Date Issued: 26 October 2020

NOTICE OF AN APPLICATION FOR A PLANNING PERMIT

The land affected by the application is located at: **114 Jefferies Road, Locksley VIC 3665**

The application is for a Permit for: **Use and Development of land for a Dwelling**

The applicant for the Permit is: **TOMAINO, Sandro**

The application Reference Number is: **P2020-019**

You may view the application and any documents that support the application at the office of the Responsible Authority:

Strathbogie Shire Council
109A Binney Street Euroa
Telephone: (03) 5795 0000

This can be done during office hours and is free of charge.

Any person who may be affected by the granting of the Permit may object or make other submissions to the Responsible Authority.

An objection must be sent to the Responsible Authority in writing, include the reasons for the objection and state how the objector would be affected.

The Responsible Authority will not decide on the application before: **16 November 2020**

All objections are placed on the relevant Planning Permit application file, which is publicly available at all times. Objections can therefore be read and used by other parties.

An objection form is available from Strathbogie Shire Council office, by phoning Council on (03) 5795 0000 or at https://www.strathbogie.vic.gov.au/development/statutory-planning/objections

If you submit an objection, the Responsible Authority will tell you of its final decision.

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Submission to Strathbogie Shire Council

Proposed Use & Development of a Dwelling

114 Jefferies Road, Locksley

Prepared on behalf of Sandro Tomaino

January 2020 | Ref: 1152101

Tomkinson Group
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Document History and Status

Rev.	Status	Date	Project Manager	Project Reviewer
A	Final	January 2020	Ben Yates	Michael St Clair

CONTENTS

1 INTRODUCTION 3

2 REGULATORY TRIGGERS 4

2.1 Planning permit triggers 4

2.2 Aboriginal Heritage Act 4

3 THE SITE AND CONTEXT DESCRIPTION 5

4 THE PROPOSAL 7

5 THE PROVISIONS OF THE PLANNING SCHEME 8

5.1 Planning Policy Framework (PPF) 8

5.2 Local Planning Policy Framework (LPPF) 8

Responding to the Planning Policy Framework 8

5.3 Farming Zone 11

Clause 35.07-5 – Application requirements for a dwelling 12

Clause 35.07-6 – Decision Guidelines 13

5.4 Overlays 15

5.5 Particular Provisions 15

6 CONCLUSION 16

7 ATTACHMENTS 17

ATTACHMENT 1: COPY OF TITLE 18

ATTACHMENT 2: PHOTOS OF SITE AND SURROUNDS 19

ATTACHMENT 3: SITE AND CONTEXT PLAN 28

ATTACHMENT 4: DESIGN RESPONSE PLAN 29

ATTACHMENT 5: DWELLING PLANS 30

ATTACHMENT 6: LAND CAPABILITY ASSESSMENT REPORT 31

ATTACHMENT 7 – LAND CAPABILTIY ASSESSMENT – EXISTING SYSTEM UPGRADE 32

1 INTRODUCTION

This submission is made on behalf of Sandro Tomaino in support of a Planning Permit application seeking approval for the use and development of a dwelling at 114 Jefferies Road, Locksley.

The property is within the Farming Zone and unaffected by any Overlays

Details of the site and its surrounds are provided in Section 3, details of the proposal are provided in Section 4, an assessment of the subdivision in relation to the provisions of the Strathbogie Shire Planning Scheme is provided in Section 5.

The following documents must be read in conjunction with this report and are provided as part of the application:

- Copy of Title (Attachment 1)
- Photos of the site and surrounds (Attachment 2)
- Site Context Plan (Attachment 3)
- Design Response Plan (Attachment 4)
- Dwelling Plans (Attachment 5)
- Land Capability Assessment (Attachment 6)
- Land Capability Assessment – Existing System Upgrade (Attachment 7)

2 REGULATORY TRIGGERS

2.1 Planning permit triggers

The proposed use and development require a planning permit pursuant to the following provisions of the Strathbogie Shire Planning Scheme:

Planning Scheme provision	Permit Trigger	Relevant permit application requirements
Farming Zone: **Clause 35.07-1**	Use of land for a dwelling (Section 2 Use)	• Access via an all-weather road • Land capability assessment • Dwelling plans and elevations • Statement against decision guidelines for the Zone
Farming Zone: **Clause 35.07-4**	Buildings and works associated with a Section 2 Use	

2.2 Aboriginal Heritage Act

The subject site is not located within an area of cultural heritage sensitivity. The proposed development is not a high impact activity, being the construction of one dwelling. A Cultural Heritage Management Plan is therefore not required for this development pursuant to the Aboriginal Heritage Regulations 2018.

3 THE SITE AND CONTEXT DESCRIPTION

Formally identified as Lot 1, LP 125177, the subject site is located at 114 Jefferies Road, Locksley. The property has a 207m frontage to the Hume Freeway and associated service road, Jefferies Road. Total site area equals 19.85Ha. The property is semi-rectangular in shape and accessed via a gate and crossover from Jefferies Road, a sealed all-weather rural road. Access into the property is available via a gravel all-weather driveway. The property is fenced in typical rural post and wire fencing.

The property is located approximately 3km south of the rural locality of Locksley and 14km form the rural township of Avenel to the east. Access is available from the Hume Freeway running parallel to Jefferies road and via the surrounding network of rural roads. The site is currently serviced by electricity and telecommunications, no reticulated water or sewer are available in the area. A minor waterway running east-west feeds two dams on the site.

The property and all adjoining properties are located entirely within the Farming Zone. The road reserve adjoining the northern boundary is zoned RDZ1 land following the alignment of the Hume Freeway road reserve extending east-west from the site. The site is located in a broader area of privately owned Farming Zone land interspersed with pockets of Public Conservation and Resource Zone (PCRZ) land covering sites of environmental significance.

Figure 1: Location and Zoning context

The site has is currently used for the purposes of small-scale viticulture and developed with a vineyard. The vineyard is currently irrigated by dams located within the property. Other agricultural activities on the property include stock-feed production and domestic calf rearing and cattle grazing. Other development on the property includes shedding ancillary to agricultural uses on the site. The site is largely cleared of all vegetation, land rises gently north-south across the property.

The site currently contains a dwelling being used in conjunction with the existing agricultural use on-site. The small dwelling contains one bedroom, combined kitchen and living area, bathroom and toilet.

Properties adjoining the site are all used for the purposes of agriculture and developed in a similar fashion to the subject site. Most properties of a similar size are developed with dwellings and feature agricultural activities commonly associated with dryland farming. No intensive agricultural uses are located within the immediate vicinity of the property and many larger undeveloped allotments more suited to broadacre activities are prevalent in the area. Capacity for broadacre activities on the subject site are limited due to its smaller allotment size.

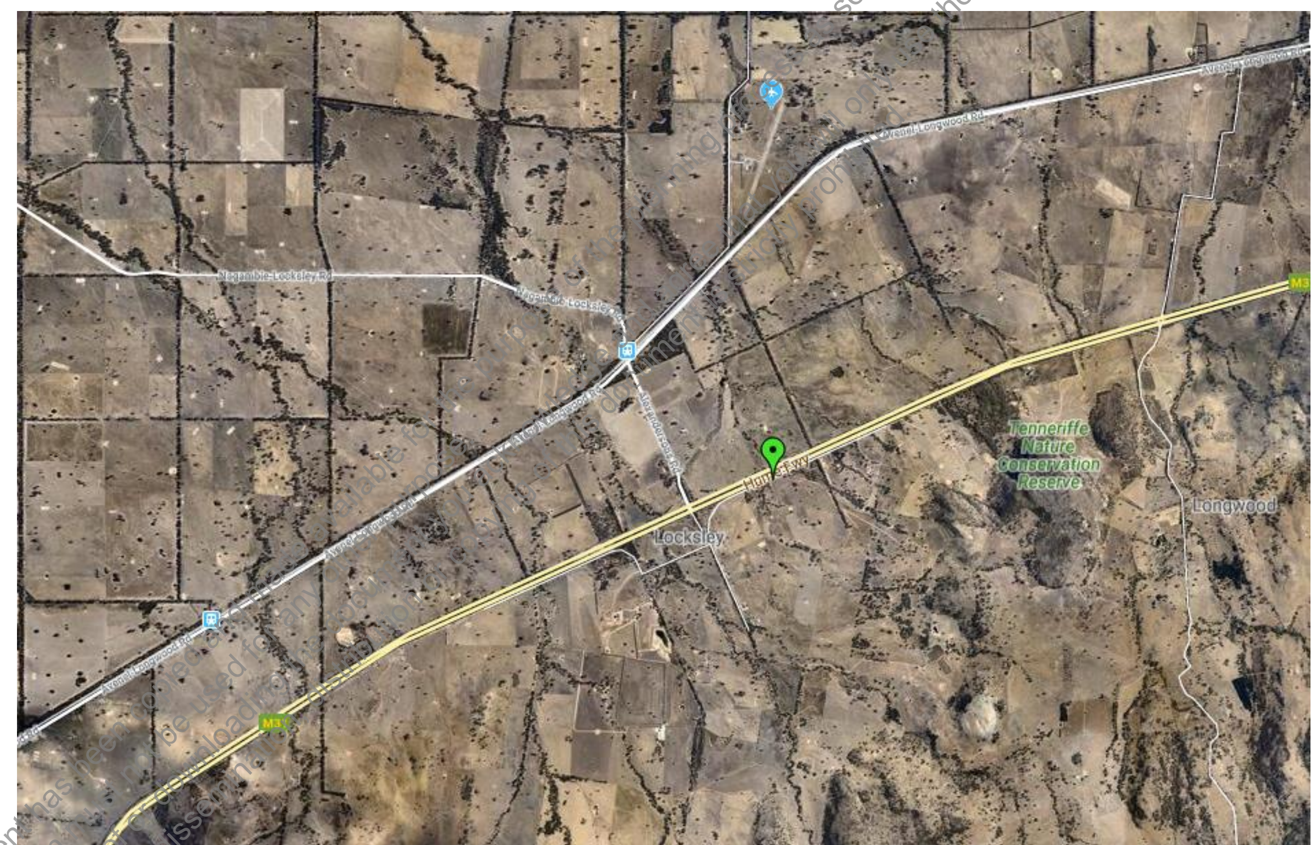

Figure 2 - Land surrounding Subject Site

- *Refer to Attachment 1 for Copy of Title*
- *Refer to Attachment 2 Photos of Site and Surrounds*
- *Refer to Attachment 3 Site and Context Plan*

4 THE PROPOSAL

Use and development of a dwelling is proposed for the subject site. The dwelling will be located within proximity of the existing farming operation and associated development on the property. The proposed dwelling will replace the existing dwelling currently used on the property. (Refer to Attachment 5).

The proposed dwelling will contain three bedrooms and will be located within the front third of the property between the vineyard and eastern boundary. The proposed replacement dwelling site will be approximately 344m from Jefferies Road and 27m from the eastern boundary.

Proposed dwelling will feature shared kitchen, family and lounge area, dining room, study, separate bathroom, laundry and ensuite. Dwelling footprint will be approximately 22m x 20m in size.

Access to the dwelling will be via the existing crossover and extension of the driveway from Jefferies Road. A new driveway link extending east from the limits of the existing driveway will service the new dwelling. The new driveway will be constructed to the satisfaction of the Responsible Authority and capable of supporting emergency vehicles. (See Attachment 4 – Design Response Plan for details).

Water will be provided by water tanks connected to the dwelling. A dedicated water supply of 10,000 Litres will be provided for firefighting purposes.

Reticulated sewerage is not available to the property. All wastewater is will be be retained, treated and managed within the subject site in accordance with the Land Capability Assessment prepared for the proposal (Attachment 6). The assessment was authored by Troy Spencer and dated 18/11/2018. The Land Capability Assessment demonstrates there will be no impact from the proposed development on water quality in the catchment.

The existing dwelling will be converted into a shed for use in association with the agricultural use on the property. The kitchen and bathroom will be removed, and the toilet retained for continued use. The dwelling's existing wastewater arrangements will be upgraded to modern standards as a component of the development. A supplement to the Land Capability Assessment prepared for the proposal identifies strategies to bring the existing wastewater system into line with modern standards (Attachment 7). An additional wastewater field will be provided for management of wastewater from the shed.

The proposed dwelling will be connected to all reticulated services available to this area, including electricity and telecommunications. No vegetation removal is required to facilitate construction of the dwelling.

The lot is capable of supporting small-scale productive uses (e.g. domestic stock, small-scale horticulture), however large traditional broadacre agriculture is not possible on this site given its smaller size. A house on the site is required to ensure the ongoing management of land, vines and stock onsite and more active control of pest plants and animals.

- *Refer to Attachment 4 for the Design Response Plan.*
- *Refer to Attachment 5 for the Dwelling Plans and Elevations.*
- *Refer to Attachment 6 for the Land Capability Assessment report.*

5 THE PROVISIONS OF THE PLANNING SCHEME

5.1 Planning Policy Framework (PPF)

The following Planning Policy Framework (PPF) clauses are believed relevant to this proposal:

- Clause 11 – Settlement
- Clause 12 – Environmental and Landscape Values
- Clause 13.02 – Bushfire
- Clause 14.01 – Agriculture
- Clause 14.02 – Water
- Clause 16 – Housing

5.2 Local Planning Policy Framework (LPPF)

The following Local Planning Policy Framework (LPPF) clauses are considered to be relevant to this proposal:

Clause 21 – Municipal Strategic Statement (MSS)

- Clause 21.02 – Vision and Framework Plan
- Clause 21.03 – Settlement
- Clause 21.05-5 – Bushfire
- Clause 21.06 – Natural Resource Management

Clause 22 – Local Planning Policies

- Clause 22.01 – Housing and House Lot Excision in the Farming Zone

Responding to the Planning Policy Framework

This proposal aligns with the Planning Policy Framework. The proposed development promotes sustainable growth and development in the Avenel/Euroa area and provides protection of rural land, natural resources and environmental assets through good wastewater management and land management practises associated with rural living. The proposed dwelling will not remove productive land permanently from agriculture. The proposal effectively enhances the agricultural viability of land that has relatively low productive capacity through improved management practises.

The proposed use and development of the land for a dwelling is consistent with other use and development in the area, particularly on neighbouring farms and smaller lots, which are already developed with dwellings. Much of the land in the area is not utilised for broadacre agricultural activities. The proposal for a dwelling on the subject site would not result in the loss of productive agricultural land in the area or the ability of neighbouring properties to conduct agricultural activities.

Use and development of this parcel of land for a dwelling aligns with Clause 11, where settlement is encouraged in areas with existing amenity and infrastructure. The site's proximity and ease of access to Avenel and Euroa makes it well-sited to take advantage of the amenity and infrastructure offered by these regional communities. Roads servicing the site are of a high standard and provide the site with safe and sustainable

access. Access to the site via Jefferies Road would not disrupt the service, safety and amenity of the main transport route, Hume Freeway.

No vegetation removal is proposed as part of this application. The proposed dwelling will be suitably setback from nearby waterways and proposed in a location that will not require the removal of any vegetation. The proposal accords with the intent of state policy by ensuring all wastewater generated within site will be retained, treated and managed on site. The wastewater envelope is sufficiently large to accommodate suitable primary and secondary effluent disposal areas. The wastewater envelopes were identified through the attached Land Capability Assessment (refer to Attachment 6). In addition, the development of a dwelling would include appropriate measures to restrict sediment discharge from the site in accordance with *Construction Techniques for Sediment Pollution Control (EPA 1991).*

The proposal will not have any adverse impact on the natural environment of the site and surrounds. The proposed dwelling is expected to achieve a better land management outcome by having a permanent manager's residence onsite, thereby enabling regular monitoring and control of pest plants and animals and ongoing maintenance of the property. The dwelling will provide for a replacement dwelling on an operational farming property, thereby enabling the more effective management of horticultural activities and stock. The dwelling will provide for ongoing daily management of stock welfare while providing for increased security against stock theft. A dwelling will ensure the more effective management of irrigation of vines onsite and mitigate the effects of extreme heat or cold events on produce. The proposed replacement dwelling will be developed in support of a proven agricultural venture on the property and not for the purposes of developing a lifestyle property. The proposed dwelling and setbacks from adjoining agricultural land and dwellings is consistent with the surrounding land use pattern and would not result in the loss of productive agricultural land in the area.

The subject site and adjoining properties have been identified as a bushfire-prone area. The proposed use and development of the site has been designed and sited with consideration of bushfire risk to the site. The proposed dwelling has been sited away from any significant vegetation on the property. Sufficient space is available for the establishment and management of defendable space.
Development of a dwelling on the property would result in more active management of fuel loads on the property, further reducing the bushfire risk to surrounding dwellings and human life. A high quality, gravel all-weather access road is available into the site capable of supporting the ingress of and egress of emergency vehicles. There is sufficient space available within property boundaries to accommodate the turning of vehicles. The proposed dwelling will feature a 10,00 litre water tank with CFA fittings and sufficient reserves for firefighting purposes.
Landscape risk to the site is likely to be limited to the approach of a fire front taking hold in grassland surrounding the property. However, the degree of risk to the site is reduced due to the availability of multiple exit options to safer areas and close proximity to the Locksley and Upton Hills fire station. Landscape risk to the site is further reduced as a result of regular grazing of pastures surrounding the site, and controlled burns to reduce fuel loads by adjoining landowners.

The proposal accords with policy by ensuring all wastewater from the dwelling will be retained, treated and dispersed on site within respective wastewater disposal systems which will meet the requirements of the Septic Tank Code of Practice and the requirements of the Responsible Authority. It is well located in relation to existing infrastructure and services.

LOCAL POLICY RESPONSE

Local policy for the use and development of land in the Farming Zone discourages development of small lots in the Zone for housing, however the policy notes circumstances where it is appropriate. The site is located in an area of typically lower agricultural quality land and will not impose on existing farming operations due to the provision of sufficient buffers from adjoining uses within the site and on adjoining properties.

As identified in Strathbogie Shire's 2004 Rural Land Use Strategy, agricultural capacity of adjoining and surrounding land is likely to be limited to Dryland Grazing due to soil and climatic conditions. Impacts from any adjoining agricultural use is likely to be negligible. The Proposed use and development of a dwelling will enable the continued management of agriculture on the property to a level currently allowed by the existing dwelling onsite. The pursuit of viticulture on the property requires the careful monitoring of plant health and control of pest plants and animals. A farm manager living onsite will facilitate the management regime required for grape production and domestic calf rearing. The ongoing presence of a land manager onsite will allow for more effective irrigation practices in response to seasonal conditions and extreme weather events.
The development of a dwelling on this property seeks to enable the use of the site for more enhanced grape production and domestic stock rearing, further supporting the ongoing use of the land into the future for productive purposes. Thereby retaining the land as productive agricultural resource into the future. A dwelling is essential for the daily management of stock welfare and security. Facilitating stock breeding on the site further diversifies the agricultural base of the Shire.

The presence of a dwelling onsite will not result in the intensification of the existing agricultural use onsite. A replacement dwelling will allow the continued operation of a viable small-scale farming operation in the area. The existing use of a dwelling onsite has demonstrated an effective contribution to maintaining a sustainable rural pursuit on the property. As no further intensification of use is proposed, a Farm Management Plan is not provided with the proposal. The existing use onsite has effectively demonstrated the degree which the proposed dwelling is necessary for the rural activity of the land and assisting in the operation of the farm.
Development of a dwelling on this property allows for the sustained operation of an existing productive agricultural use on the land. The proposal will not lead to the loss or fragmentation of agricultural land, instead solidifying the property's position as an agricultural asset.

All wastewater will be carefully managed and treated onsite to ensure the development does not negatively impact upon the natural resource base and water quality of the area. There will be no impact on catchment water quality as a result of this development, as demonstrated in the Land Capability Assessment (Attachment 5).

A high quality all-weather access road is available into the property and dwelling site. Existing access arrangements are capable of supporting the ingress and access of emergency vehicles.

The provision of this dwelling provides for an additional dwelling, further supporting the agricultural capacity of the municipality.

5.3 Farming Zone

The land is included within the Farming Zone (FZ) under the Strathbogie Planning Scheme. The purpose of the Farming Zone is to ensure that non-agricultural uses, particularly dwellings, do not adversely affect the use of land for agriculture and to encourage use and development of land based on comprehensive and sustainable land management practices and infrastructure provision.

The following permit triggers apply under the FZ provisions:

Planning Scheme provision	Permit Trigger	Relevant permit application requirements
Clause 35.07-1	Use of land for a dwelling (Section 2 Use)	• Access via an all-weather road • Land capability assessment • Dwelling plans and elevations • Statement against decision guidelines for the Zone
Clause 35.07-4	Buildings and works associated with a Section 2 Use	• Non Specified

Use of land for a dwelling must meet the requirements of Clause 35.07-2:

Table 1: Addressing Clause 35.07-2 - Use of land for a dwelling in the Farming Zone

Standard	Response
Access to the dwelling must be provided via an all-weather road with dimensions adequate to accommodate emergency vehicles	The site will be accessed via an existing crossover from Jefferies Road. Jefferies Road provides direct access to Hume Freeway from which access to nearby townships Euroa and Avenel. Additional access is available via the surrounding rural road network servicing agricultural properties in the area, all of which are all-weather roads with dimensions adequate to accommodate emergency vehicles. The proposed driveway extension to the dwelling will be of suitable dimensions to accommodate emergency service vehicles and enable them to turn around within the property.
The dwelling must be connected to a reticulated sewerage system or if not available, the wastewater must be treated and retained on-site in accordance with the State Environment Protection Policy (Waters	The dwelling will be connected to a wastewater treatment system, in line with the recommendations of the Land Capability Assessment (LCA) in Attachment 6. The LCA has designed the wastewater treatment system to ensure the waste water is treated and retained on site in accordance

Standard	Response
of Victoria) under the Environment Protection Act 1970.	with the State Environment Protection Policy (Waters of Victoria) under the Environmental Protection Act. The system will be located and installed in accordance with the recommendation of the LCA and to the satisfaction of the responsible authority.
The dwelling must be connected to a reticulated potable water supply or have an alternative water supply with adequate storage for domestic use as well as fire fighting purposes.	The allotment does not have access to a reticulated water supply. Appropriate size rainwater tanks will be installed as an alternative source of water supply for domestic, stock and firefighting purposes, and be in line with regulations (i.e. minimum 10,000 litres dedicated for firefighting purposes). There is also a dam on the property to provide additional water as required.
The dwelling must be connected to a reticulated electricity supply or have an alternative energy source.	Reticulated power is available from Jefferies Road and currently services the existing dwelling onsite.

Clause 35.07-5 – Application requirements for a dwelling

An application to use a lot for a dwelling must be accompanied by a written statement which explains how the proposed dwelling responds to the decision guidelines for dwellings in the zone. This is provided below and in the body of this report.

Clause 35.07-6 – Decision Guidelines

The following is a response to the Decision Guidelines at Clause 35.07-6 for an application to use a lot for a dwelling:

GENERAL ISSUES

- The proposal has been considered against the Planning Policy Framework as provided in Section 5.1 and 5.2 of the submission.

- The proposal aligns with the vision and principles of the Goulburn Broken Regional Catchment Strategy. The proposed dwelling will protect natural assets including waterway health and water quality. A full-time land manger onsite will enable more active control of pest plants and animals.

- All wastewater from the proposed dwelling will be retained, treated and managed on site with a wastewater disposal system meeting the requirements of the Septic Tank Code of Practise and the requirements of the Responsible Authority (refer to the Land Capability Assessment).

- The proposal is compatible with the adjoining use and development of surrounding properties along Jefferies Road and Alexandersons Road.

- The dwelling will connect to all available reticulated services and utilise the existing road network and crossover for access.

AGRICULTURAL ISSUES

- The land's size and location make it less suitable for traditional broadacre agricultural practices. The proposed dwelling will enable the property to be more actively managed. The continued presence of a full-time land manager on-site will allow more effective management of stock health and mitigation of environmental factors such as frost or extreme heat events affecting grape vines.

- The proposal demonstrates that the property can treat and retain wastewater and effluent on site in accordance with the Septic Tank Code of Practice and Council's Environmental Officer requirements. This will prevent any wastewater entering the nearby waterway and water supplies.

- The proposed use of the land of a dwelling associated with the farming use will not have any adverse impact on the surrounding land uses. The proposal would be consistent with this existing land use pattern.

- The proposed new dwelling will not impact negatively on agriculture productivity of the land, given its relatively low productive potential and buffers from adjoining agricultural land.

DWELLING ISSUES

- The provision of a dwelling on this allotment will not result in loss or fragmentation of productive farmland, rather enabling more active management of the land for sustainable management (In particular, pest, plant and animal management).

- The dwelling is unlikely to be adversely affected by dust, noise, odour, use of farm machinery or traffic generated by surrounding agricultural activities due to the type of uses being low impact (e.g. mainly haymaking). The proposed new dwelling will not affect the expansion of nearby agricultural uses.

- There is a low concentration of dwellings in the immediate vicinity of the property. The addition of the dwelling on the proposed lot will not result in a proliferation that could impact on surrounding agricultural land.

- Development of this lot for a dwelling is considered to be within the character of the surrounding properties. This style of development is most suited to this area to enable niche and micro-scale agriculture to occur in an area that can no longer support broadacre agricultural practices.

ENVIRONMENTAL ISSUES

- Net environmental benefit will be achieved as a result of:

  - An approved wastewater system to treat and retain effluent on site.
  - More active management of the site due to a permanent dwelling being constructed on the site, resulting in more effective onsite management of any pest plants and environmental weed infestations.
  - More sustainable irrigation practices.
  - Improved management of bushfire hazards onsite.
  - Continued protection of the waterway through existing fencing and stock management practises.

DESIGN AND SITING ISSUES

- The siting of the dwelling has been chosen to minimise impacts on the waterway, whilst minimising bushfire risk to the residents. It is considered that the proposed location of the dwelling avoids adverse impacts on landscape features, major roads and vistas.

- The siting and location of the dwellings will not result in the loss of any native vegetation.

- The use of non-reflective building materials and muted colors would further contribute to the dwellings blending into the landscape.

- A modest sized dwelling will not affect environmental, natural resource, aesthetic or amenity values of the area.

- The site will utilise existing electricity and telecommunications infrastructure. The access to the site will need to be extended to council's satisfaction. The existing road network is considered capable of supporting any additional vehicular movements as a result of the new dwelling at this location.

5.4 Overlays

No overlays affect the site.

5.5 Particular Provisions

No Particular Provisions applicable to the proposal.

6 CONCLUSION

The proposed construction of a replacement dwelling and subsequent use is consistent with the relevant objectives and policies as stated in the Strathbogie Planning Scheme.

The subject site can be developed and serviced with minimal impact on existing infrastructure and with no impact on natural resources. The proposed development is compatible with and complementary to the surrounding environment and neighbourhood and considered capable of maintaining the landscape character of the area.

Development of a replacement dwelling will enable the more effective and sustainable management of the existing agricultural use on the property.

The proposal is commended to Council and, on behalf of our client, we look forward to a positive outcome from the application.

7 ATTACHMENTS

ATTACHMENT 1: COPY OF TITLE

ATTACHMENT 2: PHOTOS OF SITE AND SURROUNDS

Jefferies Road, bearing west.

114 Jefferies Road Access.

114 Jefferies Road, Crossover.

Driveway into property, facing North towards Jefferies road.

Adjoining dwelling and outbuilding, westernmost boundary. Viewed from driveway

Existing dwelling onsite.

Grapevines, bearing northeast from Driveway.

Machinery Shed, facing east. Grapevines and internal access track also pictured.

Eastern edge of Vines, bearing north.

Proposed building site, bearing north.

Bearing Northeast from grape vines

Facing proposed building site, viewed from eastern edge of grapevines.

Access track through property. Bearing South from machinery shed. Dam pictured left.

Dam in centre of property, bearing north.

Grazing land, looking towards southernmost boundary of property

East towards Teneriffe Reserve.

Waterway through property, facing west.

ATTACHMENT 3: SITE AND CONTEXT PLAN

ATTACHMENT 4: DESIGN RESPONSE PLAN

ATTACHMENT 5: DWELLING PLANS

ATTACHMENT 6: LAND CAPABILITY ASSESSMENT REPORT

ATTACHMENT 7: LAND CAPABILTIY ASSESSMENT – EXISTING SYSTEM UPGRADE

SCALE 1:500
5 0 5 10 15 20 25
LENGTHS ARE IN METRES - PAPER SIZE A3

Principal Sandro Tomaino

CONCEPT PLAN

Tomkinson Group
Project Managers Development Planners
Licensed Surveyors Civil Engineers
ISO 9001:2015 FS520488
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PO Box 421, Bendigo 3552 57 Myers Street, Bendigo 3550
web: www.tomkinson.com email: bendigo@tomkinson.com

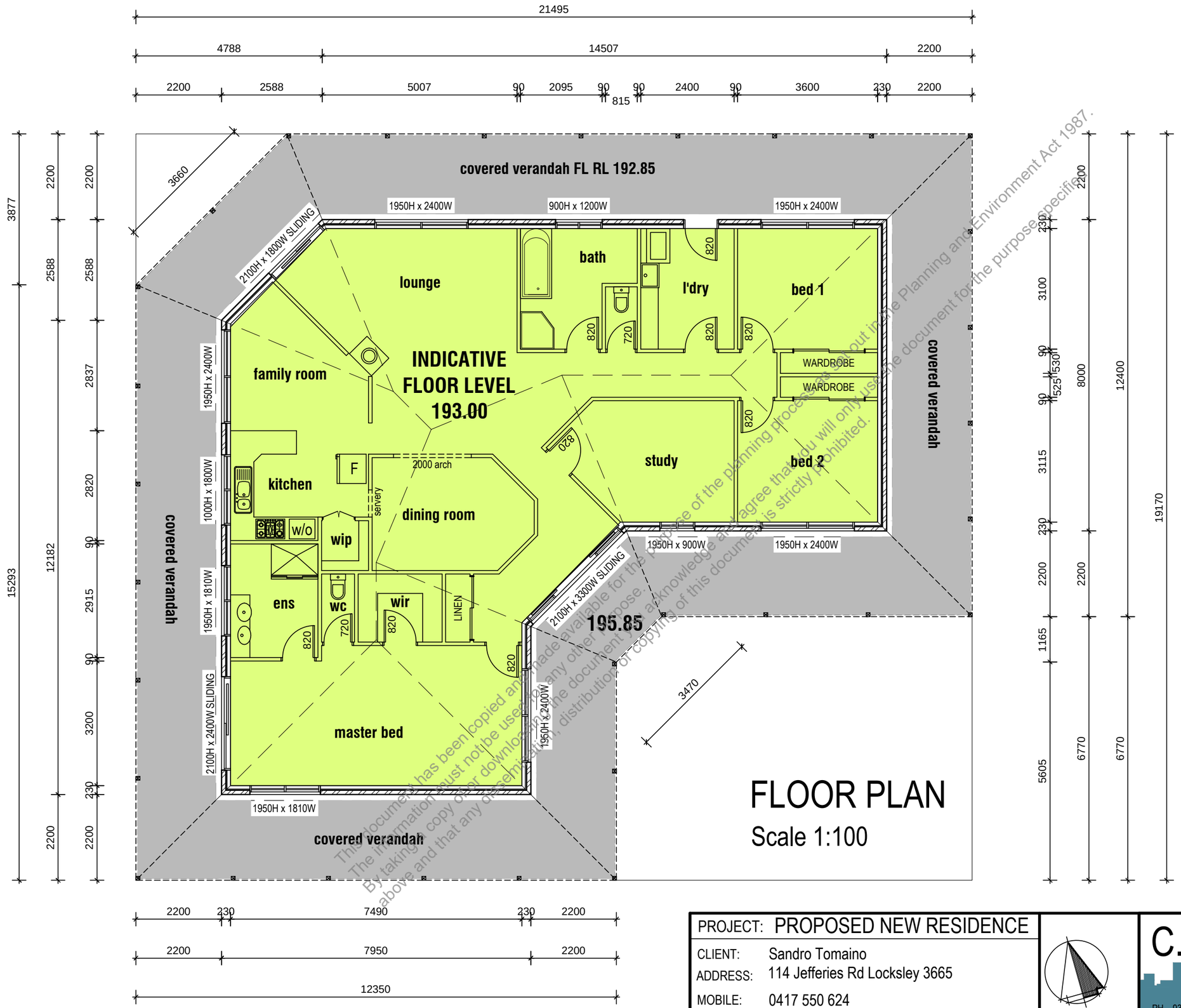
USE & DEVELOPMENT OF A DWELLING
114 JEFFERIES ROAD, LOCKSLEY
Design Response Plan

REV		DESIGNED	DRAFTED	CHECKED	DATE
A	AS SUBMITTED TO CLIENT	BY	BY	AD	11/12/2018

Municipality & Ref:
SHIRE OF STRATHBOGIE
PP REFERENCE

SHT 1 OF 1 REV A

Drawing No:
1152101 - DRP



SITE AREA ANALYSIS		
TOTAL SITE AREA	198435	m²
BUILDING AREA		
GROUND FLOOR	190.00	m²
VERANDAH	153.0	m²
TOTAL	343.0	m²
TOTAL BUILDING SQUARES	36.9	squares

AIR CONDITIONING UNIT
IF REQUIRED, TO BE SAME COLOUR AS ROOF, LOW PROFILE TOWARDS THE REAR OF THE HOME. PLACE BELOW RIDGE LINE. NOT VISIBLE FROM STREET FRONTAGE

ANTENNA/ SATELITE
TV AND SATELITE DISHES SHOULD BE LOCATED ON THE SIDE OR REAR OF THE BUILDING

WATER TANK
PROVIDE 2000 LITRE RAINWATER TANK TO BE PLUMBED TO ALL TOILET SYSTEMS WITH EXTERNAL TAP PRIOR TO HANDOVER, TO BE PLACED SO AS NOT TO BE VISIBLE FROM ROAD

HOT WATER SERVICE
TO ACHIEVE A 60% SOLAR COVERAGE. PLUMBER TO SUPPLY RBS CERTIFICATE. LOCATION OF SOLAR PANELS (S.P) AS PER SITE PLAN TO BE APPROVED BY THE DEVELOPER. NOT VISIBLE FROM STREET FRONTAGE.

GENERAL NOTES:

1. THESE DRAWINDS ARE TO BE READ & USED IN CONJUCTION WIYH SPECIFICATIONS, DETAILS, STRUCTURAL ENGINEERS DRGS & COMPUTATIONS
2. FIGURED DIMENSIONS TO TAKE PREFERENCE TO SCALE
3. DENOTES CHECK ON SITE C.O.S.THE BUILDER SHALL CHECK ALL DIMENSIONS AND LEVELS PRIOR TO COMMENCING ANY WORKS, ANY DISCREPANCIES TO BE REPORTED IMMEDIATELY
4. THE BUILDER SHALL BE RESPONSIBLE FOR SITE WORKS AND SUPERVISION OF CONSTRUCTION, AND SHALL ENSURE THE SAFETY OF THE BUILDING AND ALL ADJOINING PROPERTIES IN THE AFFECTED VICINITY.
5. THE BUILDER SHALL BE RESPONSIBLE FOR CALLING OF ALL NECESSARY COUNCIL INSPECTIONS AS REQUIRED
6. ALL WORK TO BE DONE IN ACCORDANCE WITH BUILDING CODE OF AUSTRALIA, COUNCIL BY LAWS & REQUIREMENTS & RELEVANT CODES.

FLOOR PLAN
Scale 1:100

PROJECT: PROPOSED NEW RESIDENCE

CLIENT: Sandro Tomaino
ADDRESS: 114 Jefferies Rd Locksley 3665
MOBILE: 0417 550 624
EMAIL: vsdelectrical@gmail.com

NORTH

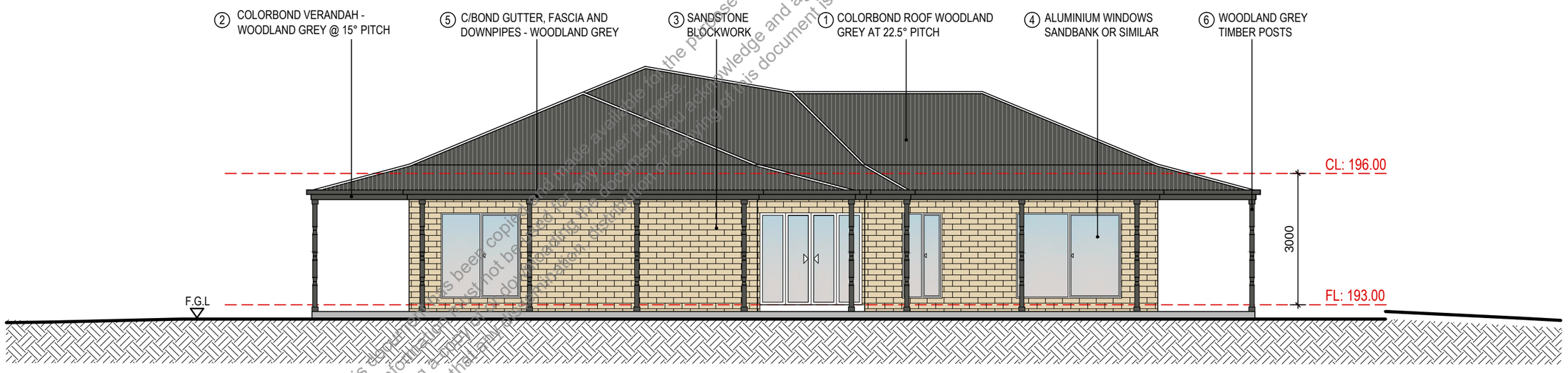
C.C.D. DRAFTING PTY. LTD.
Shop 4/39 DINAH PDE. EAST KEILOR 3033
PH. 9331 4280

DRAWN: D.M. | SCALE: AS NOTED | JOB No. 19-022
SH. NO. 1 of 3 | DATE: AUGUST 2019

NOTE: LEVELS ARE INDICATIVE AND MAY VARY DEPENDING ON SITE CONDITIONS

NORTH ELEVATION Scale 1:100

NOTE: LEVELS ARE INDICATIVE AND MAY VARY DEPENDING ON SITE CONDITIONS

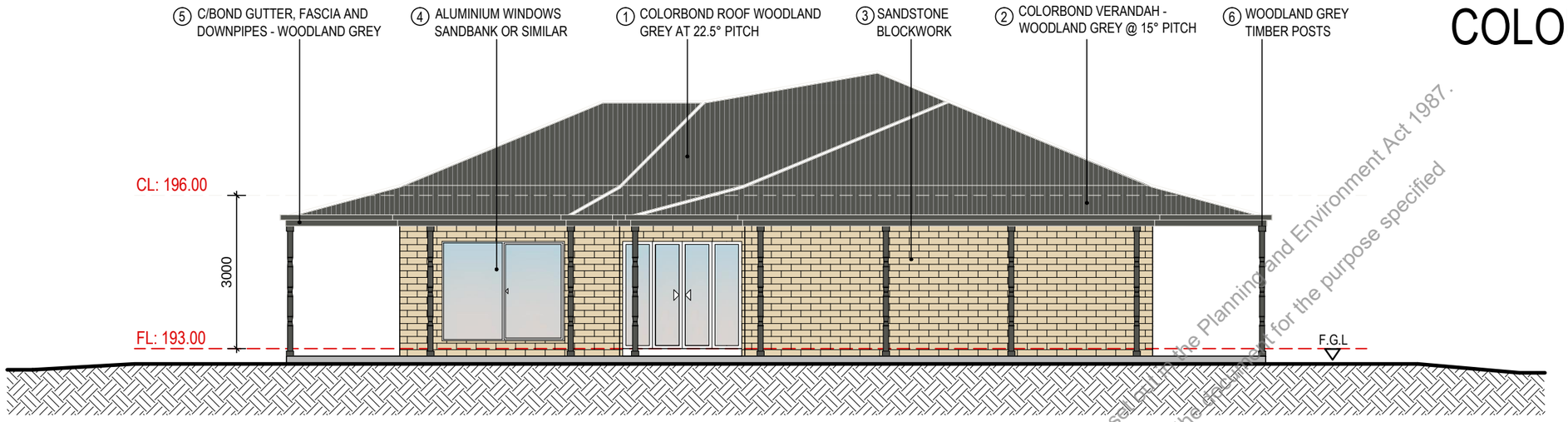


SOUTH ELEVATION Scale 1:100

PROJECT:	PROPOSED NEW RESIDENCE
CLIENT:	Sandro Tomaino
ADDRESS:	114 Jefferies Rd Locksley 3665
MOBILE:	0417 550 624
EMAIL:	vsdelectrical@gmail.com

C.C.D. DRAFTING PTY. LTD.
Shop 4/39 DINAH PDE. EAST KEILOR 3033
PH. 9331 4280

DRAWN: D.M.	SCALE: AS NOTED	JOB No. 19-022
SH. NO. 2 of 3	DATE: AUGUST 2019	



EAST ELEVATION Scale 1:100

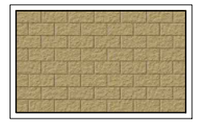
NOTE: LEVELS ARE INDICATIVE AND MAY VARY DEPENDING ON SITE CONDITIONS

WEST ELEVATION Scale 1:100

COLOURS & MATERIALS

1 COLORBOND ROOF - WOODLAND GREY

2 COLORBOND VERANDAH - WOODLAND GREY



3 SANDSTONE BLOCKWORK - AUSTRAL DESERT FAWN

4 WINDOWS & DOORS ALUMINIUM C/BOND SANDBANK OR SIMILAR

5 GUTTERS / DOWNPIPES - ALUMINIUM C/BOND WOODLAND GREY OR SIMILAR

6 TIMBER POSTS - WOODLAND GREY

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SH. NO. 3 of 3 | DATE: AUGUST 2019

Landography

Land Capability Assessment

Address:	114 Jefferies Road Locksley, Vic 3665
Client:	Sandro Tomainno
Proposed:	Dwelling
Prepared by:	Troy Spencer, A.DipSc, G.DipPlan
Reference No:	Land#001
Date:	18/11/2018

Contents

1. Summary of findings and recommendations 3
2. Site and development overview 3
3. Investigation method 5
4. Desktop review and site inspection findings 6
    - 4.1 Rainfall & Evaporation Data for the Locality 6
    - 4.2 Slope and Aspect 6
    - 4.3 Slope Stability 6
    - 4.4 Surface Drainage 6
    - 4.5 Existing Vegetation 6
    - 4.6 Groundwater 7
    - 4.7 Soil Unit Types 7
    - 4.8 Subsurface Soil Profile 7
    - 4.9 Soil Permeability 8
    - 4.10 Basement Permeability 8
    - 4.11 Colloid Stability 8
    - 4.12 Soil Classification 8
    - 4.13 Nutrient Attenuation 8
    - 4.14 Wastewater Generation Calculation 9
5. Land capability assessment summary 12
    - 5.1 Risk mitigation and management measures 13
6. System type and design 13
7. Owners information – system management 14
8. Assessors qualifications and insurance details 14
9. References 15
10. Attachments 15

1. Summary of findings and recommendations

The purpose of this Land Capability Assessment is to determine the classification for a system for a proposed dwelling site at 114 Jefferies Road, Locksley. The dwelling will contain five bedrooms and will be located on land that is 20 hectares in size. The farm contains an established vineyard and associated storage shedding and dams. The assessment is in a medium risk area as defined by the Strathbogie Shire Council.

The assessment identified land capability rates of good to fair with a weakly structured sandy loam and recommends that the wastewater treatment system should provide an area of 299m^2 with 125 metres of trenched effluent fields with a primary septic tank system.

2. Site and development overview

The subject land is located within a rural area of the Strathbogie Shire Council in the Farming Zone of the Strathbogie Planning Scheme. The property is 20 hectares in area and contains a farm storage shed, open machinery shed and a free-standing hay shed. In addition to this, a two-acre wine grape vineyard is established centrally and is irrigated by a water storage dam. The property is fenced into paddocks and a small number of angus beef cattle with calves are being grown commercially.

The property contains minor waterways that are seasonal and dependent on runoff from the nearby hills. The Hume Freeway fronts the site, and the access to the site is via Jefferries Road (service road) which runs parallel to the Freeway.

The proposed dwelling will contain five bedrooms and will be located within the front third of the property between the vineyard and the eastern boundary. A setback from the eastern boundary of 33 metres and 337 metres from the northern (front) boundary. The dwelling footprint is 22 metres by 20 metres in size with five bedrooms, two lounge rooms, bathroom, ensuite and laundry.

The water storage dam is upslope from the dwelling in a south-westerly direction. The distance between the dwelling and the dam will be 63 metres. The waste water treatment area is located to the north of the dwelling and will be an additional 40 metres north (downslope), providing a setback between the effluent fields and the dam of 103 metres. A waterway is 102 metres from the proposed effluent disposal area (refer to Site Layout Plan).

The subject land slopes gently from the southeast corner in a downhill direction to the northwest corner. The highest point on the land is in the southeast corner at

205 metres above sea-level. The lowest point on the land is in the northwest corner at 185 metres above sea-level. That is a gradual fall of 20 metres across the entire property.

Photographs of the dwelling site and effluent disposal area are shown below:

Dwelling Site (looking southeast) "Upslope"

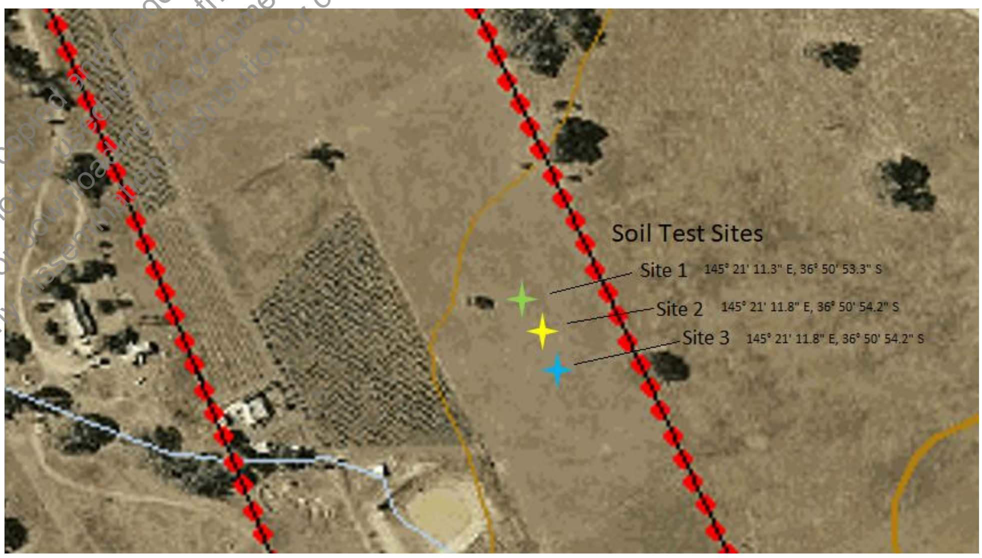
Effluent Disposal Area (taken from the dwelling site looking northwest) "Downslope"

3. Investigation method

An initial onsite meeting with the landowner, Mr Sandro Tomainno took place on Monday 7th November 2018 and the soil assessment was carried out on Friday 16th November 2018. A total of three soil test sites were selected after measuring the desired setback distances from the dwelling, waterway and water storage dam. Also, the setback distances from the nearest boundaries helped pinpoint an ideal location for wastewater, which is downslope from the dwelling site.

Three boreholes were created using a 100-millimetre handheld auger. The test sites provided a consistent scope of the desired location, and each soil profile was placed upon a plastic tarp to enable visual characteristics to be easily viewed and collected into labelled sample bags. A depth of 750-millimetres was augered and demonstrated three distinct horizons (A, B & C).

Soil Auger test - Site 1



Soil Test – Bore Hole Sites

4. Desktop review and site inspection findings

4.1 Rainfall and evaporation data

Table 1. Redistribution of Rainfall

Rainfall to be redistributed (9th decile)	748.7	mm/yr
Minimum mean rainfall	34.6	mm
9th decile (annual) – mean rainfall (annual)	181.8	mm

Table 2. Weather Station and Rainfall Details

Weather Station: Mangalore Airport							**Number:** 088109						
Date timeframe: 22/11/2018			**Latitude:** 36.89 °S				**Longitude:** 145.19 °E				**Elevation:** 141m		
Statistic	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Annual**
Mean	40.8	34.6	35.5	38.9	53.1	52.7	57.2	61.1	54.4	45.3	47.5	41.1	566.9
Lowest	0.0	0.6	1.6	3.8	3.6	3.4	7.8	5.0	8.6	0.0	0.0	0.6	258.7
1st %ile	9.6	2.8	6.8	9.2	16.2	19.4	21.1	21.9	19.4	9.0	12.6	4.7	392.1
5th %ile	31.4	21.9	29.0	36.6	46.9	45.8	54.0	56.7	45.4	40.8	37.9	36.9	557.4
9th %ile	87.8	93.8	72.2	76.7	95.6	100	98.4	98.9	99.5	92.4	99.0	82.6	748.7
Highest	172	216	133	164.6	135.2	169.2	119.2	148.6	177.9	175.2	150	123.2	971.6

4.2 Slope and Aspect

The subject property is gently sloped, falling gradually from the south-east to the northwest. The proposed effluent disposal area is downslope from the proposed dwelling site. The slope is in the range of 0-5% and there are no rocky outcrops or surface rocks present. The site is exposed to wind and sunshine throughout the day.

4.3 Slope Stability

The soil structure is well-drained and therefore due to the gently slope on the land, stability of the soil is considered to be satisfactory and unlikely to have issue with hydraulic loading.

4.4 Surface Drainage

The setback distance of the effluent disposal area from the nearest waterway is 110 metres (north-east), with the effluent area being downslope of the waterway. The nearest dam to the treatment area is 75 metres away (south-west), with the dam being upslope from the area.

4.5 Existing Vegetation

The effluent disposal area will be located within a pasture environment with ground cover including ryegrass and clover. There are very few native trees located on the land, with most being planted. A single tree is located nearby to

the area, and is positioned to the south-west of the disposal area ensuring that shadowing will not impact the area.

4.6 Groundwater

The proximity to ground water is not evident at this property due to the highly permeable nature of the soil structure. The property does not contain a groundwater bore, and therefor the effluent disposal area is more than 100 metres from groundwater used for domestic purposes.

4.7 Soil Unit Types

Pursuant to AS/NZS1547:2012 the soil is classified as being a Category 4, Sandy Clay Loam.

4.8 Soil Surface Profile

The Soil Surface Profile consists of:

Horizon	Description	pH	EC
A	Brown sandy loam (150mm)	6.0	0.18dS/m
B	Light brown sandy loam (150-450mm)	5.9	0.11dS/m
C	Light brown sandy clay loam (450-750mm)	6.0	0.06dS/m

Soil Profile

4.9 Soil Permeability

Table 3. Determination of Saturated Hydraulic Conductivity (Ksat)

Hole No.	Depth (cm)	Radius (cm)	Depth to limiting (cm)	Head (cm)	Q (cm^3 / min)	Ksat (m /day)
1	57	3.5	75	21	10.7	1.13m/day
2	58	3.5	75	22	7.5	1.15m/day
3	50	3.5	75	22	10.7	1.13m/day
Geometric Mean: 1.13						

4.10 Basement Permeability

The constant head permeability resulted in a Ksat of 1.13m/day. We have adopted a conservative design loading rate of 10mm/day.

4.11 Colloid Stability

The results of the Emerson Crumb Test, Dispersion Index Test, and observations of discolouration of water in the boreholes suggested that the A Horizon was a Class 8, B Horizon Class 1 and C Horizon Class 2. Slaking within A, and no slaking in B or C Horizons.

4.12 Soil Classification

In accordance with AS/NZS1547:2012 the materials can be classified as Category 4 soil (Clay Loam).

4.13 Nutrient Attenuation

The clay soils within the profile will not require phosphorus balance as this is expected to be lost within a few metres. The nitrogen is expected to be filtered out effectively without the need for attenuation within this soil type.

4.14 Wastewater Generation Calculation

Table 4. Water Nutrient Balance

Victorian Land Capability Assessment Framework

Please read the attached notes before using this spreadsheet

Irrigation area sizing using Nominated Area Water Balance for Zero Storage

Site Address:	**114 Jefferies Road, Locksley**		
Date:		**Assessor:**	

INPUT DATA

Design Wastewater Flow	Q	750	L/day	Based on maximum potential occupancy and derived from Table 4 in the EPA Code of Practice (2013)
Design Irrigation Rate	DIR	6.0	mm/day	Based on soil texture class/permeability and derived from Table 9 in the EPA Code of Practice (2013)
Nominated Land Application Area	L	299	m^2	[1]
Crop Factor	C	146	unitless	Estimates evapotranspiration as a fraction of pan evaporation; varies with season and crop type[2]
Rainfall Runoff Factor	RF	0.8	unitless	Proportion of rainfall that remains onsite and infiltrates, allowing for any runoff
Mean Monthly Rainfall Data	Mangalore Airport (088109)			BoM Station and number
Mean Monthly Pan Evaporation Data	Mangalore Airport (088109)			BoM Station and number

Parameter	Symbol	Formula	Units	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Days in month	D		days	31	28	31	30	31	30	31	31	30	31	30	31	365
Rainfall	R		mm/month	40.8	34.6	35.5	38.9	53.1	52.7	57.2	61.1	54.4	45.3	47.5	41.1	**562.2**
Evaporation	E		mm/month	179	159	121	76	44	31	33	53	68	105	130	168	**1167**
Crop Factor	C		unitless	0.80	0.80	0.70	0.70	0.60	0.60	0.60	0.60	0.70	0.80	0.80	0.80	
OUTPUTS																
Evapotranspiration	ET	ExC	mm/month	143	127	85	53	26	19	20	32	48	84	104	134	**874.9**
Percolation	B	DIRxD	mm/month	186.0	168	186.0	180.0	186.0	180.0	186.0	186.0	180.0	186.0	180.0	186.0	**2190.0**
Outputs		ET+B	mm/month	329.2	295.2	270.7	233.2	212.4	198.6	205.8	217.8	227.6	270.0	284.0	320.4	**3064.9**
INPUTS																
Retained Rainfall	RR	RxRF	mm/month	32.64	27.68	28.4	31.12	42.48	42.16	45.76	48.88	43.52	36.24	38	32.88	**449.76**
Applied Effluent	W	(QxD)/L	mm/month	77.8	70.2	77.8	75.3	77.8	75.3	77.8	77.8	75.3	77.8	75.3	77.8	**915.6**
Inputs		RR+W	mm/month	110.4	97.9	106.2	106.4	120.2	117.4	123.5	126.6	118.8	114.0	113.3	110.6	**1365.3**
STORAGE CALCULATION																
Storage remaining from previous month			mm/month	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Storage for the month	S	(RR+W)-(ET+B)	mm/month	-218.8	-197.3	-164.5	-126.8	-92.2	-81.2	-82.3	-91.2	-108.8	-156.0	-170.7	-209.8	
Cumulative Storage	M		mm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Maximum Storage for Nominated Area	N		mm	0.00												
	V	NxL	L	0												
LAND AREA REQUIRED FOR ZERO STORAGE			m^2	78	78	96	111	137	144	145	138	122	99	91	81	

MINIMUM AREA REQUIRED FOR ZERO STORAGE: 146.0 m^2

CELLS

	Please enter data in blue cells
XX	Red cells are automatically populated by the spreadsheet
XX	Data in yellow cells is calculated by the spreadsheet, DO NOT ALTER THESE CELLS

NOTES

[1] This value should be the largest of the following: land application area required based on the most limiting nutrient balance or minimum area required for zero storage

[2] Values selected are suitable for pasture grass in Victoria

Victorian Land Capability Assessment Framework

Please read the attached notes before using this spreadsheet

Nitrogen Balance

Site Address:	**114 Jefferies Road, Locksley**

SUMMARY - LAND APPLICATION AREA REQUIRED BASED NITROGEN BALANCE **299** m^2

INPUT DATA[1]

Wastewater Loading		
Hydraulic Load	750	L/day
Effluent N Concentration	30	mg/L
% N Lost to Soil Processes (Geary & Gardner 1996)	0.2	Decimal
Total N Loss to Soil	4500	mg/day
Remaining N Load after soil loss	18000	mg/day

Nutrient Crop Uptake					
Crop N Uptake	220	kg/ha/yr	which equals	60.27	$mg/m^2/day$

NITROGEN BALANCE BASED ON ANNUAL CROP UPTAKE RATES

Minimum Area required with zero buffer		
Nitrogen	299	m^2

Determination of Buffer Zone Size for a Nominated Land Application Area (LAA)		
Nominated LAA Size	299	m^2
Predicted N Export from LAA	-0.01	kg/year
Minimum Buffer Required for excess nutrient	0	m^2

CELLS

	Please enter data in blue cells
XX	Red cells are automatically populated by the spreadsheet
XX	Data in yellow cells is calculated by the spreadsheet, DO NOT ALTER THESE CELLS

NOTES

[1] Model sensitivity to input parameters will affect the accuracy of the result obtained. Where possible site specific data should be used. Otherwise data should be obtained from a reliable source such as:

- *EPA Guidelines for Effluent Irrigation*
- *Appropriate Peer Reviewed Papers*
- *Environment and Health Protection Guidelines: Onsite Sewage Management for Single Households*
- *USEPA Onsite Systems Manual*

Victorian Land Capability Assessment Framework

Trench & Bed Sizing

FORMULA FOR TRENCH AND BED SIZING				
L = Q/DLR x W			From AS/NZS 1547:2012	
Where:	Units			
L = Trench or bed length	m		Total trench or bed length required	
Q = Design Wastewater Flow	L/day		Based on maximum potential occupancy and derived from Table 4 in the EPA Code of Practice (2013)	
DLR = Design Loading Rate	mm/day		Based on soil texture class/permeability and derived from Table 9 in the EPA Code of Practice (2013)	
W = Trench or bed width	m		As selected by designer/installer	
INPUT DATA				
Design Wastewater Flow	Q	750	L/day	Based on maximum potential occupancy and derived from Table 4 in the EPA Code of Practice (201
Design Loading Rate	DLR	10.0	mm/day	Based on soil texture class/permeability and derived from Table 9 in the EPA Code of Practice (2013
Trench basal area required	B	75.0	m^2	
Selected trench or bed width	W	0.6	m	As selected by designer/installer
OUTPUT				
Required trench or bed length	L	125.0	m	

CELLS

	Please enter data in blue cells
XX	Red cells are automatically populated by the spreadsheet
XX	Data in yellow cells is calculated by the spreadsheet, DO NOT ALTER THESE CELLS

5. Land Capability Assessment

Table 5. Land Capability Assessment

Land	Land Capability Risk Rating				Ameliorative Measures and Risk Reduction
Feature	Low	Medium	High	Limiting/ Unsuitable	
Available land for LAA	Exceeds LAA and duplicate LAA requirements	Meets LLA and duplicate LAA requirements	Meets LAA and partial duplicate LAA requirements	Insufficient LAA area	Non-limiting for treatment to Septic Standard with trenches and beds – Full reserve area available
Aspect	North, north-east or north-west	East, west or south-west	South or south-east	South or full shade	Northerly
Exposure	Full sun and / or high wind or minimal shading	Partial shade	Limited light, little wind, heavily shaded area	Perpetual shade	Full sun
Slope Form	Convex of divergent side slopes	Straight sided slopes	Concave or convergent side slopes	Locally depressed	Well drained 0-5 degrees
Slope Gradient Subsurface Irrigation	< 5%	5-10%	10-15%	>15%	Well drained
Site Gradient Subsurface Irrigation	<10%	10-30%	30-40%	>40%	<5% low risk
Site Drainage Run off / Run on	LAA backs onto crest or ridge	Moderate likelihood	High likelihood	Cut off drain not possible	Cut off drain required upslope of effluent field
Landslip	Potential	Potential	Potential	Existing	Gentle slope not subject to landslip
Erosion potential	Low	Moderate	High	No practical amelioration	Slow moving overland stormwater due to gentle slope so not of concern
Flood / Inundation	Never	< 1 AEP	5 % AEP	>5 % AEP	Well drained
Distance to Surface waters (m)	Buffer distances exceeds all Code requirements	Buffer distances complies will all Code requirements	Buffer distances do not comply with all/some Code requirements	<40 metres	Please list the setback distances that fail to comply with Code of Practice requirements in this column
Distance to groundwater bores (m)	No bores on site or within a significant distance	Buffer distances comply with the Code	Buffer distances do not comply with the Code	No suitable treatment method	No bores within 300m of effluent field
Vegetation	Plentiful / healthy vegetation	Moderate vegetation	Sparse or limited vegetation	Propagation not possible	Dense grasses suitable for LAA
Depth to water table (potentiometric) (m)	>2m	2-1.5m	1.5m	1.5m - Surface	Deeper than 2 metres
Depth to water table (seasonal parched) (m)	>1.5m	<0.5m	0.5 – 1.5m	0.5 - Surface	Perching not likely at location
Rainfall (9th declie) (mm)	<500mm	500-700mm	750-1000mm	>1000mm	Not limiting

Pan evaporation (mean) (mm)	1250-1500mm	1000-1250mm	750-1000mm	<750mm	Design by water balance
Soil Profile Characteristics					
Structure	High or moderately structured	Weakly structured	Structureless, massive or hardpan		Improve structure by gypsum application
Fill materials	Nil or mapped good quality top soils	Mapped variable depth and quality materials	Variable quality and / or uncontrolled filling	Uncontrolled poor quality / unsuitable filling	No fill
Thickness of Soil (m) at the location of:					
Trenches and beds	>1.4m	>1.4m	<1.4m	<1.2m	Non limiting
Subsurface irrigation	>1.5m	1-1.5m	0.75m	<0.75m	Non limiting
Permeability					
Permeability (limiting horizon) (m / day)	0.15-0.3	0.03-0.15 0.3-0.6	0.01-0.03 0.6-3.0	>3.0 <0.03	Design by water balance
Permeability (buffer evaluation) (m / day)	<0.3	0.3-3.0	3-5	>5	Evaluate flow times 1m/day

5.1 Risk Management and Mitigation Measures

Land Feature	Land Capability Risk Rating				Remarks
	Low	Medium	High	Risk Rating	
Distance to reservoir (km)	>15km	2 to 15km	<2km	1	25 km
Soil type rating (from part 1)	1	2	3	2	Thickness (m)
Distance to river (m)	>80	40 to 80	<40	1	>25 km
Distance to stream (m)	>80	40 to 80	<40	1	105 m
Distance to drain (m)	>40	10 to 40	<10	1	110 m
Lot size (ha)	>10	2 to 10	0.2-2	1	20 ha
Density (houses/km^2)	<20	20-40	>40	1	10
LCA rating (from Part 1)	1 (Low)	2 (Medium)	2 (High)	1	Low
System fail rate (%)	<5	5 to 10	>10	2	Conservative value

The combined risk number for this site is a 2 (**Low Risk**). The results of the land capability assessment and risk analysis indicate that treatment to primary system are appropriate for this site.

6. System Type and Design

To treat domestic wastewater and allow irrigation with wastewater, a primary treatment system is deemed suitable for the site. There is sufficient land available for sub-surface absorption trenches. There is sufficient land available for a reserve LAA. A reserve area can be commissioned in the event that there is an increase of bedroom capacity.

Absorption trenches comprising a network of durable self-supporting arches on gravel and placed below ground and media filled. Trenches will be 450mm deep and 600mm wide. Primary treated wastewater is to be distributed along the length of a trench (125m) via slotted or drilled 100mm distribution pipes and then filtered through the gravel and sand to the underlying soil. Nutrients in the wastewater will be taken up by vegetation (pasture) planted across the constructed trench area.

7. Owners Information – System Management and Maintenance

As a result of our investigation we recommend that a sustainable onsite wastewater management system can be built to meet the needs of a new residence on the allotment. Specifically, we recommend the following:

- Installation of a primary (septic) wastewater treatment system with the Taylex Maxi Tank being the preferred system for the site as it has larger capacity, holds more water resulting in cleaner water for absorption trenches;
- Absorption Trenches to be constructed in 5 lengths 25m x 0.6 = 15m^2 (65m^2). Total LAA sized at 299m^2 which includes 2 metre spacing between each trench. Sizing is based on a full water balance. Trenches are to be installed at 450mm deep.
- Install absorption trenches during the warmer months as the soil is prone to dispersion.
- Operation and management of the treatment and disposal system in accordance with manufacturers recommendations and the recommendations made in this report; and
- Construction of diversion drains on sides of the LAA to divert stormwater and surface water run-on.

8. Assessors Qualifications

Troy Spencer
Landography Pty Ltd
18th November 2018

Associate Diploma in Natural Resource Management (Science) Melbourne University
Diploma in Rural and Regional Planning (Geography) La Trobe University
Member Centre for Environmental Training, Wastewater Certification (CET)
Member of Australian Water Association (AWA)
Member Planning Institute of Australia (PIA)

9. References

AS/NZS 1547:2012 *On-site domestic wastewater management.* Standards Australia and Standards New Zealand.

Emerson, W.W. (1977) Physical properties and structure. In Russell, J.S. and Graecen, E.L., Eds. *Soil Factors in Crop Production in a Semi-arid Environment.* University of Queensland Press.

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

Northcote, K.H. (1979) *A Factual Key for the Recognition of Australian Soils*. Rellim Technical Publications. Adelaide

10. Attachments

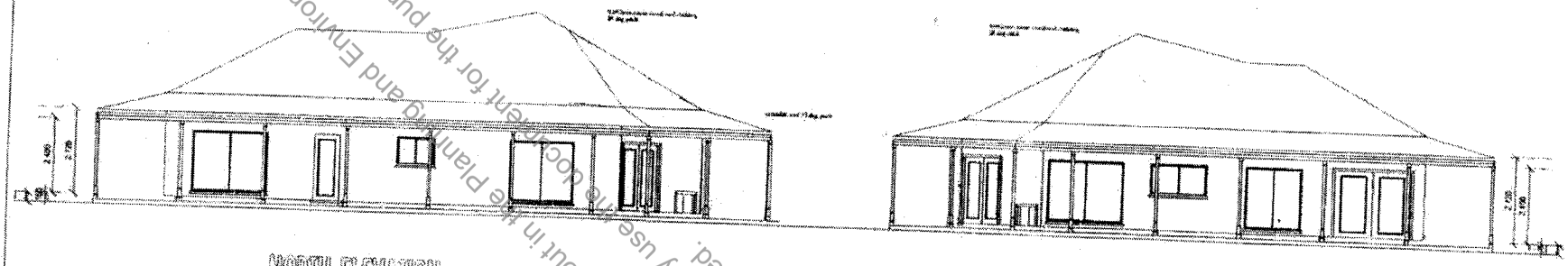
Appendix A – Site Plan
Appendix B – Dwelling Plans
Appendix C – Topographic Feature Plan

Appendix A Site Plan

Site Plan

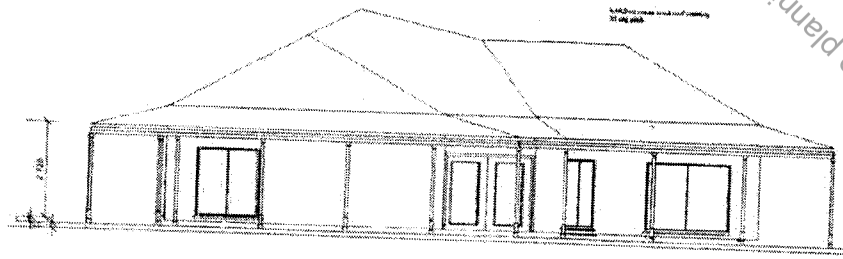
114 Jefferies Road, Locksley
Lot 1 LP125177, Parish of Monea South

Date: 26/11/2018

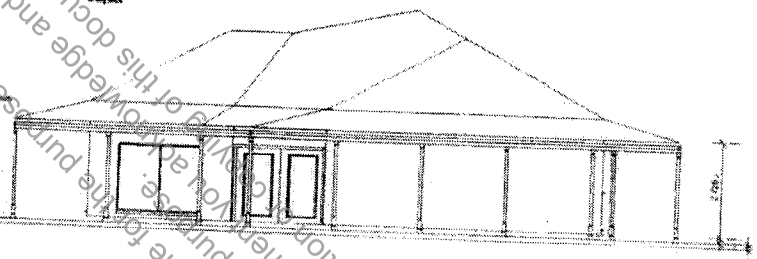


NORTH ELEVATION.

EAST ELEVATION.



WEST ELEVATION.



SOUTH ELEVATION.

SCALE 1 : 100

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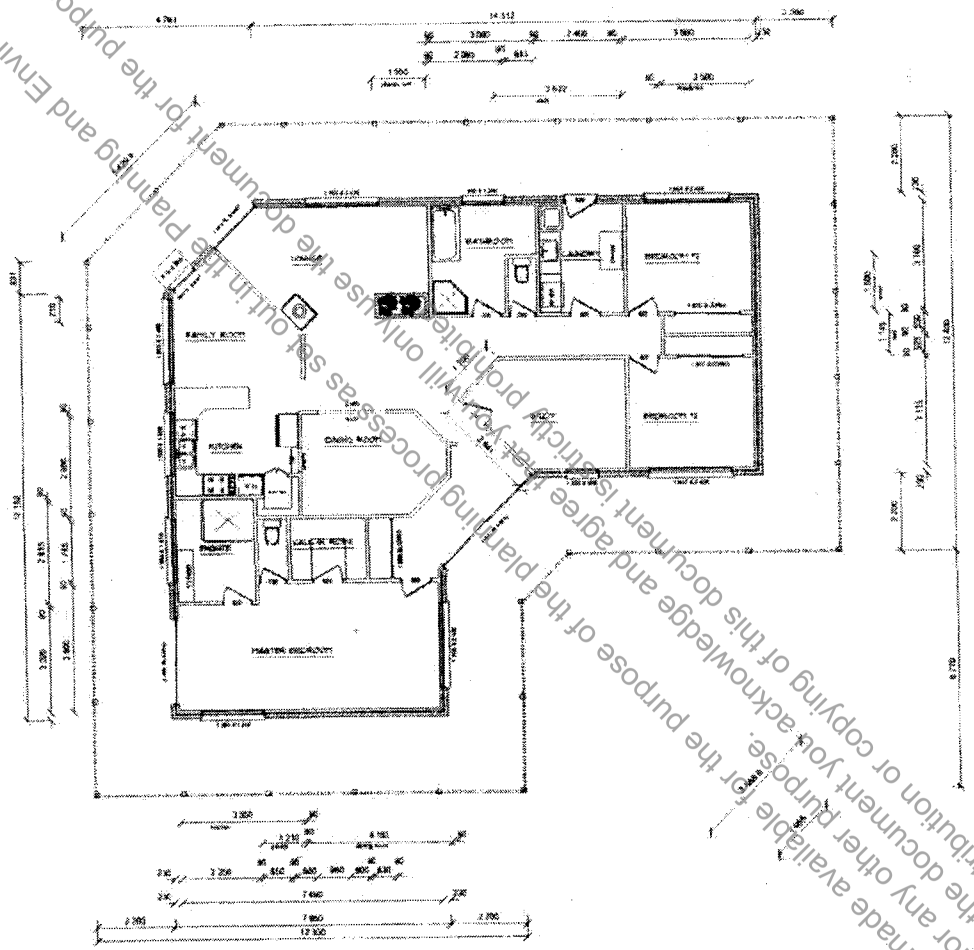
HOUSING INDUSTRIES ASSOCIATION
MEMBER No 503102

Registered Builders, No DB-U1256
BUILDERS PRACTITIONERS BOARD

PROPOSED BRICK VENEER DWELLING

Page 2 of 2



FLOOR PLAN.

SCALE 1 : 100

DRAWN by DES J HALSALL

SoftPlan Lite

D J & G D HALSALL

25 WEIR STREET EUROA

VICTORIA 3666

HOUSING INDUSTRIES ASSOCIATION
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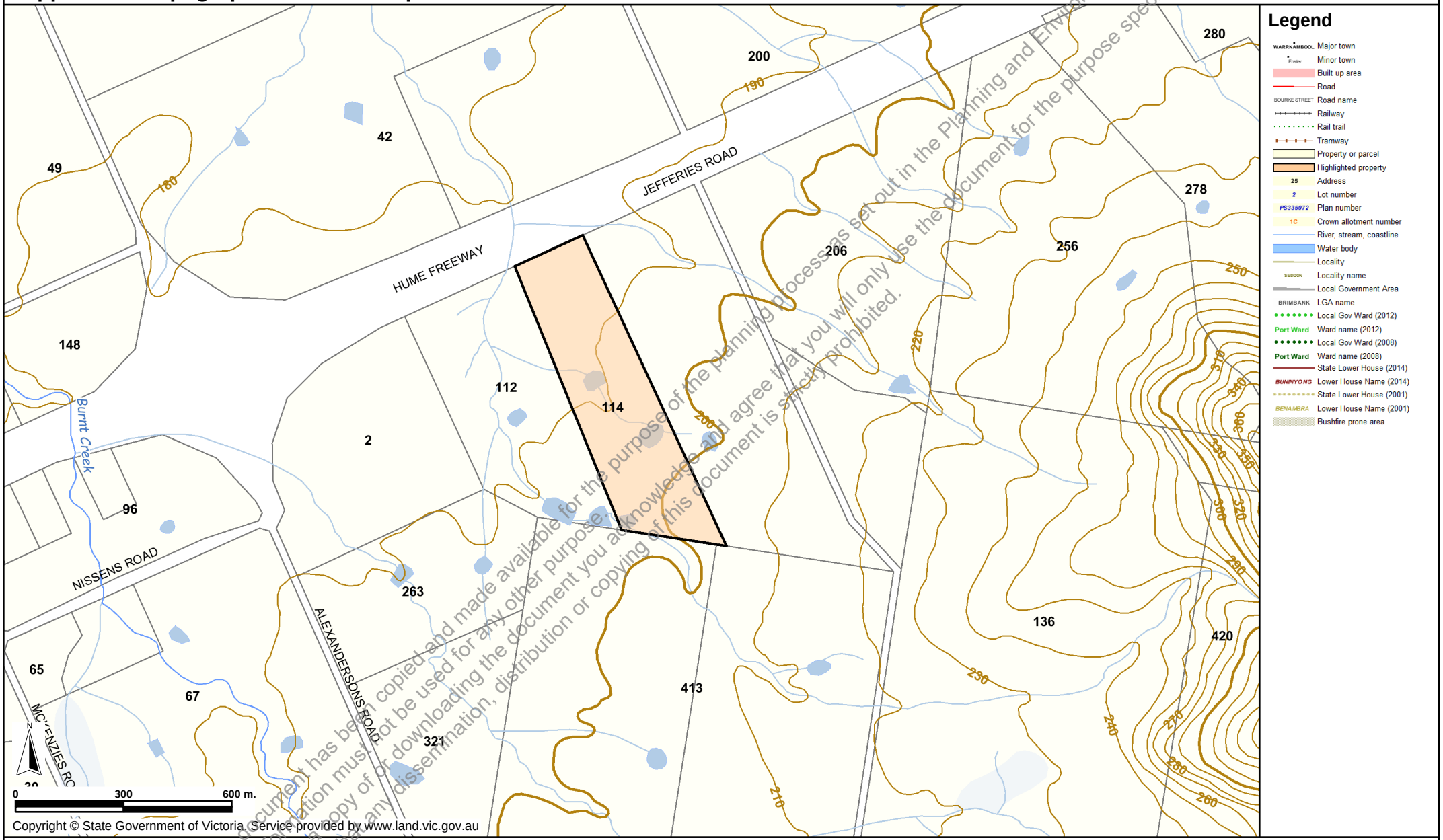
Registered Builders, No DB-U1256
BUILDERS PRACTIONERS BOARD

PROPOSED BRICK VENEER DWELLING

Appendix C Topographic Feature Map

Map Centre - VicRoads 46 G7

Appendix 3 Topographic Features Map



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VICTORIA State Government | Environment, Land, Water and Planning

Town & Country
Development Services Pty Ltd

Whole Farm Plan

Lot 1 LP125177
114 Jefferies Road, Locksley

Vineyard & Cattle Grazing

15 October 2020

Table of Contents

Introduction 1

Subject Land 1

Property Details 1

Strathbogie Planning Scheme 1

Infrastructure and Buildings 2

Neighbouring Properties 2

Agricultural Capability/Terrain Analysis 2

Land Class Classification 3

Natural Features 4

Topography 4

Water 4

Native Vegetation 5

Wildlife Habitat 5

Pest Plants and Animals 5

Climate 6

Discussion 7

Conclusion 9

Appendix 1: Design Response Plan contours, water bodies and tree cover 10

Appendix 2: EVC/Bioregion Benchmark 11

Appendix 3: Vegetation Profile & Revegetation List 12

Appendix 4: Proposed improvements 13

Appendix 5: Management Action Plan 14

Appendix 6: The Product 15

Introduction

This Whole Farm Plan (WFP) is for a vineyard and cattle grazing farm located at Lot 1 LP125177, 114 Jefferies Road Locksley. The property is fertile flats located on the northern edge of the Strathbogie Ranges sitting at 203 metres above sea-level at its highest point. A driveway off Jefferies Road leads to a shed fitted out for temporary accommodation with varies shedding for farm machinery, pumps and a set of cattle yard. The business requires management of the existing 2.2 acre (0.9 ha) vineyard with the proposed expansion of another 10 acres (4.1 ha). The enterprise focusses on maintaining and establishing a new vineyard with grapes to be harvested then processed off site for the production of wine. The business relies upon on the income from wine sales from grapes produced on property. The business requires management of vineyard maintenance activities including pruning, slashing, spray program, irrigation, pest control and harvest.

The business will be managed on a fulltime basis and will require a manager to be in attendance on the land at all times. There will be periods that require additional workers on the land, including plumbers (irrigation specialists), contractors for planting and labour for high workload activities such as harvest.

This WFP provides the landowner with guidelines for the management of the land for this purpose into the future.

This WFP is an evolving document which is to be used continuously to plan, implement, manage and review outcomes for continuous land improvement and to ensure environmental gains are achieved.

This WFP is illustrated through aerial photographs, tables and drawings in conjunction with discussion around each relevant topic.

Subject Land

Property Details

Existing Conditions

The subject land is 19.85 hectares in area with open pasture, vineyard and a constructed driveway to a central point with varies farm shedding including a shed converted for accommodation. The land is located within the Farming Zone of the Strathbogie Planning Scheme.

Proposed Future Conditions

The land will be used for running the existing vineyard with plans for vineyard expansion, the business will require daily maintenance activities for a vineyard. As regular work ensures that the vines are maintained, it is required that the owner/viticulturist be onsite. Refer to Appendix 4 to view proposed improvements on the land. The existing accommodation will be decommissioned with the removal of cooking facilities and shower. The shed will no longer be used as a dwelling and instead be used by workers toilet/break room.

Strathbogie Planning Scheme

Existing Conditions

The land is within the Farming Zone of the Strathbogie Planning Scheme. The property is less than 40 hectares in area and therefore a Planning permission is required for the use and development of land for a dwelling.

Proposed Future Conditions

The site will be developed for use as a working vineyard. The Strathbogie Planning Scheme encourages use and development that supports intensive farming practices to become established and operated sustainably into the future.

Infrastructure and Buildings

Existing Conditions

Access throughout the property is possible from Jefferies Road, Locksley. Shedding is located centrally on the property and a driveway provides access to this location where the more intensive farming activities take place, including vineyard, diesel pump/filtration system and cattle work (yards). The site contains a small vineyard, cattle yards, a few small paddocks with the remaining land in larger fenced paddocks with a laneway for stock movement. The location proposed for a dwelling is to be in an area that meets the requirements of the vineyard and its operation.

Proposed Future Conditions

This site has been chosen for its suitability for wine grape production with already an established vineyard. The site gently slopes towards the site frontage with well drained soils which is ideal for vineyards. A dwelling will be positioned centrally on the property overlooking the vineyard with its driveway to be extended past the vineyard utilising existing infrastructure and assist with surveillance of farming activities.

Fencing off vegetated areas is proposed.

Neighbouring Properties

Existing Conditions

There are several dwellings along Jefferies Road, with each being located on properties that are similar in size to the subject land. The closest dwelling is located approximately 210 metres away at 112 Jefferies Road which will be screened from view of the proposed dwelling by the existing machinery shed and vineyard. A mix of uses includes vineyards, traditional beef and sheep farming, and equine enterprises.

Proposed Future Conditions

A dwelling will be developed for use by the farm manager. A biodiversity area will be created on the land along the water way linking existing tree lines on the property with native vegetation through the neighbouring land to the west. The design of the property for viticulture is suitable, particularly the ability to provide surveillance from the dwelling across the entire farm. The already established vineyard has proven to be successful in the past while maintained however requires onsite management to reinstate and expand the operation.

Agricultural Capability/Terrain Analysis

Existing Conditions

The subject land has a rundown vineyard that has been profitable in the past when kept. The majority of the vines are in good condition and would take a season to bring back to full production with pruning and spray program to manage fungal diseases. The balance of the land is being used for cattle grazing at low stocking rates. Many of the fences require maintenance to restrict stock from sensitive areas such as water ways and vegetation.

Proposed Future Conditions

Rotational grazing measures will be implemented to insure constant vegetation cover is available throughout the year to reduce risk of overgrazing, compaction or instability of the soil structure. Overall soil improvement measures will include the addition of native shrub and grasses within areas along the water course. This approach will improve the soil quality and improve soil stability in the long term. The proposed vineyard expansion site is chosen for its suitability for wine grape production with fertile free draining soil, gently slope and a northerly aspect.

Land Class Classification

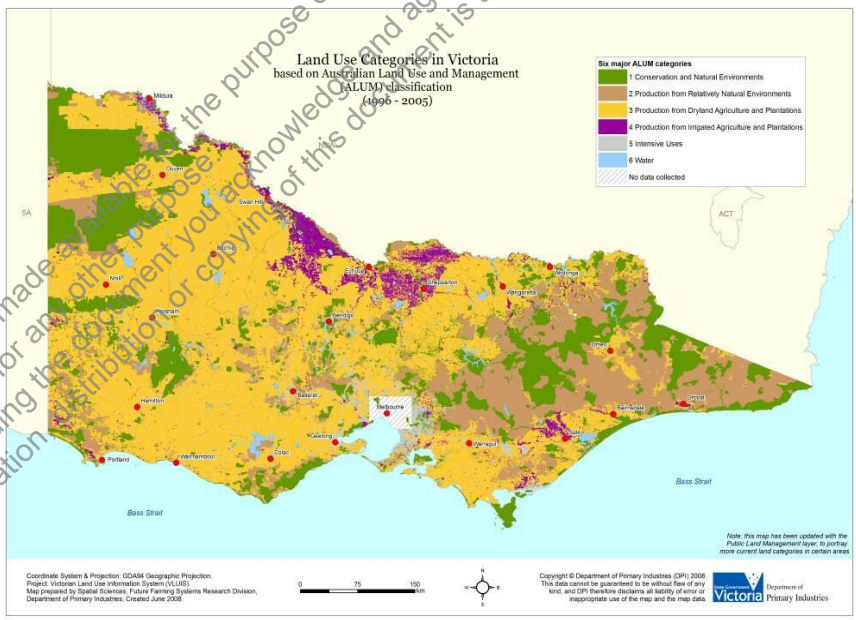
Existing Conditions

A land class unit is a unit of land use and land management practice. Land classing determines land features and soil with similar agricultural potential and similar management requirements. By identifying areas with similar land features and soil types the landholder is able to make informed decisions on what the land use is best suited to a certain area.

Land Class classification for the property has been estimated by observation during a recent site inspection. It is concluded from this inspection the site is classified as Land Class 3. Land Classing Kit for Farmers, published by the Department of Natural Resources and Environment in 2000, describes Land Class 3 as follows:

Land Class 3:

Land suited to a wide range of land uses including less intensive horticulture, cropping, grazing and farm forestry. Low risk of land degradation but still requiring very high levels of management such as conservation tillage and maintenance of a vegetation cover on the soil surface.



Landuse categories in Victoria

Figure 1. Land Use Categories in Victoria produced by the Department of Primary Industries.

Proposed Future Conditions

All land use activities proposed align with Land Class 3 management descriptions.

Natural Features

Topography

Existing Conditions

The land is gently sloped in nature. Refer to Appendix 1: Design Response Plan for contours.

Proposed Future Conditions

The existing topographical conditions will not be altered.

Subject land

Water

Existing Conditions

The land contains a seasonal watercourse that crosses through the centre of the property. The land slopes gently downward toward the watercourse from the south with the front half of the property gently sloping towards Jefferies Road. The land contains a number of dams for stock water and irrigation. The main dam (Dam1) located on the south side of the vineyard has an 8 mega litre water licence which is connected to a diesel pump and filtration system for supply of irrigation water to the vineyard. A dam further to the south (Dam 2) has a 6 mega litre water licence, this irrigation licence is currently not being utilised. Refer to Appendix 1.

Proposed Future Conditions

Stock watering points will be installed in paddocks as demonstrated on the Proposed Improvements Plan. Dam 1 located in the centre of the property will form part of the reticulated watering system and be the main water supply for irrigation of the vineyard. Dam 2 is to be used as a backup water supply in times of drought, if required water would be transferred to dam 1 for irrigation. Refer to Appendix 4 for siting of proposed stock water supply locations.

Native Vegetation

Existing Conditions

The site contains the Ecological Vegetation Class (EVC) including EVC 175-61 Grassy Woodland and is within the Central Victorian Uplands Bioregion. Refer to Appendix 2 & 3 for details.

Proposed Future Conditions

Some selected plantings of native vegetation which accord with the EVC are identified for the land and will be located within a fenced-out area and shown on the Proposed Improvements Plan at Appendix 4. These are also specified within the Action Management Plan at Appendix 5.

A stock exclusion zone and areas to be revegetated are located within the property. A strip or sporadic plantings of local indigenous vegetation species will be planted within these zones. This will create a shelter belt and connectivity between remnant vegetation. Refer to Appendix 3: Vegetation Profile for the range of species that are indigenous to this area. The species selected for use in the plantings have been chosen using this document and through observation onsite. Specific species are to be determined in consultation with the local landcare group. Timeframes are specified on Appendix 5 Action Management Plan.

Wildlife Habitat

Existing Conditions

Wildlife habitats identified on the site include single mature trees, hollows in trees, dead trees, fallen logs and branches, leaves and twig ground litter, native grasses-herbs-shrubs-trees, and connectivity of vegetation both on and off site.

Proposed Future Conditions

The existing habitat components will be managed in a conservative manner, for example majority of dead and fallen timber will remain and strategic seasonal grazing allowing seed set.

The implementation of revegetated stock exclusion zones will enhance existing habitat values.

These management approaches will ensure environmental net gains to the site and the extended surroundings.

Pest Plants and Animals

Existing Conditions

Evidence of kangaroos, rabbits and foxes on the site were noted.

Proposed Future Conditions

The landowner is obligated to control rabbits and foxes pursuant to the Catchment and Land Protection Act 1994. They are nomadic animals and if given an opportunity to make burrows, they will remain as a pest on this property. Refer to Appendix 5 Action Management Plan for proposed control measures.

Spraying with herbicide for the control of pest plants will occur.

Climate

Existing Conditions

The rainfall in this location is between 550 and 650 millimetres per annum and the monthly mean maximum temperature is 19 to 23 degrees. The vineyard growing season is from September to the end of April.

Proposed Future Conditions

Considering the unpredictability of the changing climate the averages recorded above are interpreted as an average only not as a guarantee. The shiraz grape variety are tolerant of warmer climatic conditions and can thrive in hotter climates such as the Mildura wine region.

Discussion

The rural enterprise includes vineyard management, which forms the majority of the farm's annual turnover, grapes will be processed offsite and distributed to restaurants and retailers for sale under their own label. For the purposes of the whole farm plan the focus will be on the farming operation and the production of the wine grapes. Wine grape production is an intensive process that requires high labour and input costs.

Below is a breakdown of the tasks/costings which are separated into two stages.

Stage 1 – Re-establish Existing Vineyard, 0.92ha (Year 1)

Item	Timing	Activity	Expenditure Annually	Income Annually
Grape Harvest/Sales (0.92ha/2.27ac)	Annually	Fruit picking (58 hrs)	N/A	11.4 ton @ $2200 = $25,080.00
Cattle Sales	Annually	Muster stock and transport (8hrs)	$600.00	15 Head @ $1,500/head $20,000.00
Slash Vineyard	Monthly	Grass slashing with tractor (4hrs) x 6 months	$600.00	N/A
Sprays	Every 3 weeks	Spraying vines during growing season (4 hrs) x 7	$1,500.00	N/A
Trellis Repairs	Annual	Replace broken posts (120 hrs)	$1,000.00	N/A
Irrigation Repairs	Annually and as required	Fix leaks, replace broken drippers, flush drip lines. (120 hrs)	$1,200.00	N/A
Pump maintenance	Annually and as required	Service pump, clean filters. (16hrs)	$300.00	N/A
Desuckering	Monthly	Remove vine shoots off trunks (25 hrs) x 4	N/A	N/A
Training	Annually	Train vines onto wire (120 hrs)	N/A	N/A
Scare gun	Annually	Setup and maintain scare gun (10hrs)	$200.00	
Netting	Annually	Net vines at veraison, remove prior to harvest (120 hrs)	$400.00	N/A
Vine Replacement	Annually	Replace dead or diseased vines (20hrs)	$400.00	N/A
Clean driplines	Monthly	Check drippers/irrigation system repair and flush lines/clean filters. (8hrs) x 4	$300.00	
Fertilising	Annually	Spreading fertiliser for nutrient replacement (8 hrs)	$1,500.00	N/A
Cattle marking	Annually	Castrate/vaccinate & tag calves (12 hrs)	$200.00	N/A
Weed management	Bi-annual	Spraying weeds (5hrs) x 2	$200.00	N/A
Move Stock	Weekly	Move and check cattle (3hrs)	N/A	N/A
TOTAL		962 hrs Annually	$8,400.00 Annually	$45,080.00 Annually

Stage 2 – Full Production – Vineyard 4.62ha (Year 3)

Item	Timing	Activity	Expenditure Annually	Income Annually
Grape Harvest/Sales (4.92ha/11.41ac)	Annually	Fruit picking (58 hrs) + machine picking	$3,000.00	57.0 ton @ $2200 = $125,400.00
Cattle Sales	Annually	Muster stock and transport (8hrs)	$600.00	15 Head @ $1,500/head $20,000.00
Slash Vineyard	Monthly	Grass slashing with tractor (20hrs) x 6 months	$3,000.00	N/A
Sprays	Every 3 weeks	Spraying vines during growing season (20 hrs) x 7	$4,500.00	N/A
Trellis Repairs	Annual	Replace broken posts (120 hrs)	$1,000.00	N/A
Irrigation Repairs	Annually and as required	Fix leaks, replace broken drippers, flush drip lines. (160 hrs)	$1,200.00	N/A
Pump maintenance	Annually and as required	Service pump, clean filters. (32hrs)	$600.00	N/A
Desuckering	Monthly	Remove vine shoots off trunks (125 hrs) x 4	N/A	N/A
Training	Annually	Train vines onto wire (400 hrs)	N/A	N/A
Scare gun	Annually	Setup and maintain scare gun (20hrs)	$400.00	
Netting	Annually	Net vines at veraison, remove prior to harvest (520 hrs)	$2,000.00	N/A
Vine Replacement	Annually	Replace dead or diseased vines (50hrs)	$1,600.00	N/A
Clean driplines	Monthly	Check drippers/irrigation system repair and flush lines/clean filters. (40hrs) x 4	$1,200.00	
Fertilising	Annually	Spreading fertiliser for nutrient replacement (40 hrs)	$7,500.00	N/A
Cattle marking	Annually	Castrate/vaccinate & tag calves (12 hrs)	$200.00	N/A
Weed management	Bi-annual	Spraying weeds (6hrs) x 2	$300.00	N/A
Move Stock	Weekly	Move and check cattle (3hrs)	N/A	N/A
TOTAL		2,343 hrs Annually	$27,100.00 Annually	$145,400.00 Annually

In order to fulfil a meaningful and sustainable farm that provides stabilised soil, improved ground cover, shade, biodiversity, and animal safety, the introduction of an Action Management Plan has been prepared. This plan describes the actions proposed to remedy or prevent land management issues from occurring as a result of farming and vineyard management. It also promotes biodiversity to be improved as part of the normal activity on the farm. The tasks and actions to be achieved will ensure that the farm will become and remain more sustainable into the future. The Action Management Plan is at **Appendix 5** and is best illustrated on the Proposed Improvements Plan at **Appendix 4.**

The grape production and cattle grazing enterprise will be undertaken with a proposed under vine area of 4.62 hectares. The proposed vineyard and cattle grazing will yield an income of at least $145,400.00 per annum is possible.

Conclusion

The land use for a viticultural enterprise is considered to be in-keeping with the size and location of the land, and is compatible with the Strathbogie Planning Scheme. The proposal is consistent with the zoning of the land, and measures for land management will ensure that erosion will be managed appropriately. This Whole Farm Plan is considered to be a balanced approach to the use of the land for viticulture and to improve the biodiversity on the land through undertaking measures for protecting native flora and fauna. The careful management of soil, water and vegetation will improve the health of the farm, along with the quality of water leaving the site. The viticultural enterprise as well as beef cattle production will ensure that cash flow will be maintained throughout the year. This is therefore demonstrated through this Whole Farm Plan, that the site is suitable for the proposed use for viticultural activities.

Appendix 1: Design Response Plan - Contours, waterways, dams, roads etc

SCALE 1:500
5 0 5 10 15 20 25
LENGTHS ARE IN METRES - PAPER SIZE A3

Principal Sandro Tomaino
.

CONCEPT PLAN

Tomkinson Group
Project Managers Development Planners
Licensed Surveyors Civil Engineers
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ISO 9001:2015 FS520488

USE & DEVELOPMENT OF A DWELLING

114 JEFFERIES ROAD, LOCKSLEY

Design Response Plan

Municipality & Ref:
SHIRE OF STRATHBOGIE
PP REFERENCE

REV		DESIGNED	DRAFTED	CHECKED	DATE
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NOTE: THIS PLAN IS AN UNCONTROLLED DOCUMENT AND WILL NOT BE UPDATED. IT IS THE RESPONSIBILITY OF THE USER TO CONFIRM THAT THIS IS A CURRENT COPY AND SUITABLE FOR THE PROPOSED USE - THIS SHEET MUST BE READ IN CONJUNCTION WITH ALL SHEETS OF THIS SET AND ANY ACCOMPANYING DOCUMENTS
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Appendix 2: EVC/Bioregion Benchmark

Department of Sustainability and Environment

EVC/Bioregion Benchmark for Vegetation Quality Assessment

Central Victorian Uplands bioregion

EVC 175_61: Grassy Woodland

Description:
A variable open eucalypt woodland to 15 m tall over a diverse ground layer of grasses and herbs. The shrub component is usually sparse. It occurs on sites with moderate fertility on plains or undulating hills on a range of geologies.

Large trees:

Species	DBH(cm)	#/ha
Eucalyptus spp.	70 cm	15 / ha

Tree Canopy Cover:

%cover	Character Species	Common Name
15%	Eucalyptus polyanthemos	Red Box
	Eucalyptus viminalis	Manna Gum
	Eucalyptus yarraensis	Yarra Gum
	Eucalyptus pauciflora	Snow Gum
	Eucalyptus ovata	Swamp Gum

Understorey:

Life form	#Spp	%Cover	LF code
Immature Canopy Tree		5%	IT
Understorey Tree or Large Shrub	1	5%	T
Medium Shrub	2	15%	MS
Small Shrub	1	1%	SS
Prostrate Shrub	1	1%	PS
Medium Herb	8	20%	MH
Small or Prostrate Herb	3	10%	SH
Medium to Small Tufted Graminoid	8	40%	MTG
Medium to Tiny Non-tufted Graminoid	1	1%	MNG
Bryophytes/Lichens	na	10%	BL

LF Code	Species typical of at least part of EVC range	Common Name
T	Allocasuarina littoralis	Black Sheoak
T	Allocasuarina verticillata	Drooping Sheoak
MS	Acacia pycnantha	Golden Wattle
MS	Acacia paradoxa	Hedge Wattle
SS	Pimelea humilis	Common Rice-flower
PS	Bossiaea prostrata	Creeping Bossiaea
MH	Gonocarpus tetragynus	Common Raspwort
MH	Drosera peltata ssp. auriculata	Tall Sundew
SH	Dichondra repens	Kidney-weed
SH	Opercularia varia	Variable Stinkweed
SH	Drosera whittakeri ssp. aberrans	Scented Sundew
MTG	Lepidosperma filiforme	Common Rapier-sedge
MTG	Lomandra filiformis	Wattle Mat-rush
MTG	Poa sieberiana	Grey Tussock-grass
MTG	Dianella revoluta s.l.	Black-anther Flax-lily
MNG	Microlaena stipoides var. stipoides	Weeping Grass

Victoria The Place To Be

Recruitment:
Continuous

Organic Litter:
20 % cover

Logs:
15 m/0.1 ha.

Weediness:

LF Code	Typical Weed Species	Common Name	Invasive	Impact
MH	Hypochoeris radicata	Cat's Ear	high	low
MTG	Briza maxima	Large Quaking-grass	high	low
MTG	Romulea rosea	Onion Grass	high	low
MTG	Briza minor	Lesser Quaking-grass	high	low
MNG	Vulpia myuros	Rat's-tail Fescue	high	low
MNG	Aira cupaniana	Quicksilver Grass	high	low

Published by the Victorian Government Department of Sustainability and Environment April 2004

Appendix 3: Vegetation Profile

Southern Riverina Standard Revegetation Species List

Profile:	**Gravelly Hills, Low Hills, Lower Slopes & Spring Soaks**
Landform:	**Lower Slopes and Low Hills**
Geology:	**Sedimentary, soils clay-loam.**
EVC:	Grassy Woodland (Slopes Box)
Description:	Tall White Box or Grey Box woodland with Red Box, Yellow Box, Red Stringybark and occassionally Sheoak. Open mid-storey over a diverse grassy ground layer.
Site Example:	Rail reserve at Curries Rd near Baddaginnie; road reserve Long Gully Rd, Violet Town; Balmattum Hill Nature Conservation Reserve; road reserve Upton Rd near Avenel.

This plant (species) list has been compiled after extensive literature searches, ground truthing and collaboration with local botanical experts.

Plants appearing in this **Standard Revegetation List** are hardy and robust species that are strong competitors that will provide structure to a site. Species listed are commonly available at indigenous nurseries, however ordering early is recommended.

Trees > 5m

Species Name	Common Name	Life Form	Notes
Acacia dealbata	Silver Wattle	T	E
Acacia implexa	Lightwood	T	
Acacia mearnsii	Black Wattle	T	W
Allocasuarina verticillata	Drooping Sheoak	T	
Eucalyptus albens	White Box	T	
Eucalyptus blakelyi	Blakely's Red-gum	T	
Eucalyptus macrorhyncha	Red Stringybark	T	
Eucalyptus melliodora	Yellow Box	T	
Eucalyptus microcarpa	Grey Box	T	
Eucalyptus polyanthemos	Red Box	T	

Shrubs

Species Name	Common Name	Life Form	Notes
Acacia acinacea	Gold-dust Wattle	MS	
Acacia aspera	Rough Wattle	MS	E
Acacia lanigera	Woolly Wattle	SS	E
Acacia paradoxa	Hedge Wattle	MS	
Acacia pycnantha	Golden Wattle	MS	
Acacia rubida	Red-stem Wattle	MS	⍁
Acacia verniciflua	Varnish Wattle	MS	
Bursaria spinosa	Sweet Bursaria	MS	
Cassinia arcuata	Drooping Cassinia	MS	↔
Indigofera australis	Austral Indigo	MS	

Groundcovers

Species Name	Common Name	Life Form	Notes

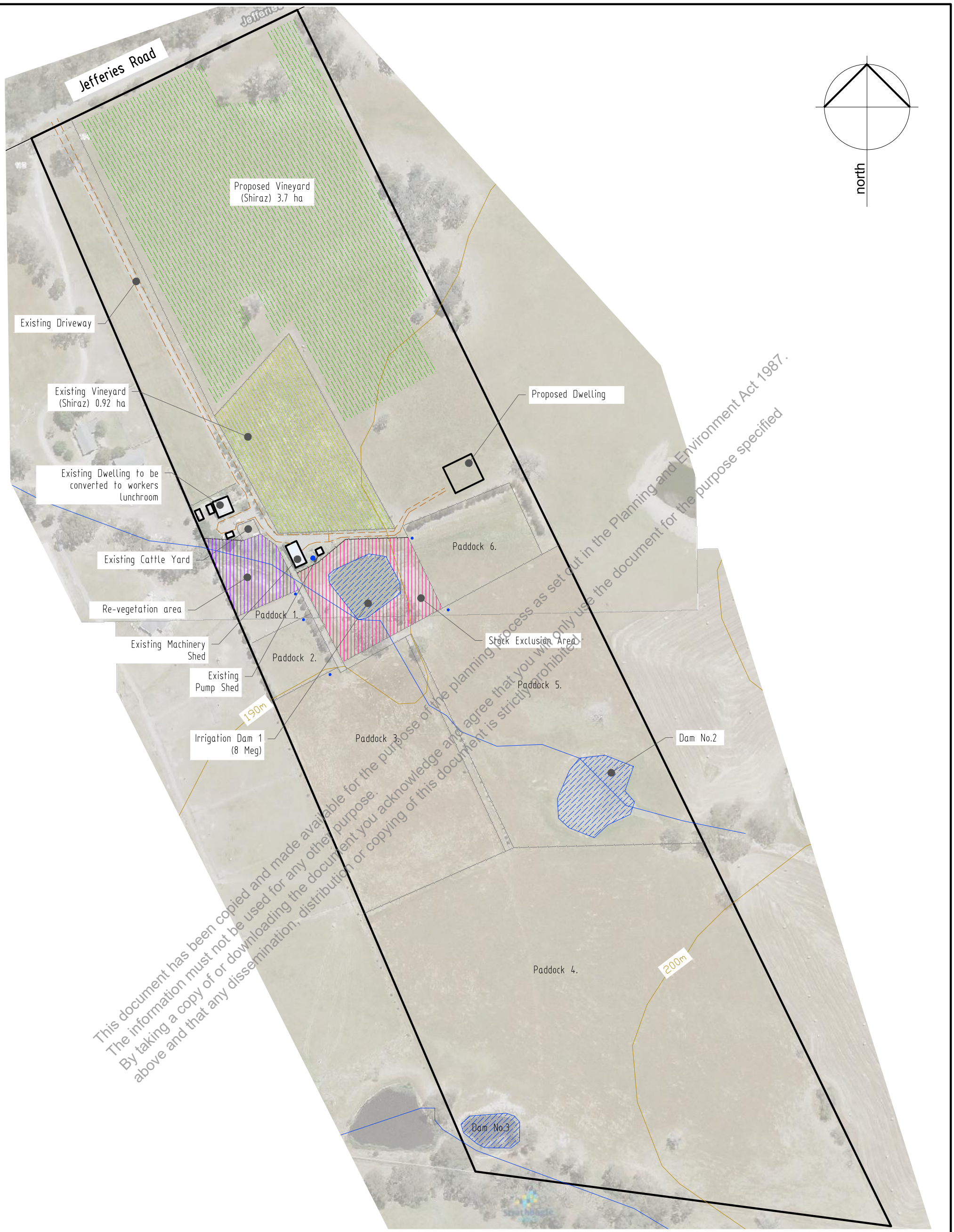
Footnotes

^	Species from extended list. These may not be commonly available at nurseries.
❖	Rare or threatened species
N	Northern part of zone
E	Eastern part of zone
W	Western part of zone
⍁	Near Warrenbayne only
↔	Readily colonises

Life Forms

LH	Large Herb	MS	Medium Shrub	SH	Small Herb
LTG	Large Tufted Graminoid	MTG	Medium Tufted Gramminoid	SS	Small Shrub
MH	Medium Herb	PS	Prostrate Shrub	T	Tree
MNG	Medium Non-tufted Graminoid	SC	Strangler/Climber		

Appendix 4. Proposed Improvements Plan



Town & Country
Development Services Pty Ltd

T & C DEVELOPMENT
SERVICES PTY LTD

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Tel No.: (03) 5795 2181
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Proposed Improvements Plan
-
114 Jefferies Road
Locksley

JOB REF.	20018	REVISION:	01
SCALE:	1 : 2500	SIZE:	A3
SHEET NO.	1		
DRAWN:	CR	DATE:	15/10/2020
DESIGNED:	CR	DATE:	15/10/2020
CHECKED:	-	DATE:	-

Appendix 5: Management Action Plan

MANAGEMENT ACTION PLAN

Issue & Location	Course of Action	Who else do I need to consult? eg. contractors, DELWP	When Timeframes	Risks associated with actions	Cost	Completed?
Fencing – Vegetation Protection Area	▪ Fencing out of vegetation protection area/s to exclude cattle ▪ Installation of post and 5 x wire fence for areas identified for vegetation protection on Proposed Improvements Plan ▪ Record work undertaken for fencing including receipts and labour costs in a Property Book	Department of Environment, Land, Water and Planning can supply further information. Local indigenous plant nursery. GBCMA Planting Guide.	▪ Install fencing by 1 June 2021 ▪ Maintain fencing annually	Personal injury may occur, personal protection equipment (PPE) to be used.	Plant stock labour	Cattle exclusion zones will remain as such to enable native vegetation to be protected and improved. The fencing will be completed by 30 June 2021.
Natural Recruitment	▪Re-growth vegetation within the vegetation protection area/s will be encouraged to established ▪Vulnerable vegetation will be protected with tree guards where required	Department of Environment, Land, Water and Planning can supply further information. Local indigenous plant nursery. GBCMA Planting Guide.	▪ Commence natural recruitment revegetation works by 1 June 2021 ▪ Establish protection measures by July 2021 including tree guards where required	Personal injury may occur, personal protection equipment (PPE) to be used.	Plant stock labour	Works to be completed by August 2021 and then ongoing maintenance to continue as required.
Pest Plant Management	▪ Bi-annual review of pest plants on the land including recording of weeds within a Property Book ▪ Mapping of monitored weeds shown on a plan kept in the Property Book ▪ Treatment of weeds using appropriate control methods including herbicide application and hand removal	Department of Environment, Land, Water and Planning can supply further information. Neighbours, local Landcare group. Quotes from contractors may be obtained.	▪ Establish a Property Book to record Pest Plant and Animal Management and Degraded land management by March 2021 ▪ Control methods to be commenced by July 2021 and detailed records to be inserted into the Property Book as soon as possible following completion ▪ Append receipts for materials, chemicals and labour to the Property Book	▪ Seed spread ▪ Un-seasonal weather ▪ Bushfire ▪ Drought	▪ Labour costs ▪ Materials ▪ Chemicals	Quarterly review and comment to be entered into Property Book on status of pest plant control program. Ongoing monitoring of property for new infestation.
Pest Animal Management	▪ Monitor pest animal presence bi-annually and record findings within a Property Book ▪ Log treatment methods used including bait/trapping etc in the Property Book ▪ Make comments on success/failures within the Property Book	Department of Environment, Land, Water and Planning can supply further information. Neighbours, local Landcare group. Quotes from contractors	▪ Commencement of control measures by March 2021 ▪ Treatment through regular control measures undertaken quarterly	Personal injury may occur, personal protection equipment (PPE) to be used.	Contractor	Ongoing monitoring of property.
Building Zone	▪ Locate stockpiled soil at an appropriate distance from vegetation, and ensure that it is either covered or is provided with sediment traps (weed free straw bales) before being taken away or respread within an appropriate location	Traffic Management /Construction Materials Supplier. Local indigenous plant nursery. Contractors.	▪ Install para-webbing protection around the tree within 15 metres of the building prior to works being undertaken on the land ▪ Ensure that trees within 15 metres of the driveway that are to be fenced into a revegetation area are identified for protection, prior to works being undertaken on the land.	Personal injury may occur, personal protection equipment (PPE) to be	Contractor Labour costs Straw Bales Para-webbing Marker ribbon	Prior to the commencement of development including driveway construction and site preparation

	on the land			used.		
Operation Risk	▪ Prepare a Property Book ▪ Include Success and Failure comments and photographs within the Property Book regarding issues, action, timeframes, costs and any other helpful information in addressing unforseen problems. ▪ Maintain property information within a Property Book on a quarterly basis ▪ Include chemical usage information ▪ Include equipment hire or purchase for pest plant and animal control and land degradation management	Risk Assessor	▪ Establish a Property Book to record operational information by March 2021 ▪ Update Property Book quarterly as a minimum for operation information	Personal injury may occur, personal protection equipment (PPE) to be used.	Purchase adequate folder and loose leaf paper to develop a Property Book Plastic Pockets Labels Dividers	Prepare Property Book and relevant sections to accommodate operation risk matters and maintain the book on an ongoing basis.
Soil Management	▪ Rotate the cattle between paddocks to assist in resting soil and pasture. This rotation will ensure that 2 – 3 paddocks are being rested whilst the other 3 or 4 paddocks are being stocked. The Property Book must provide an entry to demonstrate which paddock is being rested for a minimum of 1 month at a time. ▪ Spread superphosphate annually on pasture ▪ Cattle numbers on the property will not exceed 40 cows with calves or equivalent in total.	Landowner/Farm Manager	▪ Establish a Property Book to record operational information by March 2021 ▪ Update Property Book quarterly as a minimum for operation information	N/A	Labour	Prepare Property Book and relevant sections to accommodate paddock rotation and pasture maintenance and maintain the book on an ongoing basis.

Appendix 6: The Product

The Product

What is the product? *"Wine Grape & Beef Production"*

What is this business and who are our client's?
The vineyard will supply grapes for the production of wine under a boutique label for local wine sales and Melbourne restaurants. Beef cattle will be breed with steer sold through the Euroa Saleyards.

The need for supervision
The need to be present around the clock to provide surveillance of farm equipment from theft and maintain the health of the livestock at the farm is necessary. Being present when contractors are onsite including hired labour is also necessary. The work load involved with a vineyard operation of this size and the requirement to constantly monitor vine health also warrants a constant onsite presence.

Start-up
It is anticipated that the business will commence upon gaining approval for a dwelling on the land. The existing vineyard will be necessary in the first instance to bring it back into production and plumbing to water troughs. The cattle exclusion zone will be fenced out to ensure protection prior to the business commencing.

Staff requirements
This business will be operated by the owner (1 fulltime person) during the year with contract or employed labour used during peak periods.

Vineyard & Farm Supply requirements
Vineyard chemicals and general farm supplies would be purchased from Hunters in Euroa and stored within the storage shed on the property. The land produces the pasture that will be grazed by the cattle with some hay bailed during spring to be stored and fed during periods of feed shortage (ie drought).

Cattle water requirements
Water is supplied to each paddock through a plumbed watering system. The land has water available via an irrigation dam with two backup dams.

Soil and pasture care
The small number of horses per paddock will ensure protection of soil. The manure will be collected using a towable machine on a regular basis. This process assists in reducing intestinal worm infections on the property, and will reduce weed outbreaks. Pasture sowing will occur as required, and the use of perennial species will help maintain ground cover to prevent erosion and salinity from occurring.

Who will manage the vineyard?
The business is to be managed by the owners who have had previous experience. Specialist people including ergonomists, veterinarians, viticulturists and harvesting contractors would tend to the vineyard/cattle when required.