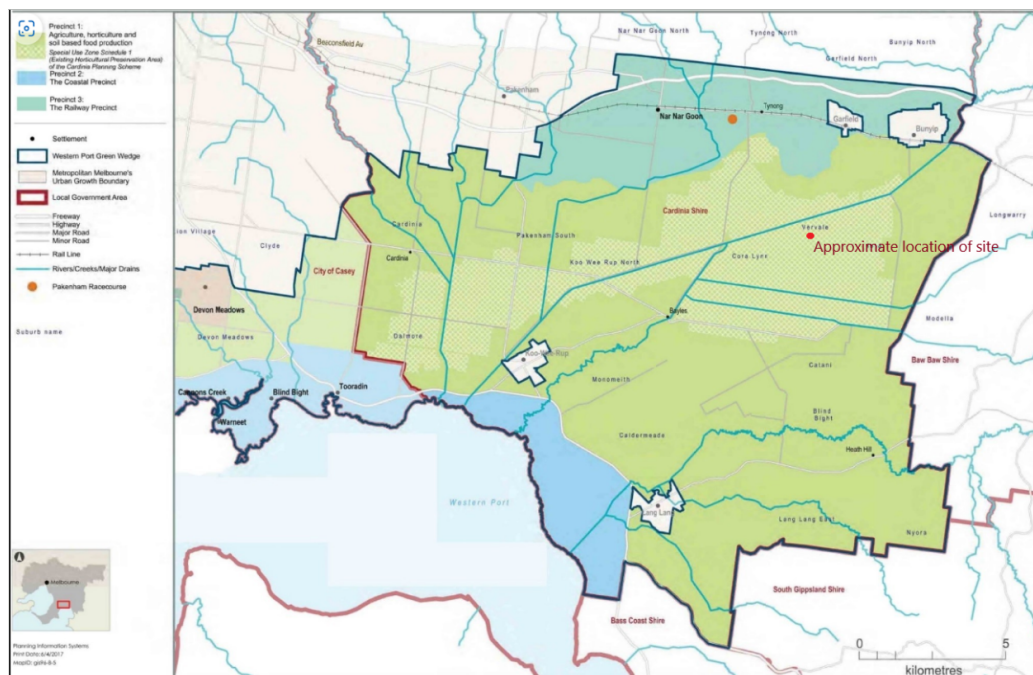


Figure 5: Westernport Green Wedge Precincts (source: Cardinia Planning Scheme - Clause 22.05)

Objectives of the policy seek to provide clear guidance on preferred land uses through three distinct regions:

- **Precinct 1:** Agriculture, horticulture and soil-based food production
- **Precinct 2:** Coastal
- **Precinct 3:** Railways

The subject site is identified within Precinct 1 that sets out the following vision:

*“Precinct 1 will be the hub of, agriculture, horticulture and soil-based food production within the Cardinia Western Port Green Wedge, taking advantage of its highly versatile soils, vegetable production (in particular asparagus), dairy and beef farming, other agricultural pursuits, potential access to Class A recycled water and the important role this precinct plays in food security. Land within the SUZ1 part of the precinct will be prioritised for soil-based agricultural and horticultural use and soil based food production with a focus on the consolidation of lots to support the economic viability of the agricultural and horticultural industry.*

*Opportunities for new, innovative or more intensive agriculture and horticulture and soil-based food production will be supported to ensure that the rich agricultural potential of the precinct is realised.*

*It will integrate biodiversity and agricultural outcomes by recognising ecosystem services which can improve agricultural efficiency.*

*Opportunities for linking the community with the local agricultural and horticultural industry will be identified and promoted to help establish food-based tourism within the precinct.”*



Specific to the subject site, future direction envisaged by the precinct is discouraging non-soil based agriculture and uses such as primary, secondary schools and places of worship in Special Use Zone – Schedule 1. The Precinct further seeks to protect existing vegetable industries and support Rural industry to allow farmers to value add to their produce.

In response to the **Planning Policy Framework**, it is considered that:

- The proposal is supported by policy seeking the protection of valuable farmland where approximately 82% of the property is to be utilised for primary production (growing of industrial hemp).
- The proposal is consistent with state and local policy that seek to encourage rural diversification and value add to agricultural production.
- A clear nexus between Rural Industry and primary production is demonstrated where the industrial hemp will be grown for the purpose of manufacturing, forming the primary composition of the mud brick.
- The proposal is compatible with the vision of the Westernport Green Wedge Policy and the future directions/preferred uses outlined for Precinct 1 of this Plan. The application proposes an activity that directly supports soil-based agriculture (hemp crop raising) with the intent to value add to this produce by processing the hemp to create hemp-based mud bricks. The majority of the site (82%) is intended to be set aside for soil-based agriculture ensuring crop raising is the primary activity undertaken on the site.

As the activity seeks to occupy an approved shed, there is no further land that will be removed from agricultural production and no capacity to permit further buildings in association with this use.

While the policy makes specific reference to the existing vegetable industries, hemp crop raising remains a soil-based activity and encourages diversification and innovation of new industry within the region.

- Noise to be generated from the activity will primarily consist of hemp decortication and processing along with mixing of compounds all to be contained within a building where noise levels are expected to be consistent with levels found in other forms of agricultural production. There are no dwellings within 500 metres of the site however sensitive uses are protected by EPA legislation and conditions can also be applied to limit operating hours to further mitigate off-site noise emissions.

Based on the above policy assessment it is determined that the proposal responds appropriately to the key planning policy considerations.

***How does this application differ from Planning Permit application T190712 and the subsequent appeal***  
[\[Little v Cardinia SC \[2022\] VCAT 477 \(2 May 2022\) \(austlii.edu.au\)\]](#)

This Tribunal appeal considered a refusal to grant a Permit for application T190712. The application proposed the use and development of the land for Rural Industry and Caretakers Dwelling associated with Industrial Hemp.

The Tribunal affirmed Council's decision to refuse to grant a permit. In arriving at this decision, the Tribunal was asked to consider whether hempcrete production was more appropriately categorised under 'Industry' than 'Rural Industry'. In doing so, the Tribunal was asked to determine whether the proposal met the first limb of the Rural Industry definition found in Clause 73.03:

*Land used to:*

- a. Handle, treat, process, or pack agricultural produce;*
- b. Service or repair plant, or equipment used in agriculture; or*
- c. Manufacture mud bricks.*

The Tribunal determined that the initial process of hemp to hurd, fibre or leaf fit the definition of Rural Industry, but the further processing to hempcrete fit more appropriately into the definition of Industry and is therefore a prohibited activity:

- 77. I find that the processing of the hemp crop into hurd, fibre and leaf constitutes Rural industry as per the Scheme definition. The hurd, fibre and leaf are the result of the processing of the primary produce.*
- 78. Although I acknowledge that the applicants see the decortication as simply a step in the process of manufacturing hempcrete, it as a separate, and initial, step that provides the hurd that is then required to undertake the further steps of mixing, compression and curing that are required to produce the final hempcrete product.*
- 79. This initial process also provides the leaf and fibre from the hemp that are then intended to be on-sold without further processing. It is likely that they will be packed into a form fit for sale, and this fits clearly into the definition of Rural industry, as does the initial processing.*
- 80. However, the processing of the hurd to become hempcrete falls more naturally into the definition of Industry which describes a process of manufacture that involves products stored on the land. The manufacture of hempcrete involves the use of hurd that has been decorticated and stored on the land and the curing of the finished hempcrete product which is proposed to be carried out within the drying room in the shed. As opposed to processing hemp and packing hurd, leaf or fibre (Rural industry), the production of hempcrete is a process of manufacture, where goods used in the operation of manufacture and resulting from it are also stored on the land (Industry).*

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Emphasis added.

Although the manufacturing of mud brick is listed as an activity of Rural Industry, the Tribunal was not asked to determine whether this was applicable, and therefore this matter was not further interrogated however has been interrogated under this Permit application (refer to assessment below)

The question of the site's appropriateness for Rural Industry was briefly touched on in the decision (paragraphs 82-88) where the Tribunal recognised that there was support in the Scheme's policy for diversification and value-adding at State and Local levels but acknowledged that this is not before the Tribunal to consider, as the Tribunal had determined that the real and substantial use best fit 'Industry' and hence, the appropriateness of any Rural Industry on this land would be subject to a new application altogether.

**Note:** This decision also discussed the merits of the use of the land for a Caretakers Dwelling, however this is not relevant to this Permit application currently being considered by Council.

The decision of *Little vs Cardinia SC* also explored the importance of viability in justifying supporting land uses, noting that successful crops had not been planted on the land and water supply issues had not been addressed. The tribunal referenced an earlier decision of [Tyler v Cardinia SC \(2012\) VCAT 1726](#) that considered the merits of an application for a dwelling in the Special Use Zone Schedule 1 in associated with a horse agistment business. This decision to refuse the granting of a permit in this instance centred around the limited farming activities used to justification the need for a dwelling on the land that couldn't otherwise be achieved living off-site.

The merits of business viability remain equally important however there are points that distinguish the current proposal from these considered by the Tribunal. Unlike these appeals, the proposal before Council is seeking to utilise a building that has already been approved meaning there is no net loss of arable land.

Furthermore, the use in question (Rural Industry) is dependent on the farming activity as the core component of the product to be manufactured, demonstrating a level of dependency that does not necessarily apply where a dwelling land use is considered. Notwithstanding this, Council acknowledges that the Rural Industry use can operate without a crop being harvested on-site (i.e. hemp can be brought in externally) therefore to mitigate this issue, conditions on any Permit issued will be imposed requiring

that the crop be established prior to the commencement of the use and that the use may only operate when in conjunction with the hemp grown on the site (as per endorsed plans).

Since the previous hearing of *Little vs Cardinia SC* the applicant has also secured separate water rights through Council and Southern Rural Water, providing greater confidence of establishing and maintaining an ongoing crop.

***Does the proposed product meet the definition of 'mud brick'?***

During Council's initial assessment of the application, concern was raised about land use characterisation and suggested the activity was more appropriately categorised as "Industry" – an activity that is prohibited in the Special Use Zone – Schedule 1.

Land Use definitions are set out in Clause 73.03 of the Planning Scheme where Rural Industry is listed as:

*Land used to:*

- a) Handle, treat, process, or pack agricultural produce;*
- b) Service or repair plant, or equipment used in agriculture; or*
- c) Manufacture mud bricks.*

Where a term is not defined in the Scheme, it assumes the ordinary meaning of the term or words.

The clause also specifies that a term describing a use or activity in relation to land which is not listed in the table must not be characterised as a separate use of land if the term is obviously or commonly included within one or more of the terms listed in the table.

**Legal Advice**

Legal Advice obtained by the applicant sought to respond to Council concerns by determining the proper land use characterisation of the proposed use and whether the hemp-based bricks fall within the ordinary meaning of mud bricks.

The advice breaks down the meaning of the term using the Oxford dictionary definitions:

Mud:

*"soft, moist, glutinous material resulting from the mixing of water with soil, sand, dust or other earthy matter, mire, sludge".*

Mud-brick:

*"a brick made of (usually unfired) mud"*

The advice concludes that the mixture to create hemp bricks and the process of manufacture fit the definition of the ordinary meaning of mud brick.

Hemp hurd fits the description of "earthy matter" – a term that itself is not defined in the dictionary but generalised as matter of organic quality while geopolymer binder comprises a high proportion of sand that itself is a component of "mud".

The number of materials anticipated by the definition of mud are included in the proposed mixture, including sand, water, organic matter and sludge and do not reference a balance or percentage of composition.

Council has obtained a peer review of this advice which has determined that the conclusions drawn by the applicant's advice are sound but extend the question of characterisation to the 'real and substantial' purpose of the use for which the land is to be put.

To that end, Council's advice considers the purpose of the use as:

- (to) Grow hemp on the land; and*
- Manufacture hemp-based bricks.*

In establishing their view, the advice emphasises the mandate set out in Clause 73.03 of the Scheme:



*A term describing a use or activity in relation to land which is not listed in the table must not be characterised as a separate use of land if the term is obviously or commonly included within one or more of the terms listed in the table.*

Following the conclusions drawn by both lawyers, Council offers are satisfied that the use best fits the categorisation of Rural Industry as the proposed product and activity meet the ordinary meaning of mud brick manufacturing.

### Special Use Zone – Schedule 1

The Special Use Zone is a special purpose zone that recognises or provides for the use and development of land for specific purposes as identified in a schedule.

Schedule 1 of the Zone has been implemented for the specific purpose of preserving land of high agricultural quality for horticulture and other farming activities and discourage non-agricultural and non-soil-based uses establishing on soil of high quality.

It further seeks to minimise the potential for conflict between residents and normal farming practices that are related to the conduct of agricultural activities.

Pursuant to Clause 1.0 of the Schedule, the table of uses identifies Rural Industry as a Section 2 use (permit required) with a condition restricting the gross floor area of all buildings associated with the use to 500 square metres.

As the use falls under Section 2, an assessment must be made on the merits of the use against the purpose and decision guidelines of the Schedule, as appropriate.

The guidelines are set out as follows:

- *The Land Capability Study for the Cardinia Shire (February 1997).*

The study identifies the land as Quaternary alluvium, Koo Wee Rup peaty clay with a land capability class of 2. The table below highlights that the agricultural capacity of the soil is good and the highest Agricultural class found in Cardinia Shire Council.

**Table 2.1 Land capability classes for agriculture.**

CLASS	CAPABILITY	DEGREE OF LIMITATION
Class 1	Very good	Can sustain a wide range of uses including an intensive cropping regime. Very high levels of production possible with standard management levels.
Class 2	Good	Moderate limitations to agricultural productivity, overcome by readily available management practices.
Class 3	Fair	Can sustain agricultural uses with low to moderate levels of land disturbance such as broadacre cultivation in rotation with improved pastures. Moderate to high levels of production possible with specialist management practices such as minimum tillage.
Class 4	Poor	Low capacity to resist land disturbance such as cultivation. Moderate production levels possible with specialist management such as improved pasture establishment with minimum tillage techniques. Recommended for low disturbance agriculture such as grazing or perennial horticulture.
Class 5	Very poor	Very low capability to resist disturbance. Areas of low productive capacity. Minimal grazing levels or non-agricultural uses recommended.

*Figure 6: Land Capability Assessment (1997)*

- *Whether the land is liable to flooding and any advice received from Melbourne Water.*

The use will occupy an approved building and does not trigger further assessment against the Land Subject to Inundation Overlay, or related policy.

- *Whether the use, building, works or subdivision will be detrimental to the horticultural significance of the area.*

It is considered that the proposal will contribute to the horticultural production of the area with an emphasis on crop raising on the land that is specifically sought by the Schedule.

The activity seeks to utilise an approved building to value-add to the hemp that is to be grown on the land by processing, mixing, forming and drying a hemp-based mixture into bricks. All activities post-harvesting are to be undertaken within the building, minimising off-site impacts. Furthermore, as the activity occupies an approved building further loss of arable land is avoided.

- *Whether the dwelling is reasonably required for the operation of the rural activity being conducted on the land.*

Not applicable, no dwelling has been applied for.

- *Whether the use utilises the high quality soils for horticultural or agricultural pursuits.*

The majority of the product will be composed of processed hemp, demonstrating a strong link to the productive cultivation of the land.

- *The impact of the use, building, works or subdivision on the character and appearance of the area.*

Not applicable, there are no buildings or works proposed and the crop-raising is 'as-of-right' under the Schedule.

- *Whether the site is suitable for the use, building, works or subdivision and the compatibility of the proposal with adjoining and nearby farming and other land uses.*

It is considered that the activity is compatible with the purpose of the zone and neighbouring farming activities. The activity will primarily support crop raising on the land.

Off-site impacts are considered to be primarily those related to noise emissions and waste water discharge. Noise impacts beyond normal farming operations are expected to derive from the processing of the hemp into hurd and the batching/pressing of the material. More offensive activities will be conducted within the shed that is substantially separated from neighbouring dwellings and other buildings. It is recognised that the land is zoned for rural purposes where associated industry is contemplated and a residential level of amenity cannot be expected. Notwithstanding, noise emissions are regulated by EPA standards and will form a condition of permit, should one be granted.

The applicant has stated that wastewater discharge from the operation is not anticipated and any wastewater generated will be reused. A condition will be applied to any permit granted to ensure wastewater is managed appropriately.

To a lesser extent, the generation of dust and traffic are matters of relevance however given the scale of the proposal and the maximum number of employees, such impacts are expected to be isolated and not dissimilar to other agricultural operations in the area.

Any perceived risk of the expansion of the Rural Industry activity and further loss of productive land by a proliferation of additional buildings is mitigated by the condition associated with Rural Industry in the Schedule that limits total gross floor area to 500 square metres.

In determining compatibility with the Schedule, Council must ensure any given land use proposal sufficiently demonstrates a nexus with rural enterprise that contributes to agricultural and economic output for the region and avoids erosion of its long-term productivity. In the case of this proposal, the manufacturing of the product occupies an approved building and no further building footprint is contemplated (or can be considered having regard to the 500sqm limitation) to ensure the remaining 82 % of land is used for crop cultivation.

While a successful crop has not been demonstrated on the site, the applicant has taken reasonable preparatory measures by securing waters rights permissions and Cannabis cultivation approvals to provide confidence the crop can be sown, irrigated and processed on the site before making further investment in infrastructure.

In consideration of these matters and the protection that can be afforded by permit conditions to ensure a link with on-site crop raising is maintained, there is sufficient confidence that the primary purpose of the site will be for primary production, while the manufacturing of the hemp-based mud bricks remains secondary.

Ultimately, the assessment for Council is not to consider whether there are more appropriate locations for this activity but whether this is an acceptable use of land, when regard is made for planning policy and the Zone controls. Based on the above assessment, it is considered that the proposed activity represents an acceptable use of the land.

#### **Clause 51.02 – Metropolitan Green Wedge Land: Core Planning Provisions**

This provision acts to protect green wedge land from use and development that is incompatible and would diminish its conservation, landscape, environmental and agricultural value.

The provision outlines a list prohibited uses and uses that can be considered where applicable conditions are met. Rural Industry is not a listed use under this provision and can therefore be considered as appropriate under the zone.

#### **Clause 52.06 – Car parking**

This provision sets out the requirements for car parking and access for a proposal.

While no buildings or works are expressly proposed as part of this application, the change of use must be considered in determining whether there are impacts to car parking requirements or access.

Table 1 of Clause 52.06 sets out a parking rate where a requirement of 2.9 spaces to each 100 square metres of net floor area, resulting in fourteen (14) parking spaces.

A condition will be applied to any Notice of Decision granted to ensure the fourteen spaces are shown on the development plans.

No specific delivery vehicle size has been provided to Council as part of the application however the parking and access area nominated west of the building allows sufficient ability to circulate the site safely.

#### **Clause 53.10 – Uses and activities with potential adverse impacts**

This provision acts to identify uses and activities which may cause offence or unacceptable risk to the neighbourhood.

In accordance with the table set out in Clause 53.10-1, threshold distances from sensitive zones or uses are listed. Where distances cannot be met or are unspecified, referral to the EPA under Section 55 is required.

The proposed activity is a listed use being land used for Rural Industry handling, processing or packing agricultural produce with a threshold of 300 metres.

Although the site is not within proximity of sensitive uses or zones, the activity will be greater than 500 metres from the nearest neighbouring dwelling, ensuring offsite amenity impacts to residents will be minimised.

### Response to Objections

A total of four (4) objections have been received to date. The following reasons have been raised in the objections:

Reason for Objection	Response
Land use characterisation	Refer to the discussion regarding land use characterisation which also references previous VCAT decision.
Does not respond to the purposes of the Special Use Zone	Refer to the discussion regarding the Special Use Zone – Schedule 1 and response to the decision guidelines. It is assessed that the proposal appropriately responds to the considerations of the Schedule.
Processing of Amended Planning Permit T220398-1 (Farm shed)	An application can be made to change the purpose of an approved building and that is the subject of this application. The processing of the Shed application is not a matter that can be considered in forming a decision on this application.  Appeal P280/2024 has been lodged under Section 87 of the <i>Planning and Environment Act 1987</i> to cancel this permit. The appeal is currently awaiting review.
Effect on land values	The consideration of an application's effect on land value is limited in the planning process. However, the value-adding to produce grown on Special Use Zone land is directly contemplated and encouraged by State and Local planning policy.  Conditions can be applied to any permit granted to ensure a use is tied to the produce cultivated on the site, limiting the ability for the building to be utilised as a processing hub of imported hemp, minimising the perceived risk of creating de-facto industry land and inflating values.

### Clause 65.01– Approval of an application or plan

Before deciding on an application the responsible authority must consider a range of matters as appropriate to the application.

The applicant is considered to respond to the purpose and decision guidelines of the Zone and the objectives of relevant policies in the Planning Policy Framework and translates to an appropriate use of land that supports the development of business and rural diversification.

The application is considered to be an orderly use of land and one that will support to collective broader productivity of the region.

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### Conclusion

The relevant Planning Scheme provisions and policy clearly seek to ensure that agriculture, and primarily soil-based agriculture, remain the primary land uses for land located in the Special Use Zone 1.

In this instance, it is possible the subject site can be primarily utilised for a soil-based activity. The application demonstrates a commitment to the cultivation of industrial hemp on the land, evidenced by progress to securing water rights and dam approvals, and Cannabis licencing permissions that provide more certainty that the hemp crop will be the substantive activity on the land and the basis of the Rural Industry proposal under assessment.

Having regard to the scale and intensity of the proposed Rural Industry activity and the high composition of hemp in the proposed mudbricks, a genuine nexus between soil-based agriculture and the associated Rural Industry is established. Consequently, it is recommended the application is approved, subject to conditions.

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## Recommendation

### Notice of Decision to Grant a Permit

That Council having caused notice of Planning Application No. T230342 to be given under Section 52 of the *Planning and Environment Act 1987* and having considered all the matters required under Section 60 of the *Planning and Environment Act 1987* decides to Grant a Notice of Decision to Grant a Permit in respect of the land known and described as CA 17 SEC N Parish of Koo-Wee-Rup East, 565 Murray Road Vervale, for the Use of the land for Rural Industry (hemp-based mud brick manufacturing) generally in accordance with the endorsed plans, subject to the below conditions:

#### AND

That Council authorise the Manager Planning and Design to instruct Council's Statutory Planners and/ or Council's Solicitors on any future application for review at the Victorian Civil and Administrative Tribunal.

### Conditions:

#### Prior to the use commencing

1. Prior to the commencement of the use, 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 to form part of the Planning Permit. The plans must be consistent with the plans assessed by Council but modified to show:
  - a. Fourteen (14) car parking spaces designed in accordance with Clause 52.06-9 (Design Standards).
  - b. Plans to satisfy condition 2.
2. Prior to the commencement of the use, an Environmental Management Plan to the satisfaction of the Responsible Authority must be submitted to and approved by the Responsible Authority. The plan must detail:
  - a. Management measures of airborne and/or wastewater emissions generated as a result of the hemp processing and product manufacture.
  - b. Biosecurity measures to be implemented during the operation, including how these will be enforced and how any breaches managed and reported.

When approved, the plans will be endorsed and will then form part of the permit.

3. Before the use commences, all proposed areas set aside on the approved plan/s for access, circulation and car parking must be constructed to the satisfaction of the Responsible Authority. Once constructed, these areas must be maintained to the satisfaction of the Responsible Authority.

#### General

4. The use as shown on the endorsed plans must not be altered without the written consent of the Responsible Authority.

#### Rural Industry

5. Prior to the commencement of the use, the hemp crop as shown on the endorsed plans must reach harvesting maturity and must be inspected by the Responsible Authority. Photographic evidence must be submitted to meet this condition.

6. The use may only operate in conjunction with the cultivation of hemp on the land as shown on the endorsed plans.
7. The use must utilise hemp grown on the subject site as a primary source of earthen filler for the mud bricks to the satisfaction of the Responsible Authority.
8. All buildings associated with the use must not exceed a combined gross floor area of 500 square metres.
9. The Rural Industry approved under this permit may only operate between the following hours:
  - Monday to Friday: 7:00am – 8:00pm; and
  - Saturday: 7.00am – 1:00pm.
10. Any deliveries to and from the subject site must occur within the approved operating hours.
11. No more than ten (10) employees associated with the use are permitted on-site at any one time.
12. Unless with the written consent of the Responsible Authority, retail sales are not permitted from the subject land.
13. The use and development must not detrimentally affect the amenity of the area, through the:
  - a. Transport of materials, goods or commodities to or from the land;
  - b. Appearance of any building, works or materials;
  - c. Emission of noise, artificial light, vibration, smell, fumes, smoke, vapour, steam, soot, ash, dust, waste water, waste products, grit or oil;
  - d. Presence of vermin.

Or in any other way, to the satisfaction of the Responsible Authority.

14. Any waste material generated from the activity must be removed from the subject land in accordance with the endorsed Environment Management Plan. All vehicles removing waste must have fully secured and contained loads so that no wastes are spilled or dust or odour is created to the satisfaction of the Responsible Authority.

#### Amenity

15. All external plant and equipment must be acoustically treated or placed in soundproof housing to reduce noise to a level at all times satisfactory to the Responsible Authority.
16. External lighting must be designed, baffled and located to the satisfaction of the Responsible Authority to prevent any adverse effect on adjoining land.
17. Noise levels associated with the use must at all times comply with the Environment Protection Regulations under the Environment Protection Act 2017.

#### Expiry:

18. This permit for the use of land expires if—
  - a. the use does not start within **two (2) years** after the issue of the permit; or
  - b. the use is discontinued for a period of **two (2) years**.

In accordance with Section 69 of the *Planning and Environment Act 1987*, an application may be submitted to the Responsible Authority for an extension of the periods referred to in this condition.

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Dr Maggie Davidson MAIOH  
School of Science  
Western Sydney University  
Campus Delivery 1797  
Richmond NSW 2753

17<sup>th</sup> May 2024

**Enquiry regarding journal paper "*Assessment of Worker Exposure to Occupational Organic Dust in a Hemp Processing Facility*"**

To The Representative Authority

Thank you for your enquiry regarding our journal article "*Assessment of Worker Exposure to Occupational Organic Dust in a Hemp Processing Facility*" published in the Annals of Work Exposures and Health in 2020. In accordance with Edith Cowan University's Human Research Ethics Committee requirements, we are unable to disclose the identities of the business or study participants, nor any details that may make them identifiable. We can, however, provide the following information in response to the enquiry regarding occupational hemp dust.

The published paper is based on a pilot study with a very small data set and provides a snapshot of airborne occupational dust exposures based on the operational conditions at the time of monitoring. The study data should not be considered representative of potential airborne dust exposures for the proposed hemp mill, or any other hemp mill currently in operation.

The proposed hemp mill at Vervale differs significantly to the one in the study in terms of building design and construction, mechanical ventilation, localised dust capture systems for machinery, and systems of operation. These factors would significantly influence the potential atmospheric dust exposures generated within the facility during operation. In contrast, the mill in the study was a large, open plan shed without a mechanical ventilation system, relying on passive dilution ventilation by way of roller doors that were closed at the time of monitoring (Gardner et al. 2020). These factors would have contributed to the high airborne dust levels observed inside the premises during the study. The hammer mill was the only machine fitted with local exhaust ventilation (LEV), and this was operational during monitoring.

Our current research work has found that settled and airborne dust from a small set of hemp mills consists primarily of plant material, with traces of common soil minerals, likely originating from harvesting, windblown dust, or road transportation, and occasionally insect parts. The organic nature of the dust, primarily poorly soluble, low toxicity plant material, means that it should not pose a biosecurity nor food safety risk to adjacent food crops any more so than other wind generated aerosols, or dust clouds generated by other agricultural activities in the region. Further, the recommended post-harvest practices of rapid hydrocooling of asparagus in potable chilled water should remove any settle dust on plants from either local environment or generated during harvesting or transportation of the product to the processing plant (NSW Agriculture, 2004).

The proposed engineering controls for the Vervale Mill should capture airborne dust both at potential source generation (LEV affixed to plant), as well as from the general atmosphere of the facility



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(mechanical ventilation) integrated into a broader dust control plan incorporating the hierarchy of control approach (elimination, substitution, isolation and engineering, administration and personal protective equipment) should substantially reduce potential exposure to airborne dusts inside the mill if they are initiated and run as described, as well as maintained, serviced, routinely assessed and reviewed as part of the WHS Plan for the facility.

Hemp dust is not considered or classified as a carcinogen by Safe Work Australia (SWA), or the International Agency for Research on Cancer (IARC), respectively. The organic dust generated from milling hemp can be classified as “rogue dust” of low inherent toxicity, with a workplace exposure standard (WES) of 10 mg/m<sup>3</sup> (inhalable fraction) averaged over an 8-hour period (Safe Work Australia, 2024). The dust may also be referred to in the literature as poorly soluble/insoluble dusts not otherwise specified (Dusts NOS) of low inherent toxicity, which has a recommended limit of 1 mg/m<sup>3</sup> averaged over 8 hours, measured as the respirable fraction (Australian Institute of Occupational Hygienists [AIOH], 2012).

If you have any further questions or require more information, please do not hesitate to contact myself or Ms Gardner.

Kind Regards

Dr Maggie Davidson MAIOH  
Senior Lecturer Environmental Health & Occupational Hygiene  
Western Sydney University

Ms Melinda Gardner  
PhD Candidate  
Edith Cowan University

**Referenced Documents:**

Australian Institute of Occupational Hygienists. [2014]. *Dusts Not Otherwise Specified (Dust NOS) & Occupational Health Issues*. [Accessed on 25 May 2024]

Safe Work Australia. (2023). *GUIDANCE ON THE INTERPRETATION OF WORKPLACE EXPOSURE STANDARDS FOR AIRBORNE CONTAMINANTS*. [Accessed on 25 May 2024]