24 February 2023

Project Ref: 40003

ATT: Amy Wagenaar C/- South Gippsland Shire Council 9 Smith Street Leongatha VIC 3953

By email to:

amy.wagenaar@southgippsland.vic.gov.au

Dear Amy,

PLANNING PERMIT APPLICATION NO. 2022/269 570 SOLDIERS ROAD, FISH CREEK AMENDED PLANS

Further to your correspondence dated 6 February 2023, we enclose amended plans and an updated Agricultural Land Management Plan to satisfy Council's request for:

- the Staging Plan to provide that vineyards are planted and established on site and the manufacturing (winery) shed is constructed and completed prior to the dwelling being occupied; and
- the proposed dwelling reduced in height to a single storey form with a maximum roof/apex height that is no taller than the maximum height of the buildings on the neighbouring lot to the east (550 Soldiers Road).

Amended Plans

The enclosed amended plans show the proposed dwelling, which would continue to be located in the same location and with the same proposed building footprint (approximately 228sqm) as the original proposal, has been reduced in size from double to single storey.

The amended plans show the maximum ridge height of the proposed dwelling (RL 56.74m) would:

not exceed the ridge height of the neighbouring dwelling (RL 56. 74m);

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- be approximately 1.65m below the maximum ridge of height of the neighbouring outbuildings / sheds (RL 58.39m) located nearby the common boundary; and
- would be substantially below 7.5 metres above NGL, which is the relevant building height threshold under Schedule 3 to the Significant Landscape Overlay (refer analysis shown in red on Drawing Sheet No. AO8).

As a result of the proposed revisions and the provision for a single storey dwelling less than 7.5 metres in height, with a total area of less than 250 sqm, and constructed in muted, non-reflective tones, the amended proposal importantly no longer triggers the requirement for a permit under Schedule 3 to the Significant Landscape Overlay of the South Gippsland Planning Scheme (Clause 42.03).

On the basis of the above changes, it is respectively submitted that the proposed revised built form outcome is an appropriate response to the relevant Decision guidelines of the Farming Zone, noting:

- The amended proposal continues to be supported by a quality and generous landscape plan, which would enhance the existing site conditions and complement both the proposed built form and the environmental attributes and landscape character of the site and surrounding locality.
- Consistent with the original permit application, the proposed (single storey) dwelling:
 - has been sited to substantially screen the proposed winery shed from views within the public realm (Soldiers Road); and
 - would be setback more than 500 metres from Soldiers Road and framed and screened by proposed landscaping treatments both within the site, and the around the site peripheries and the proposed dwelling in a manner similar to the existing neighbouring dwelling.

In this regard, we draw Council's attention to our correspondence and associated attachments provided on 21 November 2022, which addressed in detail the visual implications of the proposed built form from the public realm (Soldiers Road) as part of the response to Council's request for further information.

Staging Plan

Per Council's request, the Staging Plan (refer Chapter 21) forming part of the enclosed Agricultural Land Management Plan has been updated to provide

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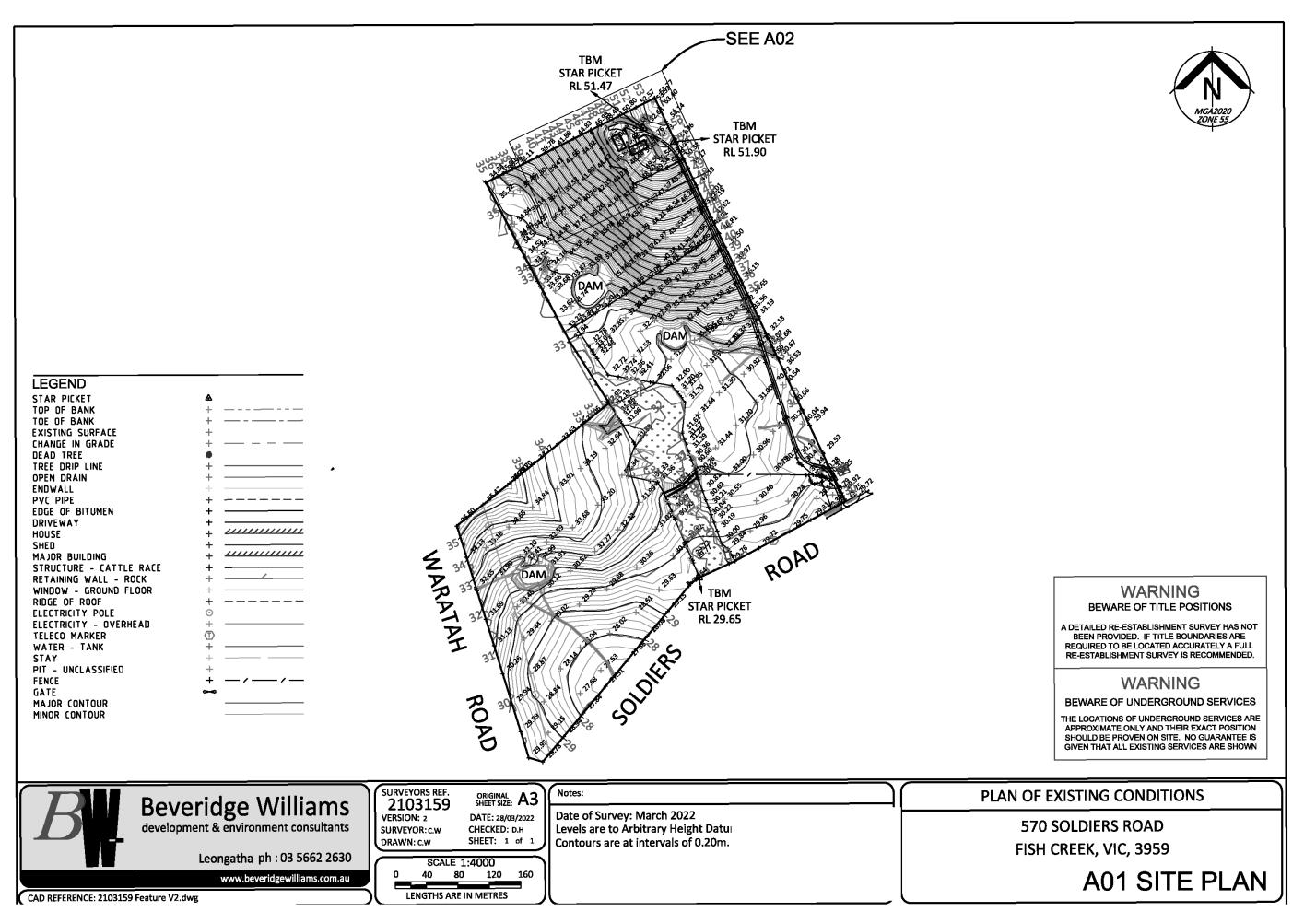
for the establishment of vineyards (in Year 1) prior to the completion and occupation of the proposed dwelling (in Year 2).

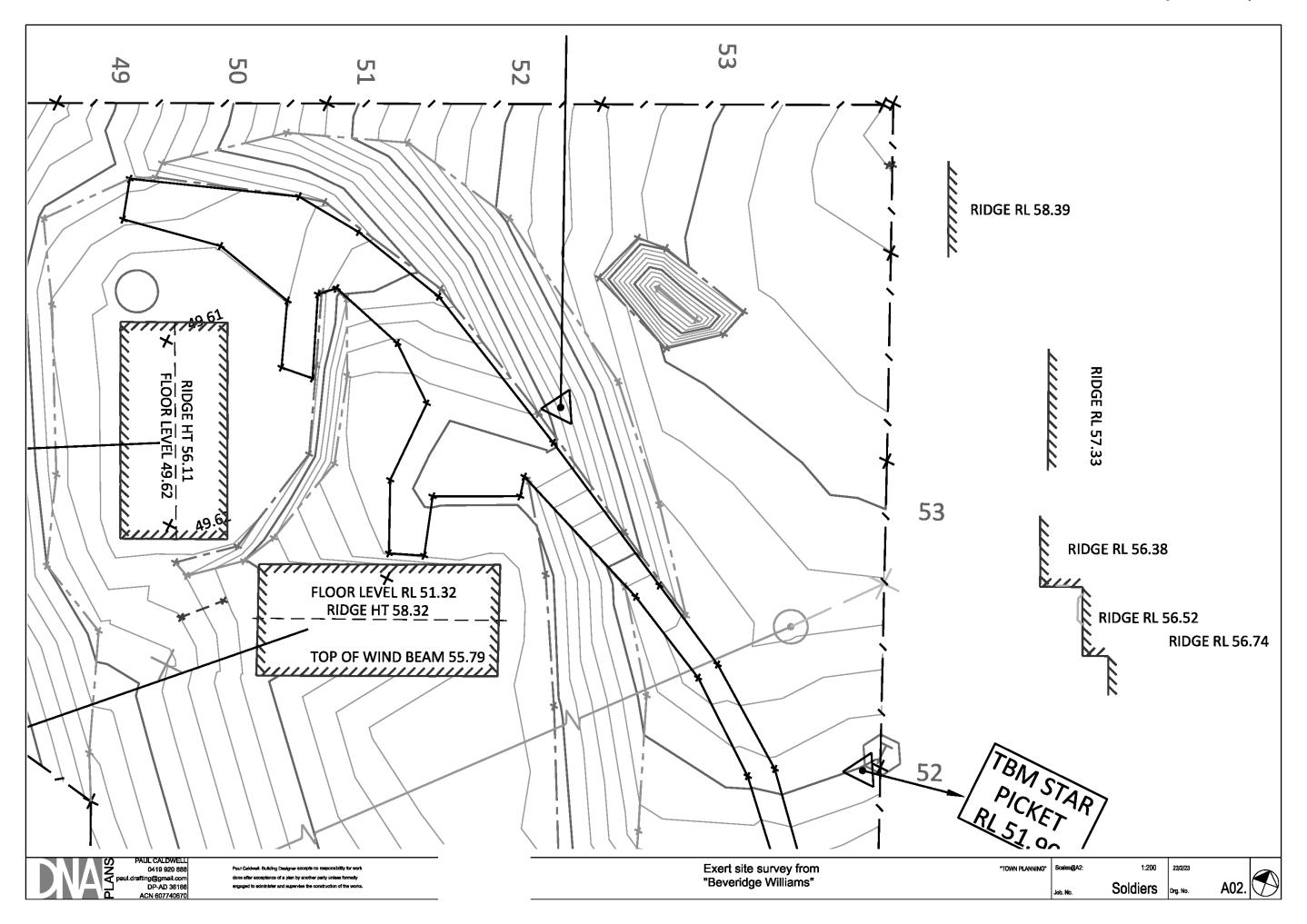
We trust that the timely provision of this information will support the referral and final assessment of the proposal in line with the timeframes set out in your correspondence dated 6 February 2023.

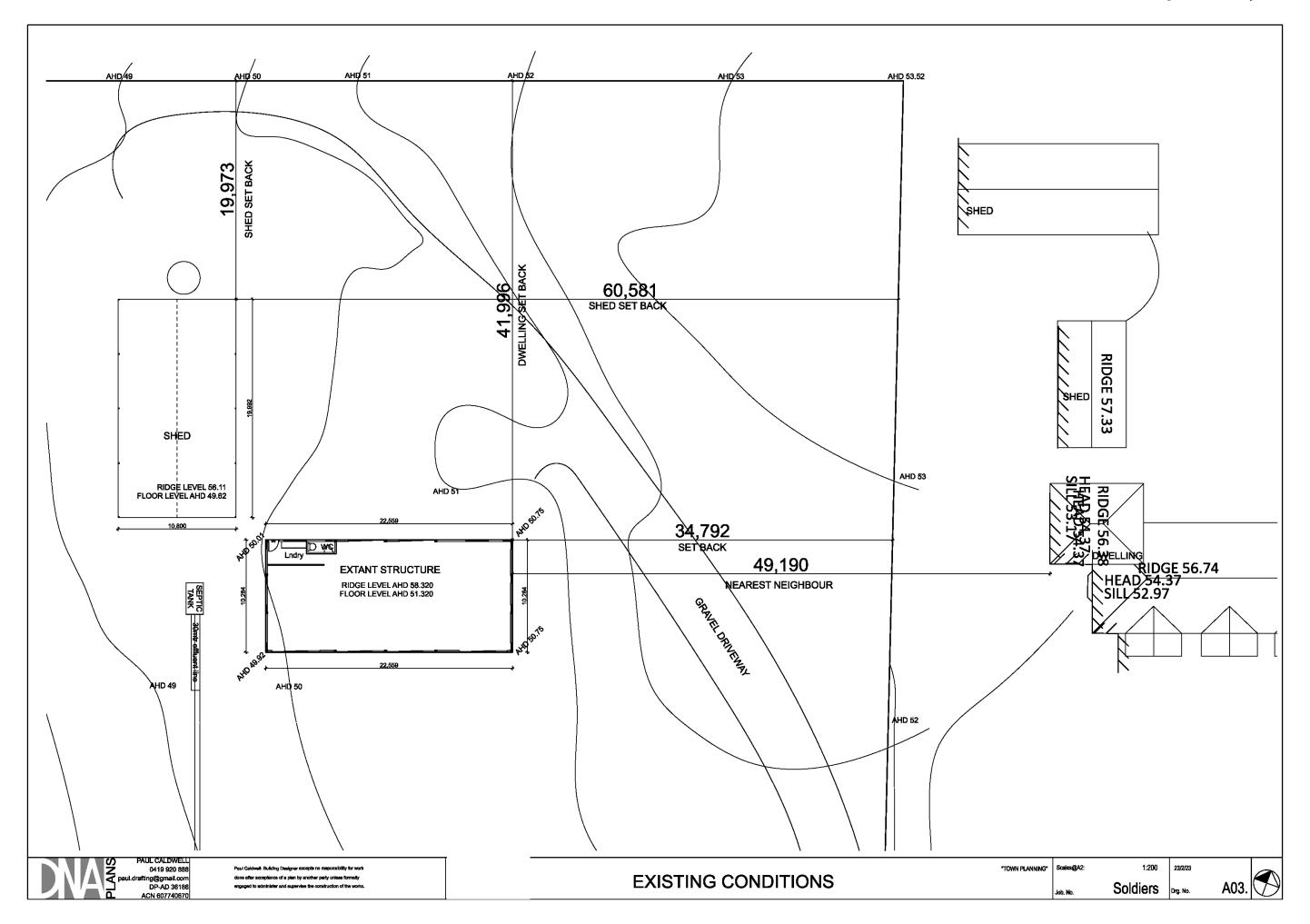
Please do not hesitate to contact the undersigned should you have any questions.

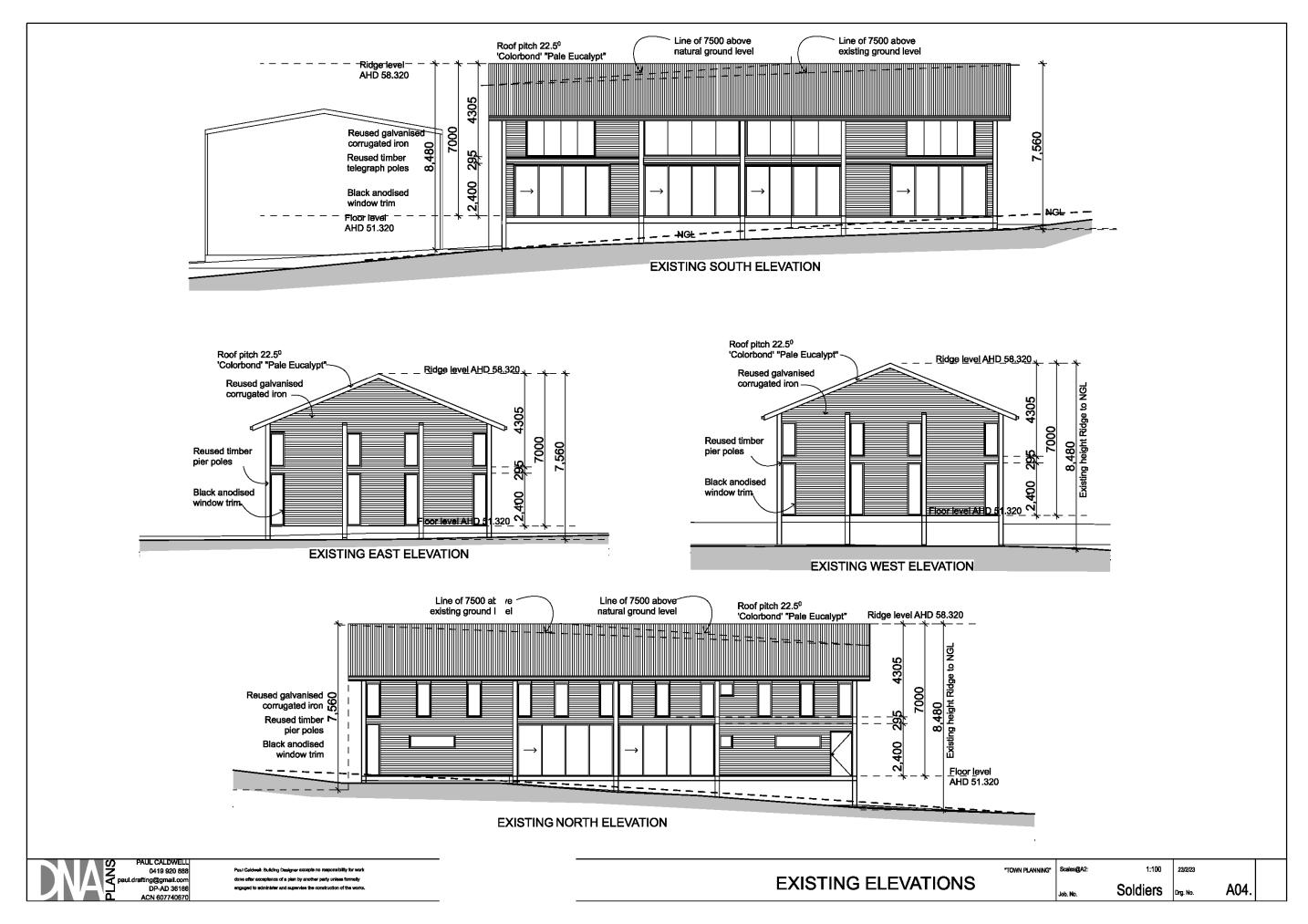
Yours sincerely

Mien

















PAUL CALDWELL
0419 920 888

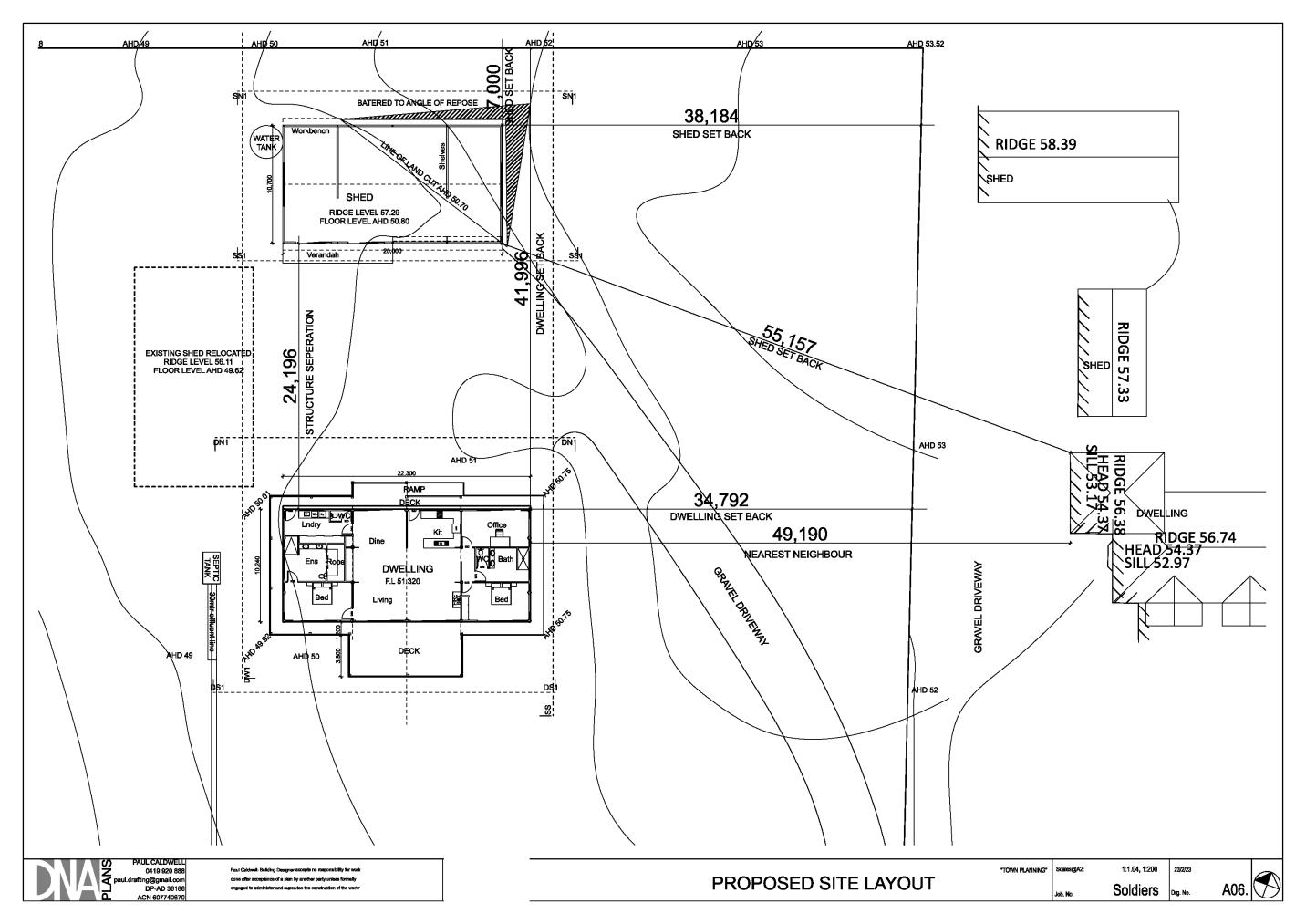
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ACN 607740670

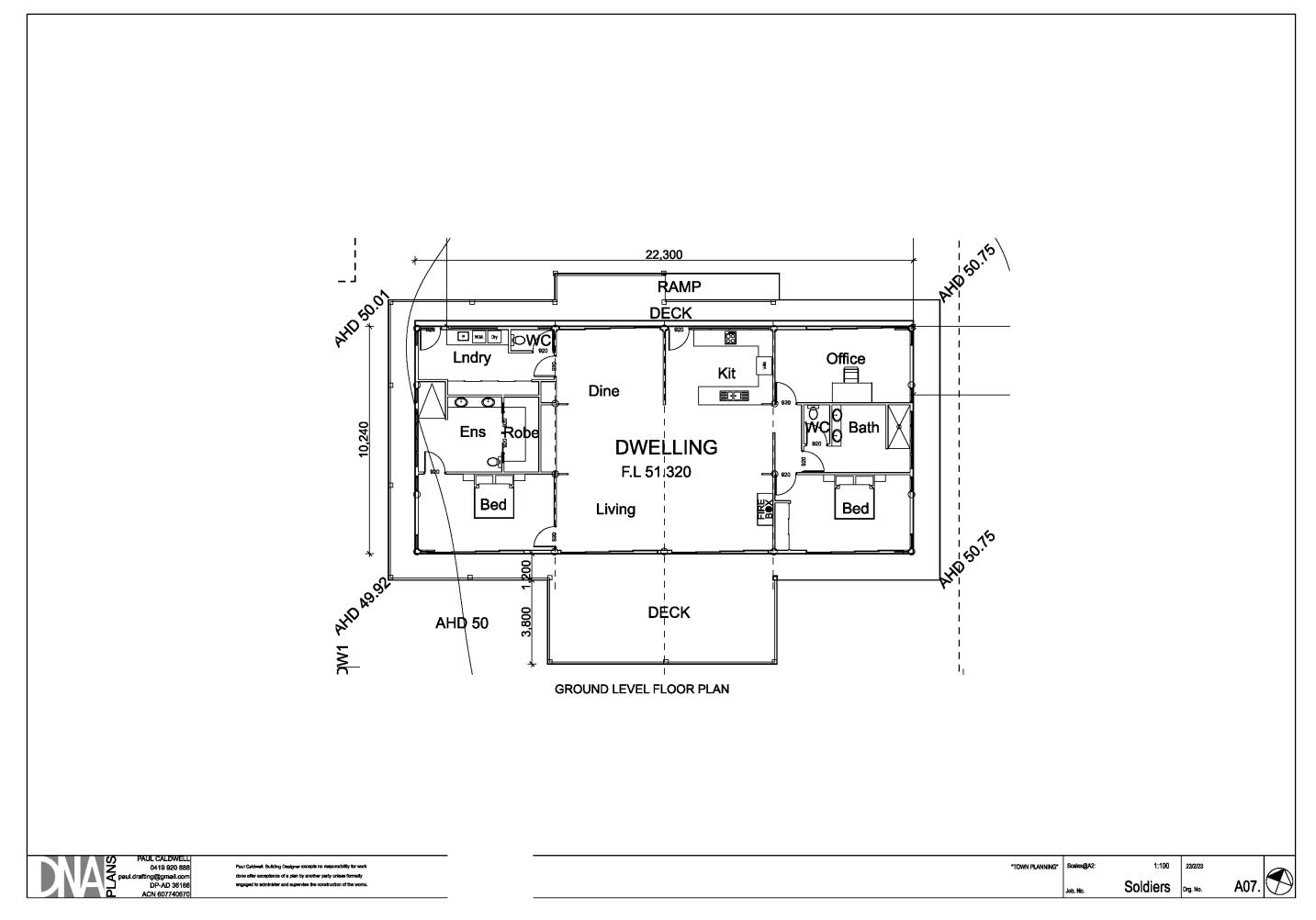
Paul Caldwell: Building Designer accepts no responsibility for work done after acceptance of a pian by another party unless formelly engaged to administer and supervise the construction of the works.

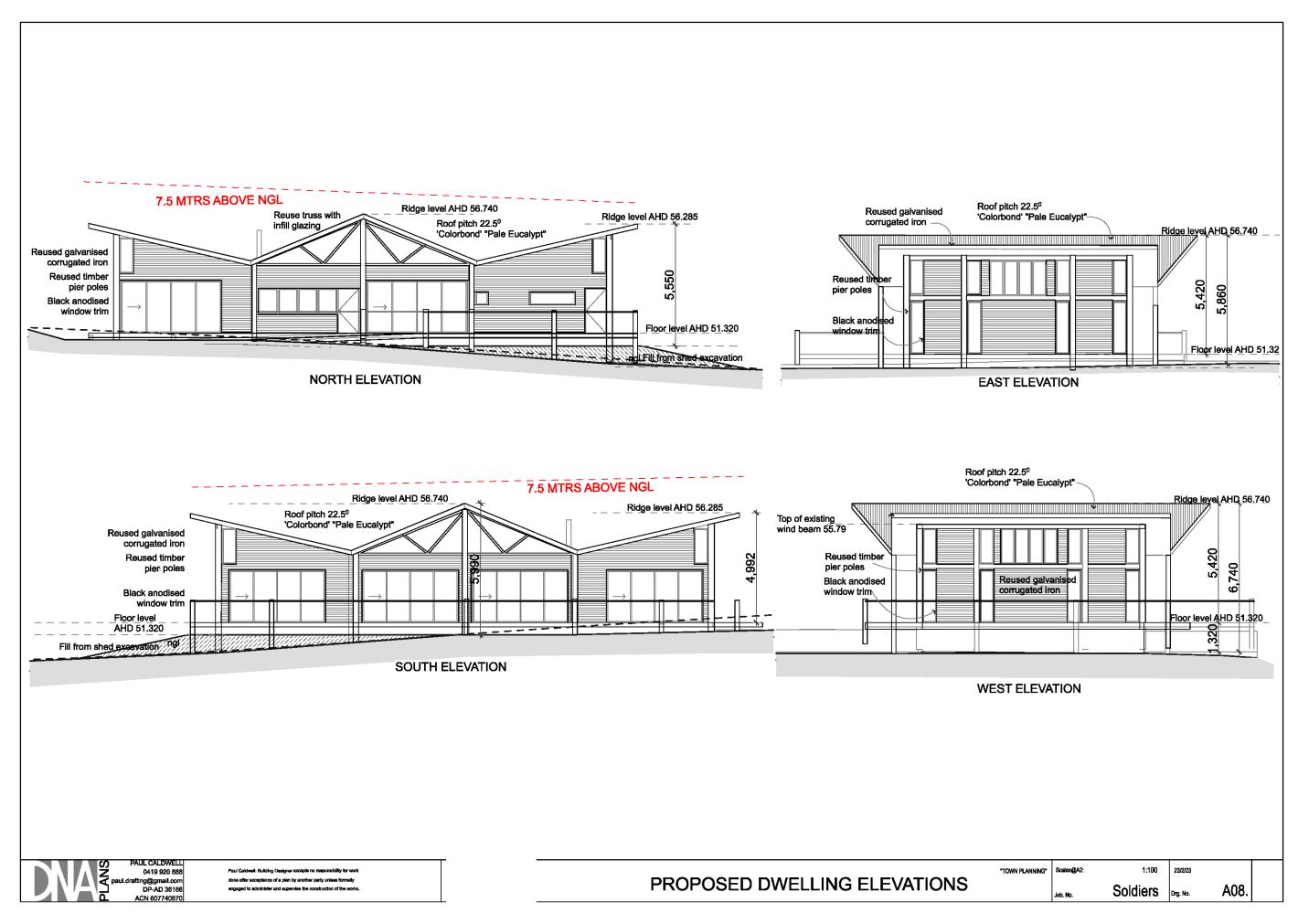
SITE PHOTOGRAPHS EXISTING CONDITIONS

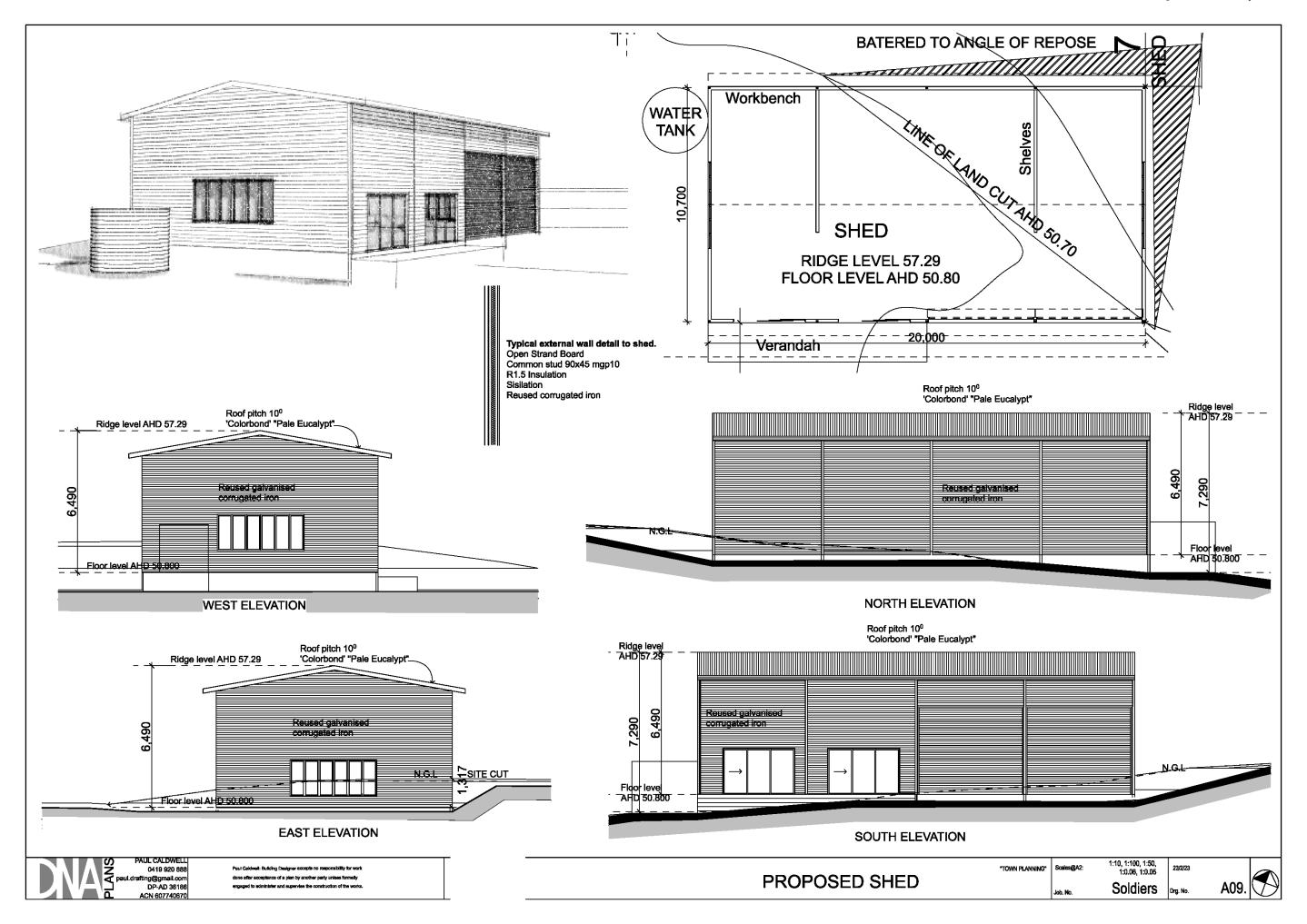
TOWN PLANNING* Scales@A2: NOT TO SCALE 24/10/22

Job. No. Soldiers Drg. No. A05.



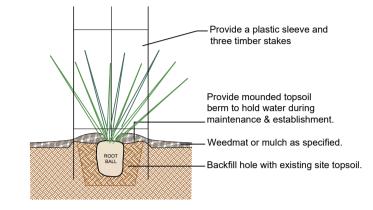






Attachment 3.1.1

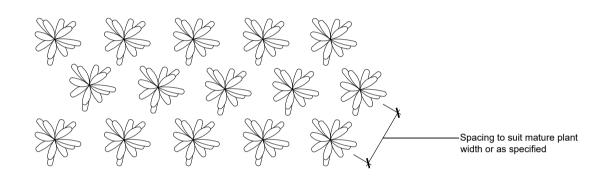




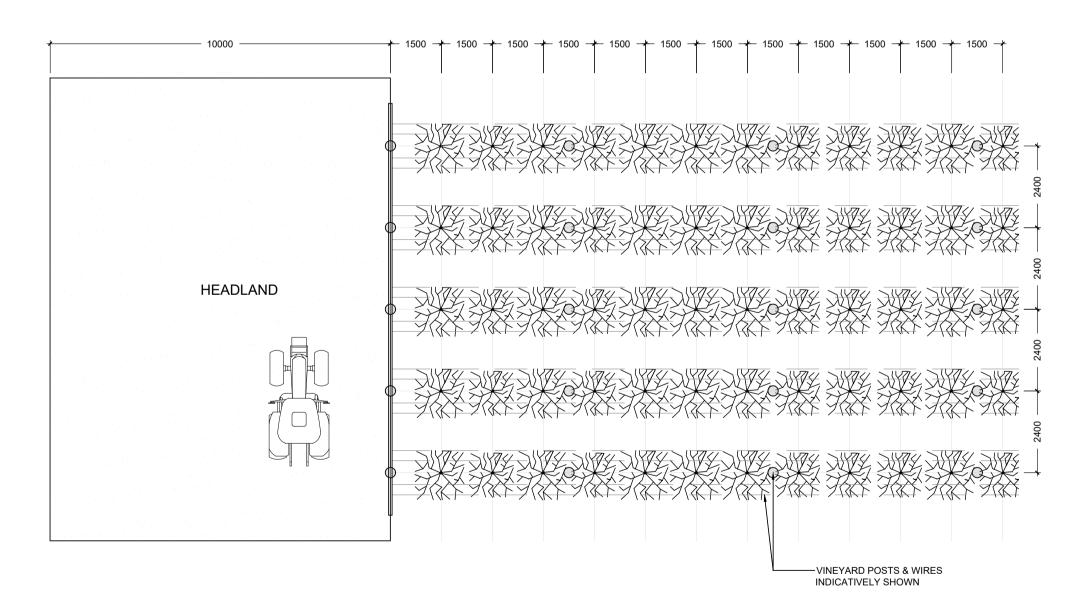
Place plants in position according to densities required and prepare planting holes, with as minimal soil disturbance as possible, to a minimum size of 150mm deep x 200mm in diameter. Plants shall be thoroughly soaked via immersion in water prior to planting. If the site soil is very dry then planting holes are also to be filled with water and allowed to drain

Place plant in hole so that top of soil level in pot matches surrounding soil level. Back fill with existing site topsoil, removing any debris limiting to plant growth. Provide weed matting or mulch area as specified taking care to keep mulch clear of plant stem. All plants are to be thoroughly watered

(D1) TYPICAL TUBE PLANTING DETAIL



D2 TYPICAL PLANTING LAYOUT PLAN - Grasses & groundcovers
Scale 1:50



D3 Vineyard Plan

SPECIFICATION NOTES

Revegetation works to follow a three part procedure

- Herbicide treatment to the revegetation site area, including general clean-up of site area.
- Ripping of area to 400mm-1000mm with suitable equipment in maximum 3m by 6m hash pattern to cover entire revegetation area.
- 2. Planting of tubestock into rip lines of prepared area
- 3. Post Vegetation Establishment maintenance/irrigation and weed control

Pre-planting Preparation

Herbicide treatment to entire planting area to remove all vegetation to area to be revegetated.

All weeds shall be thoroughly removed. All vegetative material, including roots and rhizomes of non-woody perennials and woody suckering weeds, is to be removed or appropriately controlled using chemical means. The stumps of non-suckering woody perennials are to be stump ground. All vegetative material shall be appropriately disposed of offsite in a manner which will not allow their re-establishment elsewhere. Any chemical controls are to be used in accordance with manufacturer's instructions and standard occupational health and safety procedures.

If any existing planting is to be retained then care must be taken to ensure these are not damaged during weed removal. This also implies that any herbicides used are suitable for use around the vegetation to be retained.

Deep ripping: Deep rip along planting lines with a single-tine ripper as deep as possible (min. 400mm, 1000mm preferred) to ensure good shattering of subsoil and subsequent root and moisture penetration. Ripping to be completed with suitable equipment in maximum 3m by 6m hash pattern to cover entire revegetation area.

Late winter Early Spring: Contact herbicide spray treatment along the rip lines with a suitable spray in accordance with the manufacturer's specification. Spray along the rip lines with a second application of weed spray in accordance with the manufacturer's specification. (If required)

environment for plant growth).

Indigenous Planting will take place in one stage from the planting grid provided.

Rotary hoe all rip line(s) and soil mounds with tractor to level surface, for appropriate planting bed. Planting shall be carried out using accepted horticultural practices with all plants conforming to the species, size and quantities indicated on the Landscape Plan and Plant Schedule. Plants shall be thoroughly soaked through immersion in water prior to planting and if the planting soil is very dry then the planting hole is also to be filled with water and allowed to

All plants shall be appropriately hardened off in the nursery. Use plants with the following characteristics: Large healthy root systems with no evidence of root curl or pot bound restriction or damage, vigorous, well established, and free from disease and pests and of good form, consistent with the species or variety, hardened off - not soft or forced. Plants that do not meet All tubestock and seed for planting is to be of local provenance and suitable to site. If conditions are very cold and wet, wait

for warmer weather, ideally between April-September.

<u>Tubestock:</u> Plant tubestock at suggested centres based on species (refer drawings). Tubestock are to be planted 100-200mm away from the rip lines. Planting hole dug no deeper than the height of the roots, and hole filled only to the base of the plant crow Refer detail. Planting guards are to be placed and bamboo staked around every individual plant (rabbit protection and sheltered

Biodegradable Weed Mats made from Recycled Fibre with dimensions 370mm x 370mm, to be fitted to the base of each plant (tree, shrub, ground cover). Weeds should be cleared from area prior to installation around plant base. Fasten Weed Mat with cardboard guard and bamboo stakes. Refer detail.

Post Vegetation Establishment Recommendations

Addition of organic mulch is to be supplied to all plant bases and is to be of chipped or shredded vegetable material with 80% of particles in the size range 25 to 50mm in plan and 5 to 10mm in thickness. No particles are to exceed 75mm in plan. Mulch shall be free of deleterious and extraneous matter such as soil, weeds and sticks. Mulch is to be stockpiled and thoroughly weathered prior to delivery.

This mulch shall be laid to a minimum depth of 50mm and is to be sloped towards plant stems and kept 100mm back from the stems of all plants to prevent collar rot.

Mulch to be reapplied incase of any loss due to floods.

- Weed management is critical with vegetation establishment. Strategies are as follows: Mulch is to be added as necessary to keep weeds to manageable levels.
- Exhaust the soil seed bank by removing weeds and/or spot spray with herbicide. Use of weed mats around stock, during planting/guarding.
- Minimise disturbance of soils to establish canopy and groundcover and avoid excess weed germination.
- Establish a native grass species as a ground cover as soon as possible. • Coppice established vegetation to create canopy at ground level to provide intermediate cover.

practices, as well as rectifying any defects that become apparent in the work under normal use. This plant establishment and maintenance period will last for 2 years after initial works take place. This shall include, but shall not be limited to watering, fertilising, weeding, pruning, pest and disease control, cultivation, re-staking and replacement of any plants that fail or are damaged with plants of the same species and size. This is to the onus of the owner.

Maintenance and Establishment means the care and maintenance of the revegetation area by accepted horticultural

Recommend supplemental water to be supplied to all newly planted plants, particularly during hot weather. Allow for approximately 10mm per meter squared of planting area to be delivered to the soil surface around each plant. Water delivery is more critical during the first two years of plant establishment.

Failed Plant Material and Replacement

- Addition of species underrepresented or failed within the community are to be replaced with more suitable species.
- Maintenance and achieving the appropriate structural visual form is to be completed by an experienced revegetation
- The revegetation area must function and appear as a 'natural' vegetation area.

REVISION DATE OHN PATRICK ANDSCAPE ARCHITECTS PTY LTD 24 Victoria Street. chmond, VIC 3121 +61 3 9429 4855 +61 3 9429 8211 www.johnpatrick.com.au S.Rivers & Bruce Thompson PROPOSED WINERY, VINEYARD DEVELOPMENT 570 Soldiers Road, Fish Creek Landscape Specification & Typical Details for Town Planning SCALE As Specified 28 JULY 2022 DRAWN CHECKED JOB NO DWG NO

CAD FILE

22-181-L.dwg

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NOT FOR CONSTRUCTION

Do not scale off drawings

Meeting No.482 - 17 May 2023 South Gippsland Shire Council

Agricultural Land Management Plan 570 Soldiers Road, Fish Creek

Prepared by: John Gallienne & Co. Ptv Ltd

February 2023

1. Introduction

This Agricultural Land Management Plan has been prepared to address the requirements of the South Gippsland Shire Council in respect of a planning permit application for a proposed rural industry (winery) and associated rural dwelling, and to support the ongoing agricultural use and conservation management of the land at 570 Soldiers Road, Fish Creek (the 'Property').

It has been prepared as a supplementary report to the Agricultural Land Management Plan prepared by John Gallienne & Co Pty Ltd dated 19 July 2022, which was submitted with the planning permit application.

1.1 Primary Use of the Property

Current use of the property

The Property is and has historically been used for cattle grazing and hay production.

Current and ongoing farming activities are operated in an arrangement with a nearby dairy farmer, including the grazing of heifer replacements and dry cows on the Property.

The landholders' herd of beef cattle currently numbers 33 beef steers.

The farming activities are conducted alongside ongoing land management and conservation activities to rehabilitate and repatriate the formerly degraded rural land and to continually improve biodiversity and environmental health.

Since acquiring the Property in 2014, the landholders, with the assistance of South Gippsland Shire Council, Landcare, and local horticulturalists, have implemented a range of land management and conservation measures to support and improve the environmental integrity and agricultural productivity of the land, including:

- sustainable maintenance of ground cover;
- clearing and management of weeds;
- revegetation and stabilisation of the existing riparian corridor;
- extensive planting (greater than approximately 2,700 endemic trees);
- resowing, renovating and fencing paddocks;
- development of stockyards;
- installation of a water tank;
- development of a driveway;
- development of new boundary fencing;

- development and maintenance of three (off stream) dams;
- · development of a surface drainage system; and
- development of a septic toilet.

Proposed use of the property

The landholders propose to use and develop the existing farm with integrated agriculture production (viticulture), including the development and establishment of a vineyard and an associated boutique winery.

The landholders also propose to develop a rural dwelling to support on-site occupation and management as a critical component of the proposed integrated land use and whole of farm management plan.

Other key components of the proposal and the Agricultural Land Management Plan are:

- Maintain existing and expanded farming and agricultural activities, including cattle
 grazing and fodder production and the intended operation of an independent beef
 cattle production unit (indicatively comprising 16 head of weaner steers or heifers).
- Ongoing land management and conservation activities, including to support continual biodiversity improvement and environmental health, including soil and land quality.

1.2 Land Management Aims

The use and development proposal, including on-site occupation and management, represents an appropriately sited specialist agricultural business that will be adaptable to climate change and will support compatible value adding activities to the existing agriculture use and improved biodiversity and land health outcomes.

The integrated aims of this Agricultural Land Management Plan are:

- To increase the agricultural productivity of the cleared pastured areas of the Property, including by effectively and sustainably managing existing and future grazing activities and production.
- To identify and sustainably manage any potential environmental risks on the Property, including through weed management.
- To identify, sustainably manage and enhance significant environmental assets on the Property, including native vegetation and the ephemeral watercourse, including through the implementation of a landscape plan and revegetation / restoration plan for the Property.

- To support the development of appropriately sited specialist agricultural activities, including viticulture and an associated winery.
- To identify suitable areas for farm buildings and works.

1.3 Property Summary

Address	570 Soldiers Road, Fish Creek
Certificate of Title	Volume 09439 Folio 935
Property description	Lot 3 on Plan of Subdivision 125572
Restrictions on Title	Nil
Size of property	21.1 hectares
Landholder name and contact details	
Waterway	Unnamed Creek
Water catchment	Hoddle Ranges
Municipality	South Gippsland Shire
Planning Zones	Farming Zone
Overlays	Bushfire Management Overlay Environmental Significance Overlay (Schedule 5) Significant Landscape Overlay (Schedule 3)
Bioregion	Strzelecki Ranges
Ecological Vegetation Class/s (EVC)	Indigenous plants selected from EVC 1750
Soil type	Parapanic PODSOLS with Grey KUROSOLS Yellow Kandosls
Rainfall (annual average)	1096.1mm

2. Property Description

2.1 Description of the land

The Property is located at the northeast corner of Waratah Road and Soldiers Road approximately 12kms south of the Fish Creek township.

It comprises a rural landholding of approximately 21.1 ha with a gently undulating topography that rises by approximately 20 metres to an elevation of approximately 50 metres AHD in the northeast corner of the Property.

Notable features of the Property include:

- An ephemeral watercourse and riparian vegetation corridor, which traverse the central part of the property incorporating trees and bushland within a corridor varying in width between approximately 120 and 150 metres.
- Scattered trees and vegetation, including boundary line planting.
- Cleared and fenced paddocks.
- Stockyards (nearby the southeast corner of the Property).
- 3 existing dams.
- 2 existing rural buildings (in the northeast corner of the Property).
- Existing vehicle access from Soldiers Road nearby the eastern boundary.

2.2 Description of the neighbourhood

The Property forms part of a rural landscape which includes a varied subdivision pattern and range of notably smaller and larger rural lots in the Property's immediate locality.

With some exceptions, the surrounding area contains a predominance of farming and grazing activities.

A majority of the neighbouring and nearby lots contain an existing rural dwelling.

The use and development of the Property's immediately adjoining neighbours is described as follows:

- 1075 Waratah Road shares part of the Property's western boundary and is used and developed for tourist accommodation operating as the 'Prom Coast Holiday Lodge' and offering group or single accommodation within a 'lodge' or one of 5 separate 'cottage' buildings. It includes a dwelling.
- **1085 Waratah Road** also shares part of the Property's western boundary and is used for commercial activities, offering outdoor storage for caravan, boats, and cars, alongside an existing rural dwelling.
- **550 Soldiers Road** shares a common boundary with the Property to the east. It comprises a similarly sized parcel of approximately 20.3ha that has been extensively cleared suitable for grazing and is developed with an existing dwelling in the northwest corner of the site (setback a minimum of 14 metres from the common boundary with the Property).
- Large farming properties are located to the **north and south** of the Property, including a landholding of approximately 132 hectares to the north, and a landholding of approximately 1,200 hectares to the south.

Agricultural Land Management Plan 570 Soldiers Road, Fish Creek

An aerial image of the Property forms Attachment 1.

2.3 Access

The Property includes an existing established access and all-weather driveway (incorporating dimensions adequate to accommodate emergency vehicles) from Soldiers Road, nearby the eastern boundary.

The proposed use and development of the Property would rely upon the existing access.

A proposed site and landscape plan accompanies the proposal (prepared by John Patrick Landscape Architects Pty Ltd – attachment 3) which provides for the creation and or reestablishment of existing gravel paths and creek crossings (2) to support livestock movement and effective land management.

The siting and location of existing and proposed accessways have been established and proposed to support optimal safe and efficient access and movement and to protect and enhance existing landscaping, vegetation, and habitat areas, as well as revegetation and land and habitation creation and rejuvenation opportunities.

Site Plans

3.1 Current Land Use

The current use of the Property is illustrated on the site plan at Attachment 2.

The plan identifies the location of:

- existing buildings and structures;
- existing fencing;
- the existing legal point of access in Soldiers Road;
- existing service (including overhead electricity lines);
- 3 existing dams and the existing watercourse;
- an existing water tank;
- open drains;
- vegetation;
- contours; and
- the existing driveway accessway.

3.2 Proposed Land Use

The proposed use of the Property is illustrated on the site plan at Attachment 3.

The plan identifies the location of:

- proposed buildings and structures, including a proposed dwelling and winery shed in the northeast corner of the Property;
- existing and proposed fencing;
- the location of proposed internal accessways and creek crossings (2) to be reused;
- the proposed agricultural activities, including:
 - o fenced paddocks to be utilised for grazing and fodder production;
 - stock proof fenced areas to be protected for existing and proposed planting and biodiversity and habitat enrichment, including along the riparian corridor; and
 - o stock proof fenced areas for the development of a vineyard.
- the location of proposed landscaping works.

4. Planning Scheme Zones and Overlays

Under the provisions of the *South Gippsland Planning Scheme* the Property is included in the Farming Zone and is subject the following overlay controls:

- Bushfire Management Overlay
- Environmental Significance Overlay (Schedule 5)
- Significant Landscape Overlay (Schedule 3)

The application for planning permit for the proposed use and development of the Property with a winery and rural dwelling is accompanied by a detailed town planning assessment of the proposal against the relevant provisions of the *South Gippsland Planning Scheme*, including the Farming Zone.

That assessment, prepared by Kinetica Studio Pty Ltd and dated August 2022, confirms that the proposal is a positive response to the purpose of the zone and the objectives of the relevant objectives of the overlays.

In summary, the planning assessment justifies the following conclusions:

- The proposal is a strong and consistent response to the strategic planning expectations for the Property and the *South Gippsland Planning Scheme*.
- Appropriate and proper regard has been given to the impact of the proposal on the retention and enhancement of productive agricultural land in the Farming Zone.
- Appropriate and proper regard has been given to the valued environment and landscape character features of the locality, including the broader policy objectives for the Corner Inlet Amphitheatre, as required by ESO3.
- The proposal will result in a range of embedded net community benefits not limited to bettering the region's contribution to Victoria's food bowl, and the Shire's growing food and wine trail reputation and offering.
- The proposal will result in no unreasonable adverse off site impacts, nor will it impact on the agricultural productivity of neighbouring and or nearby land.
- The proposal provides for a well resolved and high quality land use and built form outcome, including concept landscape plan, that will complement and enhance the rural and environmental values, character and experience of the Property and surrounding rural area.
- The bushfire management considerations relevant to the Property and the proposal have been appropriately considered and addressed.

4.1 Summary

This Agricultural Land Management Plan supports the above conclusions and advances a plan and actions to ensure:

- The proposed land uses are highly compatible and will result in no adverse impacts.
- The proposed development and land use will be entirely consistent and compatible
 with adjoining land uses and support land management principles and values better
 implemented and enhanced by having onsite management.
- The proposed land uses and dwelling will meet the agricultural management requirements of the Property.
- The biodiversity and quantity and quality of the flora will be maintained and improved through weed management and significant native revegetation works.
- The proposed grazing regime will not create adverse pressure on the natural physical features of the Property.
- Water can be provided for stock from the existing dams and proposed troughs.
- The number of cattle proposed for the Property is appropriate and will not result in adverse soil impacts.
- Grazing management will ensure ground cover is maintained.

- There is no proposal to remove native vegetation.
- The proposed buildings have been placed in the existing developed part of the Property so as to avoid development on the optimal agricultural land, including for grazing and viticulture activities.
- The proposed buildings have been located to facilitate and support effective property management including safe and efficient site access.

5. Land Class Capability

Land class	Description	Livestock access	
1	Little risk of degradation and able to support a wide range of uses (e.g. gentle slopes, well-drained soil, good vegetation cover).	All year	
2	Some risk of degradation under certain conditions (e.g. prone to waterlogging in winter).		
3	Land with moderate risk of degradation and will require active management (e.g. sloping land with poor soil structure).	Restricted	
4	Land with severe degradation potential (e.g. steep slopes, erosion potential, poor soil structure).	Prohibited	
5	Land that, if not already degraded, would be at serious risk of degradation (e.g. extreme slopes, prone to erosion or area of high value native vegetation).		

The land on the Property is Class 1.

- There is little risk of degradation; the land is able to support a wide range of uses.
- Slopes are gentle, with an expansive, mostly flat area on Paddocks 2 and 3.
- Paddock 4 in the south west corner of the Property, between the creek and Waratah Road, has a slight slope (to 5%) towards the creek.
- Good vegetation cover is maintained all year and stock have access to rotationally graze.
- Some years the pastures have been harvested for silage or hay.

The Class 1 land supports the proposal for open grazing in paddocks 1, 2, 3, and 4, which can sustain agricultural use all year round.

The planning application is accompanied by a viticulture assessment prepared by Hansen Consulting Group dated (June 2022), and previous Agricultural Land

Agricultural Land Management Plan 570 Soldiers Road, Fish Creek

Management Plan prepared by John Gallienne, which should similarly be read in conjunction with this plan.

That assessment has considered the land capability and quality for the suitability of the land to establish a vineyard and in advancing recommendations for vineyard siting and layout.

It supports the conclusion that the Class 1 land supports the proposal for grape vine planting in block areas '1' and '2' on the the plan prepared by John Patrick.

At the Property's scale, sustainable land use is suited to the integrated proposal for grazing, fodder production enterprises and viticulture (alongside a boutique winery).

The proposed enterprises will support sustainable land management, including good ground cover maintenance alongside conservation, enhancement and enrichment of the riparian corridor and habitat corridors through and around the Property.

6. Proposed Agricultural Enterprises

The current grazing program in conjunction with a nearby dairy farmer will continue. Both dairy replacement heifers plus 30 Angus beef steer weaners (owned by the landholders) will be rotationally grazed around paddocks.

Spring surplus pasture growth will be conserved as silage some years.

Establish grapevines and produce wine – Varieties Chardonnay (1.5ha) and Pinot Noir (2.8ha).

7. Livestock Management

Currently all of the pasture area is grazed by cattle, this accounts for approximately 16.6 ha.

The grazing area will be reduced to approximately 9.65 hectares once the proposed vineyards have been planted.

A major cause of pasture deterioration is overgrazing, therefore flexible grazing management will be constantly reviewed to ensure an appropriate balance is struck between meeting the nutritional needs of stock and maintaining healthy pastures.

It is proposed that livestock numbers will vary, but are proposed to comprise up to 78 head of cattle (48 dairy heifer replacements plus 30 beef steers). Occasionally in winter up to 55 dairy dry cows may be placed on the area, however these would be the only stock at that time.

Agricultural Land Management Plan 570 Soldiers Road, Fish Creek

Under this proposal and when the grape vine planting and tree/shrub planting phase is completed and all stock proof fencing is erected, it is likely that maximum stock numbers that will be supported will be 16 Angus beef steer/heifer weaners.

Stock numbers will be strategically managed (purchase and sale) to minimise supplementary feeding.

Feeding will be limited to short periods during winter to fill feed gaps.

It is proposed to purchase pasture hay locally. Assuming 25 hay rolls, the imported fodder would equate to less than 10% of the overall feeding requirement.

8. Pasture Management

8.1 Current pasture species

Spring 2022 pasture species are grasses and legumes:

- The grass component is predominantly perennial ryegrass (Lolium perenne) plus, some (20%) cocksfoot (Dactylis glomerata).
- Legumes are white clover (Trifolium repens) which is a perennial, with some (10%) subterranean clovers (Trifolium subterraneum) which is an annual clover and growing on the higher rises.

8.2 Ground cover on the Property

The pastures have consistently had a good ground cover.

The optimum time of the year to assess ground cover is during late summer to early autumn.

When the desirable ground cover is greater than 70% on the flats or gently rising slopes, and greater than 80% on a slope it is considered satisfactory/desirable.

The current spring ground cover is very high and greater than 80%.

8.3 Pasture renovation improvement work

Pasture renovation and improvement works in the previous 3 years have included oversowing with perennial ryegrass on paddocks 2, 3 and 4. This was necessary as there were clear signs of prior overstocking of the land by the previous owners. The

oversowing has supported and enabled current grazing and fodder production activities on the land.

Ongoing management and improvement works under the current proposal includes:

- Adding surface drains to paddocks 2 and 3
- Oversowing with perennial ryegrass in paddock paddock 1.

9. Cropping

There has been no cropping carried out since purchasing the property, and none is proposed.

10. Agroforestry and Horticulture

Historically, the Property has not been used for agroforestry or horticultural activities.

The current proposal involves the establishment of a vineyard and winery, with grapevines proposed to comprise an area of approximately 4.3 ha.

11. Biodiversity Management

Since purchase in 2014, the Property has been managed to strengthen and support biodiversity.

Naturally vegetated conservation 'zones' now equate to approximately 4.6 ha of the total site area.

In conjunction with the planned grapevines, planting additional areas with a range of tree and shrub species is proposed:

- To continue to maintain and improve biodiversity
- Provide fauna habitat
- Ensure regeneration of native vegetation over time
- Provide shade and shelter
- Provide visual amenity
- Maintain and improve surface water quality
- Enhance and conserve the riparian corridor

Complement the agricultural and viticultural enterprises.

From a land degradation risk perspective, the fencing and management of conservation and agricultural management 'zones' will support improved biodiversity protection and revegetation, with the vegetated area of the Property proposed to be be expanded to approximately 6.4ha.

The proposal is accompanied by a detailed landscape plan and planting schedules prepared by John Patrick Landscape Architects Pty Ltd.

The tubestock trees and shrubs will grow to a range of sizes from the tallest 25m Eucalyptus radiata (Narrow leaf Peppermint) down to the lowest 0.4m Epacris impressa Common Heath.

12. Soils

There are two soil types on the Property.

Mapunit: In

Name: Inverloch

Landform: Undulating Rises

Mapunit: Ag Name: Agnes

Landform: Gently undulating Plain

Geology: Pleislocene (Late) to recent Alluvium and colluvium

Dominant soils: Yellow KANDOSOLS

12.1 Soil Tests

Recent soil test results are attached (Attachment 4).

Sample 1 is from the proposed Chardonnay planting area.

Sample 3 is from the Pinot Noir planting area. (30 standard 0-15cm depth cores were collected for each sample)

Results for P, K, pH and Salinity are as follows:

- Phosphorus (P) mg/kg (Olsen method) 18.5 Moderate, 40.3 High
- Potassium (K) mg/kg (Colwell method) 213 Moderate, 460 High
- pH (water method) 4,7 and 5.0, both very strongly acidic

Salinity (Conductivity) dS/m 0.435 and 0.253 both in low range and satisfactory

Phosphorous is variable, a capital application of P prior to planting the vines is required in sample1 area.

Potassium is variable, a capital application of K prior to planting is required in sample 3 area

pH, levels are both very strongly acidic, lime is required to reduce soil acidity Samples 2 and 4 were collected from deeper sub soil cores.

The sub soil samples were tested to evaluate Conductivity (Salinity) at depth. (30 standard 40 - 50cm depth cores were collected for each sample.)

In the case of these sample results they are both in the desirable range.

Note: Subsoil samples are not used to determine requirements for P, K, or pH (lime).

Prior to planting the grape vines:

- An application of high grade agricultural lime is required at the rate of 5.0 tonne/ha
- Specific capital blends of P and K fertiliser are required for each site

Soil resampling will occur biennially to monitor changes and reset base treatments, such as lime and fertilisers, as required.

13. Soil Frosion

When the Property was purchased in 2014 there were extensive sections of erosion along the creek.

As identified, since purchasing the Property the Landholders have worked consistently to revegetate and stabilise the riparian corridor. This has involved the removal of dumped rubbish, erection of stock proof fencing and extensive revegetation and planting of greater than 2,700 endemic trees.

The ongoing management of the corridor and regeneration and revegetation efforts is critical to sustainable land management and the maintenance of a stabilised area.

No current sites of erosion (Gully, Tunnel, or Sheet) have been identified on the Property.

14. Salinity

There are no current salinity problems occurring on the Property.

However, it is a relevant consideration to this Agricultural Land Management Plan that salinity issues are known to occur in the district.

Under this plan, salinity will be constantly monitored including visually and through regular soil testing.

15. Water

15.1 Water supply

- Annual rainfall 1096 mm.
- Domestic water will be collected from the roof catchment and held in a tank next to the machinery shed/winery.
- The Property contains 3 existing rain fed dams.
- There are no bores, and none proposed.
- There is a creek flowing through the Property, which is fenced to exclude stock access.
- Firefighting water is accessible from the rain fed dams.
- A separate tank (27,500l) will be installed at the site of the machinery shed/ winery for the sole purpose of firefighting.
- Water supply for stock is accessible from rain fed dams, noting it is proposed to fence off the dams, repatriate the dams to their full capacity, and provide stock water from troughs.
- Irrigation of the vines will occur in accordance with the viticulture report sourcing water from the corresponding dam.

15.2 Waterways and wetlands

The creek that runs through the Property is not used as a water supply source; it has a stock proof fence to exclude animals.

There is no wetland on the Property.

16. Vegetation

The Property includes approximately 2.0 ha of existing native bushland.

There are approx 16 single existing native paddock trees.

There are no single non-native paddock trees.

The approximate area of existing native revegetation 2.6 ha.

16.1 Native vegetation removal

It is not proposed to remove native vegetation.

16.2 Existing native vegetation protection

Small areas of native grassland are proposed to be contained and protected for conservation by fencing within the riparian corridor along the creek.

The Property includes isolated paddock trees and patches of remnant vegetation.

The existing paddock trees are identified on the proposed landscape plan in areas identified for stock proof fencing and infill planting.

16.2 Revegetation plan

Under the proposal, a total area of approximately 6.6 ha is planned for revegetation as illustrated and detailed on the proposed landscape plan prepared by John Patrick Landscape Architects Pty Ltd (refer **Attachment 3**).

At the time of writing, site preparation works have not commenced because there is no planning permit.

Site Preparation works are proposed to include:

- Advance ordering of tube stock with local growers to ensure availability / secure stock
- Erection of stock proof fencing
- Spray out planting spots 3-4 weeks ahead of proposed planting time
- Plant tube stock and erect plant guards

Maintenance works of planting and vegetation is proposed to include:

- Regular fence inspection and repair, as required
- Use of ride-on mower to cut vegetation in open areas
- Use of brush cutter to carefully cut grass around the young establishing plants
 Light hand weeding, as required.
- Regular muching of newly planted trees.

17. Weeds

Weeds are a key environmental risk on the Property, including for the proposed establishment of a vineyard and the cultivation of grapes.

Weeds on the Property and proposed management is as follows:

•	Capeweed	Arctotheca calendula	Few plants no control required
•	Thistles	Cirsium vulgare	Few plants, dig out when found
•	Black berry	Rub fruticosus	Plants controlled by spot spraying
•	Erodium	Erodium spp.	Few plants no control required

Note: Weed control will need to be carefully managed on the property during the year because of the close proximity to the grape vines.

18. Pest Animals

Rabbits have been observed on the property, however have not been a problem.

Rabbits are difficult to control in that the level of control is also determined by the level of control from nieghbouring properties. Where it is practical, back filling soil into burrows is usefull.

No poisoning, fumigation or shooting would be undertaken.

19. Relevant qualifications, knowledge, plans and experience

Property Fire Ready Plan – Currently held.

Biosecurity Plan – Currently held.

The list below is desired but not put in place until able to be a resident on the property:

- Farm chemical user permit Proposed
- Agricultural Chemical User Permit (ACUP) Proposed
- Trust for Nature conservation covenant Proposed
- Landcare group membership Proposed

20. Reason for Dwelling on the Property

The Landholders currently live in Melbourne and have continued to since purchasing the property in 2014.

During that time they have travelled to the Property as frequently as possible to achieve essential work that has allowed the land to be developed to its current stage.

The next development phases require considerable input both in terms of financial and physical involvement. The Landholders have reached the point where the current inability to live onsite is obstructing further meaningful progress.

In the previous proposal to South Gippsland Shire Council the writer firmly addressed the requirement to have a permanent, onsite presence for working on the Property. The following was provided, with the proviso that the basic tasks to be undertaken were by no means exhaustive, and that it is not unusual for additional tasks/activities to emerge over time.

That list is repeated below.

Property Security and Onsite Work Requirements:

- On site ground preparation including trellises for the grape vines.
- The two grape varieties proposed (Pinot Noir and Chardonnay) will require significant and timely attention. Daily checking for pests and wildlife attack in their establishment phase, including plant guards in windy weather, later 2-3 times per week.
- The different varieties of trees/shrubs and ground cover plants will also require also require checking as they pass through their establishment phase and into their maintenance program.
- Daily checking for pests and wildlife attack in their establishment phase, including plant 'standing' in windy weather, extending to possibly 2 times/week in years 3+
- Weed control, hand weeding, band spraying and regular between row mowing.

- Composting pulp/grape musk for use as a soil ameliorant and plant nutrient source.
- Planting and maintenance of wind breaks in the proposed vineyard areas.
- Sprays for insect control, disease control downy mildew and powdery mildew.
- Pruning, trellis training for the vines.
- Bird netting over grape vines daily checking in windy weather.
- Soil and plant tissue testing the growing vines related to side dressing nutrients and/or foliar sprays.
- Attention to cattle grazing management, animal health.
- Attend the nearby Koonwarra livestock market to monitor stock sales/costs and financial impacts.
- Checking trees/shrubs in revegetation/plantation areas, replacement of dead plants, controlling weeds (black berry and thistles) spray and hand hoe, and vermin (rabbits) baiting.
- Attendance at local Landcare information/training activities.
- Attendance at wine industry seminars and training days
- Cattle- induction program, drenching, trace elements, lice, weighing, facial eczema, water supply. marketing.
- Pasture topdressing, weed control. soil analysis, supplementary feeding stock.
- Maintenance of fencing, stock yards, trellises, mechanical equipment and tools on the property where possible to assist in reducing costs.
- The current application for a dwelling and shed are the only buildings proposed. .
 The remainder of the Subject Land will have no structures or buildings. (The stock yards adjacent to the main entrance are an essential part of the grazing activity on a farm).

Note: This program assumes that all actions will be planned and principally undertaken by the landowners.

21. Ten Year Management Plan Actions, Standards and Timelines

Note: This program is assuming that all Actions will be planned by the property owners and predominantly carried out by them.

Year	Action	When	Who	How	Completed
1	Check and order planting tube stock	Q1	Landowner	Engage suppliers	Q1
1	Start computer file for recording annual work programme	Q1	Landowner	Record observations and notes throughout the year Record action progress	Q4 Submit to council.
1	Move and complete Machinery shed/ Winery	Q1-Q4	Landowner and contractor	Finalise engineering. Engage building surveyor Engage relevant contractors Complete Shed	End of Year 1
1	Order fencing, Trellis etc and root stock for vine planting for Pinot Noir Vineyard 1.	Q1	Landowner	Engage suppliers	Q1
1	Order trees/ shrubs for perimeter and dwelling/ Machinery shed planting areas	Q1	Landowner	Engage suppliers	Q1
1	Order Pinot Noir vines for Vineyard 1	Q1	Landowner/ Viticulturist	Engage suppliers Order following advice from Viticulturist	Q1
1	Clear surface drain in Pdks 1 and 2.	Q1	Contractor	Engage contractor Heavy Machinery	Q1
1	Fence out area between Pdks 1 and 2.	Q1 and Q2	Landowner	5 wire fence2 wires electrifiedGreen posts 5m apart	End of Q2
1	Fence out around perimeter	Q2 and Q3	Landowner	5 wire fence2 wires electrifiedGreen posts 5m apart	End of Q3
1	Prepare land and soil for Vineyard 1 and boundary planting in Q2-Q3.	Q1-Q3	Landowner	As per John Patrick Landscape Plan Herbicide treatment to entire planting area to remove all vegetation to area to be revegetated All weeds shall be thoroughly removed All vegetative material, including roots and rhizomes of non-woody perennials and woody suckering weeds, is to be removed or appropriately controlled using chemical means The stumps of non- suckering woody perennials are to be stump ground All vegetative material shall be appropriately disposed of offsite in a manner which will not allow their re- establishment elsewhere Any chemical controls are to be used in accordance with manufacturer's instructions and standard occupational health and safety procedures	Q3.

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				•	If any existing planting is to	
					be retained then care must	
					be taken to ensure these are	
					not damaged during weed	
					removal	
				•	This also implies that any herbicides used are suitable	
					for use around the	
					vegetation to be retained	
				•	Deep ripping: Deep rip along	
					planting lines with a single-	
					tine ripper as deep as	
					possible (min. 400mm,	
					1000mm preferred) to ensure good shattering of	
					subsoil and subsequent root	
					and moisture penetration	
				•	Ripping to be completed	
					with suitable equipment in	
					maximum 3m by 6m hash	
					pattern to cover entire	
					revegetation area Late winter Early Spring:	
				١	Contact herbicide spray	
					treatment along the rip lines	
					with a suitable spray in	
					accordance with the	
					manufacturer's specification	
				•	Spray along the rip lines with a second application of	
					weed spray in accordance	
					with the manufacturer's	
					specification	
1	Plant Pinot Noir Vines	Q3/Q4	Landowner	•	As per John Patrick	Q3
	in Vineyard 1. Plant				Landscape Plan	
	wind break trees for Vineyard 1 and			•	Indigenous Planting will take place in one stage from the	
	Boundary Perimeter				planting grid provide	
	Tree and Shrubs			•	Rotary hoe all rip line(s) and	
					soil mounds with tractor to	
					level surface, for	
					appropriate planting bed	
				•	Planting shall be carried out using accepted horticultural	
					practices with all plants	
					conforming to the species,	
					size and quantities indicated	
					on the Landscape Plan and	
					Plant Schedule. Plants shall	
					be thoroughly soaked through immersion in water	
					prior to planting and if the	
					planting soil is very dry then	
					the planting hole is also to	
					the planting hole is also to be filled with water and	
					the planting hole is also to be filled with water and allowed to drain completely	
				•	the planting hole is also to be filled with water and allowed to drain completely All plants shall be	
				•	the planting hole is also to be filled with water and allowed to drain completely All plants shall be appropriately hardened off	
				•	the planting hole is also to be filled with water and allowed to drain completely All plants shall be	
				•	the planting hole is also to be filled with water and allowed to drain completely All plants shall be appropriately hardened off in the nursery. Use plants	
				•	the planting hole is also to be filled with water and allowed to drain completely All plants shall be appropriately hardened off in the nursery. Use plants with the following characteristics: Large healthy root systems with	
				•	the planting hole is also to be filled with water and allowed to drain completely All plants shall be appropriately hardened off in the nursery. Use plants with the following characteristics: Large healthy root systems with no evidence of root curl or	
				٠	the planting hole is also to be filled with water and allowed to drain completely All plants shall be appropriately hardened off in the nursery. Use plants with the following characteristics: Large healthy root systems with no evidence of root curl or pot bound restriction or	
				•	the planting hole is also to be filled with water and allowed to drain completely All plants shall be appropriately hardened off in the nursery. Use plants with the following characteristics: Large healthy root systems with no evidence of root curl or pot bound restriction or damage, vigorous, well	
				٠	the planting hole is also to be filled with water and allowed to drain completely All plants shall be appropriately hardened off in the nursery. Use plants with the following characteristics: Large healthy root systems with no evidence of root curl or pot bound restriction or damage, vigorous, well established, and free from	
				•	the planting hole is also to be filled with water and allowed to drain completely All plants shall be appropriately hardened off in the nursery. Use plants with the following characteristics: Large healthy root systems with no evidence of root curl or pot bound restriction or damage, vigorous, well	

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1	Erect Trellis in Vineyard 1	Q4	Landowner	will be rejected All tubestock and seed for planting is to be of local provenance and suitable to site. If conditions are very cold and wet, wait for warmer weather, ideally between April-September Tubestock: Plant tubestock at suggested centres based on species (refer drawings). Tubestock are to be planted 100-200mm away from the rip lines. Planting hole dug no deeper than the height of the roots, and hole filled only to the base of the plant row. Planting guards are to be placed and bamboo staked around every individual plant (rabbit protection and sheltered environment for plant growth) Biodegradable Weed Mats made from Recycled Fibre with dimensions 370mm x 370mm, to be fitted to the base of each plant (tree, shrub, ground cover). Weeds should be cleared from area prior to installation around plant base Fasten Weed Mat with cardboard guard and bamboo stakes Itemised quotations on all items	Q4
	Charle Dallais humann	01.01		 Irrigation design and water supply attributes Options such as vine spacing, varieties, clones and rootstocks. Site survey information used to precisely locate rows, row numbers. Preferred trellis design 	01.04
1	Check Rabbit burrows	Q1-Q4	Landowner	Fill in Rabbit burrows Chamical and physical	Q1-Q4
1	Weed control	Q2, Q4	Landowner	Chemical and physical Industion programme (NILS)	Q2, Q4
1	Purchase weaned calves	March/April	Landowner	 Induction programme (NILS transfer and tag, drench, ear tag, trace element treatment) 	Q3
	Sell cattle	May/ June	Landowner	Notify agent	May/ June
1		December	Landowner	Purchase from local farmers	December
1	Purchase Hay	00.04	Landowner and	Finalise engineering	End of year 1
	Purchase Hay Initiate dwelling	Q3-Q4	contractor	Engage building surveyor Obtain building permit Engage relevant contractors Commence building works	
1	-	Q3-Q4	contractor	Obtain building permitEngage relevant contractors	Q1

2	Install water troughs Cows/ Steers	Q1	Landowner	Install necessary pipelinesInstall water troughs	Q1
2	Order fencing, Trellis etc and root stock for vine planting for Pinot Noir and Chardonnay Vineyard 1 & 2.	Q1	Landowner	Engage suppliers	Q1
2	Order Pinot Noir and Chardonnay vines for Vineyard 1 & 2	Q1	Landowner/ Viticulturist	Engage suppliersOrder following advice from Viticulturist	Q1
2	Prepare land and soil for Vineyard Pinot Noir and Chardonnay (Vineyard 1 and 2) planting in Q2-Q3 in Yr 3.	Q1-Q3	Landowner	As per John Patrick Landscape Plan. Herbicide treatment to entire planting area to remove all vegetation to area to be revegetated. All weeds shall be thoroughly removed. All vegetative material, including roots and rhizomes of non-woody perennials and woody suckering weeds, is to be removed or appropriately controlled using chemical means. The stumps of non- suckering woody perennials are to be stump ground. All vegetative material shall be appropriately disposed of offsite in a manner which will not allow their re- establishment elsewhere. Any chemical controls are to be used in accordance with manufacturer's instructions and standard occupational health and safety procedures. If any existing planting is to be retained then care must be taken to ensure these are not damaged during weed removal. This also implies that any herbicides used are suitable for use around the vegetation to be retained. Deep ripping: Deep rip along planting lines with a single- tine ripper as deep as possible (min. 400mm, 1000mm preferred) to ensure good shattering of subsoil and subsequent root and moisture penetration. Ripping to be completed with suitable equipment in maximum 3m by 6m hash pattern to cover entire revegetation area. Late winter Early Spring: Contact herbicide spray treatment along the rip lines with a suitable spray in accordance with the	Q3.

				manufacturer's specification. • Spray along the rip lines with a second application of weed spray in accordance with the manufacturer's specification.	
2	Plant wind break trees for Vineyard 2.	Q3/Q4 Timing to be confirmed by Viticulturist	Landowner/ Viticulturist	As per John Patrick Landscape Plan. Indigenous Planting will take place in one stage from the planting grid provided. Rotary hoe all rip line(s) and soil mounds with tractor to level surface, for appropriate planting bed. Planting shall be carried out using accepted horticultural practices with all plants conforming to the species, size and quantities indicated on the Landscape Plan and Plant Schedule. Plants shall be thoroughly soaked through immersion in water prior to planting and if the planting soil is very dry then the planting hole is also to be filled with water and allowed to drain completely. All plants shall be appropriately hardened off in the nursery. Use plants with the following characteristics: Large healthy root systems with no evidence of root curl or pot bound restriction or damage, vigorous, well established, and free from disease and pests and of good form, consistent with the species or variety, hardened off - not soft or forced. Plants that do not meet these requirements will be rejected All tubestock and seed for planting is to be of local provenance and suitable to site. If conditions are very cold and wet, wait for warmer weather, ideally between April-September. Jubestock: Plant tubestock at suggested centres based on species (refer drawings). Tubestock are to be planted OO-200mm away from the rip lines. Planting hole dug no deeper than the height of the roots, and hole filled only to the base of the plant row. Planting guards are to be placed and bamboo staked around every individual plant (rabbit protection and	

,	Paddock 1,2 tree belt	Q1-Q3	Landowner	Landscape Plan. Herbicide treatment to entire planting area to remove all vegetation to area to be revegetated.	Q3.
3	Order trees/ shrubs for paddock 1,2 tree belt Prepare soil for	Q1	Landowner		Q1
	council				
2	Review management plan actions and submit year 2 to	Q4	Landowner		Q4 Submit to council.
2	Complete dwelling	Q1-Q3	Landowner and contractor	Complete dwelling and obtain Certificate of Occupancy	End of year 2
2	Purchase Hay	December 01.03	Landowner		December
2	Sell cattle	November/ December	Landowner	Notify stock agent	November/ December
2	Purchase weaned calves	October/November	Landowner	, ,	October/ November
2	Check for wildlife and pest attack on all plantings trees/ Vines	Q1, Q2	Landowner	Visual inspection	Q3
2	Top dress pastures	Q1	Landowner	 Soil testing to guide the required fertiliser 	Q1
2	Training of Vineyard 1 Pinot Vines	Q1-Q4	Landowner	training of vines	Q1-Q4.
2	Pasture soil testing	Q3	Landowner/ Soil lab	samples across the various paddocks	Q3
	planting on boundary			replanting as required	
2	Complete tree	Q3-Q4	Landowner	1 /	Q3, Q4
2	Weed control	Q2, Q4	Landowner		Q2, Q4
2	Check Rabbit burrows	Q1-Q4	Landowner		Q1-Q4
2	Fence off the paddock 1,2 tree belt	Q2	Landowner	5 wire fence2 wires electrifiedGreen posts 5m apart	Q2
	Vineyard 2			supply attributes Options such as vine spacing, varieties, clones and rootstocks. Site survey information used to precisely locate rows, row numbers. Preferred trellis design.	
2	Erect Trellis in Vineyard 1 (Chardonnay) and	Q4	Landowner	bamboo stakes. Itemised quotations on all items Irrigation design and water	Q4
				Biodegradable Weed Mats made from Recycled Fibre with dimensions 370mm x 370mm, to be fitted to the base of each plant (tree, shrub, ground cover). Weeds should be cleared from area prior to installation around plant base. Fasten Weed Mat with cardboard guard and	
				sheltered environment for plant growth).	

				 All weeds shall be thoroughly removed. All vegetative material, including roots and rhizomes of non-woody perennials and woody suckering weeds, is to be removed or appropriately controlled using chemical means. The stumps of non-suckering woody perennials are to be stump ground. All vegetative material shall be appropriately disposed of offsite in a manner which will not allow their reestablishment elsewhere. Any chemical controls are to be used in accordance with manufacturer's instructions and standard occupational health and safety procedures. If any existing planting is to be retained then care must be taken to ensure these are not damaged during weed removal. This also implies that any herbicides used are suitable for use around the vegetation to be retained. Deep ripping: Deep rip along planting lines with a singletine ripper as deep as possible (min. 400mm, 1000mm preferred) to ensure good shattering of subsoil and subsequent root and moisture penetration. Ripping to be completed with suitable equipment in maximum 3m by 6m hash pattern to cover entire revegetation area. Late winter Early Spring: Contact herbicide spray treatment along the rip lines with a suitable spray in accordance with the manufacturer's specification. Spray along the rip lines with a second application of weed spray in accordance with the manufacturer's specification. 	
3	Plant Pinot Noir Vines in Vineyard 2 and Chardonnay in Vineyard 2. Plant paddock 1 and 2 tree belt	Q3/Q4 Timing to be confirmed by Viticulturist	Landowner/ Viticulturist	As per John Patrick Landscape Plan. Indigenous Planting will take place in one stage from the planting grid provided. Rotary hoe all rip line(s) and soil mounds with tractor to level surface, for appropriate planting bed.	Q3

Planting shall be carried out using accepted horticultural practices with all plants conforming to the species, size and quantities indicated on the Landscape Plan and Plant Schedule. Plants shall be thoroughly soulded through immersion in water prior to planting and if the plantings on lig very dry then the planting so light with water and allowed to drain completely. All plants shall be appropriately hardened off in the nursery. Use plants with the following characteristics: large healthy root systems with no evidence of root curl or pot bound restriction or damage, vigorous, well established, and free from disease and pests and of good form, consistent with the species or variety, hardened off - not soft or forced. Plants that do not meet these requirements will be rejected Allating it to be of local provided planting it to be of local provided planting it to be of local provided planting it to be of local provided and wet, wait for warmer weather, ideally between April September. • Tubestock: Plant tubestock at suggested centres based on species (refer drawings). Tubestock are to be planted only to the base of the plant row, and the planting conditions are very cold and wet, wait for warmer weather, ideally between April September. • Tubestock: Plant tubestock at suggested centres based on species (refer drawings). Tubestock are to be planted of the roots, and hole filled only to the base of the plant row, and the planting condition are approximated by the planting condition are provided only to the base of each plant (tree, shrub, ground cover). Weeds should be cleared from area prior to installation around plant bases.						
base of each plant (tree, shrub, ground cover). Weeds should be cleared from area prior to installation around plant base. Fasten Weed Mat with cardboard guard and bamboo stakes.					using accepted horticultural practices with all plants conforming to the species, size and quantities indicated on the Landscape Plan and Plant Schedule. Plants shall be thoroughly soaked through immersion in water prior to planting and if the planting soil is very dry then the planting soil is very dry then the planting soil is also to be filled with water and allowed to drain completely. • All plants shall be appropriately hardened off in the nursery. Use plants with the following characteristics: Large healthy root systems with no evidence of root curl or pot bound restriction or damage, vigorous, well established, and free from disease and pests and of good form, consistent with the species or variety, hardened off - not soft or forced. Plants that do not meet these requirements will be rejected • All tubestock and seed for planting is to be of local provenance and suitable to site. If conditions are very cold and wet, wait for warmer weather, ideally between April-September. • Tubestock: Plant tubestock at suggested centres based on species (refer drawings). Tubestock are to be planted • 100-200mm away from the rip lines. Planting hole dug no deeper than the height of the roots, and hole filled only to the base of the plant row. • Planting guards are to be placed and bamboo staked around every individual plant (rabbit protection and sheltered environment for plant growth). • Biodegradable Weed Mats made from Recycled Fibre with dimensions 370mm x	
base of each plant (tree, shrub, ground cover). Weeds should be cleared from area prior to installation around plant base. Fasten Weed Mat with cardboard guard and bamboo stakes.					 Planting guards are to be placed and bamboo staked around every individual plant (rabbit protection and sheltered environment for plant growth). Biodegradable Weed Mats made from Recycled Fibre with dimensions 370mm x 	
					base of each plant (tree, shrub, ground cover). Weeds should be cleared from area prior to installation around plant base. • Fasten Weed Mat with cardboard guard and bamboo stakes.	
3 Check Rabbit burrows Q1-Q4 Landowner • Fill in Rabbit burrows Q1-Q4	3	Check Rabbit burrows	Q1-Q4	Landowner	Fill in Rabbit burrows	Q1-Q4

3	Weed control	Q2, Q4	Landowner	Chemical and physical	Q2, Q4
3	Weed control - Blackberries	Q1	Landowner	Chemical and physical	Q1
3	Weed control – Thistles	Q1	Landowner	Chemical and physical	Q1
3	Complete tree planting on boundary, wind break.	Q3-Q4	Landowner	Further planting and replanting as required	Q3, Q4
3	Pasture soil testing	Q3	Landowner/ Soil lab	 Collection of multiple soil samples across the various paddocks 	Q3
3	Training of Vineyard 1 Pinot Vines	Q1-Q4	Landowner	 Regular checking and training of vines 	Q1-Q4.
3	Top dress pastures	Q1	Landowner	Soil testing to guide the required fertiliser	Q1
3	Check for wildlife and pest attack on all plantings trees/ Vines	Q1, Q2	Landowner	Visual inspection	Q3
3	Soil and tissue testing of vines	Blooming	Landowner	Samples sent to laboratory	Q4
3	Install netting	Q4 previous year to Q1	Landover	 Installation and removal of netting 	Q1
3	Purchase weaned calves	March/April	Landowner	 Induction programme (NILS transfer and tag, drench, ear tag, trace element treatment) 	Q3
3	Sell cattle	May/ June	Landowner	Notify agent	May/ June
3	Purchase Hay	December	Landowner	Purchase from local farmers	December
3	Review management plan actions and submit year 3 to council	Q4	Landowner	Record observations and notes throughout the year Record action progress	Q4 Submit to council.
4	Check Rabbit burrows	Q1-Q4	Landowner	Fill in Rabbit burrows.	Q1-Q4
4	Weed control	Q2, Q4	Landowner	Chemical and physical	Q1-Q4 Q2, Q4
4	Weed control - Blackberries	Q1	Landowner	Chemical and physical	Q1
4	Weed control – Thistles	Q1	Landowner	Chemical and physical	Q1
4	Complete tree planting on boundary, wind break, paddock 1,2 tree belt and tree surrounding dwelling/ sheds.	Q3-Q4	Landowner	Further planting and replanting as required.	Q3, Q4
4	Pasture soil testing	Q3	Landowner/ Soil lab	 Collection of multiple soil samples across the various paddocks 	Q3
4	Training of Vineyard 1 Chardonnay Vineyard 1 and Pinot Noir Vineyard 2.	Q1-Q4	Landowner	Regular checking and training of vines	Q1-Q4.
4	Spraying of vineyard 1	Prior to flowering	Landowner	 Spraying in accordance viticulturist advice Spraying is to be used in accordance with manufacturer's instructions and standard occupational health and safety procedures. Spraying will be performed only in appropriate weather conditions to maximise application on to vines and minimise spray drift 	

4	Picking of Pinot Noir Vineyard 1 if fruit has appeared	Q2/3	Landowner/ Landowner family/Contractors	If fruit available picking will occur at an appropriate Baume. Picking and crushing of grapes will occur in a matter of days	Q2/3
4	Pruning of Pinot Noir Vineyard 1	Q3	Landowner/ Landowner family/Contractors	Pruning of vines in Vineyard 1 as per instruction from Viticulturist	Q3
4	Top dress pastures	Q1	Landowner	Soil testing to guide the required fertiliser.	Q1
4	Check for wildlife and pest attack on all plantings trees/ Vines	Q1, Q2	Landowner	Visual inspection	Q3
4	Soil and tissue testing of vines	Blooming	Landowner	Samples sent to laboratory	Q4
4	Install netting	Q4 previous year to Q1	Landover	 Installation and removal of netting 	Q1
4	Purchase weaned calves	October/November	Landowner	 Induction programme (NILS transfer and tag, drench, ear tag, trace element treatment) 	October/ November
4	Sell cattle	November/ December	Landowner	Notify stock agent	November/ December
4	Purchase Hay	December	Landowner	Purchase from local farmers	December
4	Review management plan actions and submit year 4 to council	Q4	Landowner	Record observations and notes throughout the year Record action progress	Q4 Submit to council.
5	Check Rabbit burrows	Q1-Q4	Landowner	Fill in Rabbit burrows.	Q1-Q4
5	Weed control	Q2, Q4	Landowner	Chemical and physical	Q2, Q4
5	Weed control - Blackberries	Q1	Landowner	Chemical and physical	Q1
5	Weed control – Thistles	Q1	Landowner	Chemical and physical	Q1
5	Complete tree planting on boundary, wind break, paddock 1,2 tree belt and tree surrounding dwelling/ sheds.	Q3-Q4	Landowner	 Further planting and replanting as required. 	Q3, Q4
5	Pasture soil testing	Q3	Landowner/ Soil lab	Collection of multiple soil samples across the various paddocks	Q3
5	Training of all vines	Q1-Q4	Landowner	Regular checking and training of vines	Q1-Q4.
5	Spraying of vineyard	Prior to flowering	Landowner	Spraying in accordance viticulturist advice Spraying is to be used in accordance with manufacturer's instructions and standard occupational health and safety procedures Spraying will be performed only in appropriate weather conditions to maximise application on to vines and minimise spray drift	
5	Picking of Pinot Noir Vineyard 1 and Vineyard 2 if fruit appears	Q2/3	Landowner/ Landowner family/Contractors	If fruit available picking will occur at an appropriate Baume Picking and crushing of grapes will occur in a matter of days	Q2/3

5	Pruning of vineyard	Q3	Landowner/ Landowner family/Contractors	Pruning of vines in Vineyard 1 as per instruction from Viticulturist	Q3
5	Top dress pastures	Q1	Landowner	Soil testing to guide the required fertiliser	Q1
5	Check for wildlife and pest attack on all plantings trees/ Vines	Q1, Q2	Landowner	Visual inspection	Q3
5	Soil and tissue testing of vines	Blooming	Landowner	Samples sent to laboratory	Q4
5	Install netting	Q4 previous year to Q1	Landover	 Installation and removal of netting 	Q1
5	Purchase weaned calves	March/April	Landowner	 Induction programme (NILS transfer and tag, drench, ear tag, trace element treatment) 	Q3
5	Sell cattle	May/ June	Landowner	Notify agent	May/ June
5	Purchase Hay	December	Landowner	Purchase from local farmers	December
5	Review management plan actions and submit year 5 to council	Q4	Landowner	Record observations and notes throughout the year Record action progress	Q4 Submit to council.
6	Charle Babbit burrous	01.04	Landaumar	a Fill in Dabbit burrous	01.04
6	Check Rabbit burrows Weed control	Q1-Q4 Q2, Q4	Landowner Landowner	Fill in Rabbit burrows. Chemical and physical	Q1-Q4
6	Weed control - Blackberries	Q1 Q1	Landowner	Chemical and physical Chemical and physical	Q2, Q4 Q1
6	Weed control – Thistles	Q1	Landowner	Chemical and physical	Q1
6	Complete tree planting on boundary, wind break, paddock 1,2 tree belt and tree surrounding dwelling/ sheds.	Q3-Q4	Landowner	Further planting and replanting as required.	Q3, Q4
6	Pasture soil testing	Q3	Landowner/ Soil lab	 Collection of multiple soil samples across the various paddocks 	Q3
6	Training of Vineyard	Q1-Q4	Landowner	Regular checking and training of vines	Q1-Q4.
6	Spraying of vineyard	Prior to flowering	Landowner	 Spraying in accordance viticulturist advice Spraying is to be used in accordance with manufacturer's instructions and standard occupational health and safety procedures Spraying will be performed only in appropriate weather conditions to maximise application on to vines and minimise spray drift 	
6	Picking of vineyard.	Q2/3	Landowner/ Landowner family/Contractors	Picking will occur at an appropriate Baume. Picking and crushing of grapes will occur in a matter of days.	Q2/3
6	Pruning of vineyard.	Q3	Landowner/ Landowner family/Contractors	Pruning of vines in Vineyard as per instruction from Viticulturist	Q3
6	Top dress pastures	Q1	Landowner	Soil testing to guide the required fertiliser	Q1
6	Check for wildlife and pest attack on all plantings trees/ Vines	Q1, Q2	Landowner	Visual inspection	Q3

6	Soil and tissue testing of vines	Blooming	Landowner	Samples sent to laboratory	Q4
6	Install netting	Q4 previous year to Q1	Landover	Installation and removal of netting	Q1
6	Purchase weaned calves	October/November	Landowner	Induction programme (NILS transfer and tag, drench, ear tag, trace element treatment)	October/ November
6	Sell cattle	November/ December	Landowner	Notify stock agent	November/ December
6	Purchase Hay	December	Landowner	Purchase from local farmers	December
6	Review management plan actions and submit year 6 to council	Q4	Landowner	Record observations and notes throughout the year Record action progress	Q4 Submit to council.
7	Check Rabbit burrows	Q1-Q4	Landowner	Fill in Rabbit burrows.	Q1-Q4
7	Weed control	Q2, Q4	Landowner	Chemical and physical	Q2, Q4
7	Weed control - Blackberries	Q1	Landowner	Chemical and physical	Q2, Q4 Q1
7	Weed control – Thistles	Q1	Landowner	Chemical and physical	Q1
7	Complete tree planting on boundary, wind break, paddock 1,2 tree belt and tree surrounding dwelling/ sheds.	Q3-Q4	Landowner	Further planting and replanting as required	Q3, Q4
7	Pasture soil testing	Q3	Landowner/ Soil lab	Collection of multiple soil samples across the various paddocks	Q3
7	Training of Vineyard 1 Chardonnay Vineyard 1 and Pinot Noir Vineyard 2.	Q1-Q4	Landowner	Regular checking and training of vines	Q1-Q4.
7	Spraying of vineyard	Prior to flowering	Landowner	Spraying in accordance viticulturist advice Spraying is to be used in accordance with manufacturer's instructions and standard occupational health and safety procedures. Spraying will be performed only in appropriate weather conditions to maximise application on to vines and minimise spray drift.	
7	Picking of Vineyard	Q2/3	Landowner/ Landowner family/Contractors	Picking will occur at an appropriate Baume Picking and crushing of grapes will occur in a matter of days	Q2/3
7	Pruning of Vineyard	Q3	Landowner/ Landowner family/Contractors	Pruning of vines in Vineyard as per instruction from Viticulturist	Q3
7	Top dress pastures	Q1	Landowner	Soil testing to guide the required fertiliser.	Q1
7	Check for wildlife and pest attack on all plantings trees/ Vines	Q1, Q2	Landowner	Visual inspection	Q3
7	Soil and tissue testing of vines	Blooming	Landowner	Samples sent to laboratory	Q4
7	Install netting	Q4 previous year to Q1	Landover	Installation and removal of netting	Q1
7	Purchase weaned calves	March/April	Landowner	Induction programme (NILS transfer and tag, drench, ear	Q3
7 7 7 7	pest attack on all plantings trees/ Vines Soil and tissue testing of vines Install netting	Blooming Q4 previous year to Q1	Landowner Landover	Visual inspection Samples sent to laboratory Installation and removal of netting	Q4 Q1

				tag, trace element treatment)	
7	Sell cattle	May/ June	Landowner	Notify agent	May/ June
7	Purchase Hay	December	Landowner	Purchase from local farmers	December
7	Review management plan actions and submit year 7 to council	Q4	Landowner	Record observations and notes throughout the year Record action progress.	Q4 Submit to council.
8	Check Rabbit burrows	Q1-Q4	Landowner	Fill in Rabbit burrows.	Q1-Q4
8	Weed control	Q2, Q4	Landowner	Chemical and physical	Q1-Q4 Q2, Q4
8	Weed control - Blackberries	Q1	Landowner	Chemical and physical	Q1
8	Weed control – Thistles	Q1	Landowner	Chemical and physical	Q1
8	Complete tree planting on boundary, wind break, paddock 1,2 tree belt and tree surrounding dwelling/ sheds.	Q3-Q4	Landowner	Further planting and replanting as required.	Q3, Q4
8	Pasture soil testing	Q3	Landowner/ Soil lab	Collection of multiple soil samples across the various paddocks	Q3
8	Spraying of vineyard	Prior to flowering	Landowner	Spraying in accordance viticulturist advice Spraying is to be used in accordance with manufacturer's instructions and standard occupational health and safety procedures. Spraying will be performed only in appropriate weather conditions to maximise application on to vines and minimise spray drift.	
8	Picking of Vineyard	Q2/3	Landowner/ Landowner family/Contractors	Picking will occur at an appropriate Baume Picking and crushing of grapes will occur in a matter of days	Q2/3
8	Pruning of Vineyard	Q3	Landowner/ Landowner family/Contractors	Pruning of vines as per instruction from Viticulturist	Q3
8	Top dress pastures	Q1	Landowner	 Soil testing to guide the required fertiliser. 	Q1
8	Check for wildlife and pest attack on all plantings trees/ Vines	Q1, Q2	Landowner	Visual inspection	Q3
8	Soil and tissue testing of vines	Blooming	Landowner	Samples sent to laboratory	Q4
8	Install netting	Q4 previous year to Q1	Landover	Installation and removal of netting	Q1
8	Purchase weaned calves	October/November	Landowner	 Induction programme (NILS transfer and tag, drench, ear tag, trace element treatment) 	October/ November
8	Sell cattle	November/ December	Landowner	Notify stock agent	November/ December
8	Purchase Hay	December	Landowner	Purchase from local farmers	December
8	Review management plan actions and submit year 8 to council	Q4	Landowner	Record observations and notes throughout the year Record action progress	Q4 Submit to council.
`	Chask Dahlit house	01.04	Landauma	a Fill in Dahhit burna	01.04
9	Check Rabbit burrows	Q1-Q4	Landowner	Fill in Rabbit burrows.	Q1-Q4

9	Weed control	Q2, Q4	Landowner	Chemical and physical	Q2, Q4
9	Weed control - Blackberries	Q1	Landowner	Chemical and physical	Q1
9	Weed control – Thistles	Q1	Landowner	Chemical and physical	Q1
9	Complete tree planting on boundary, wind break, paddock 1,2 tree belt and tree surrounding dwelling/ sheds.	Q3-Q4	Landowner	Further planting and replanting as required.	Q3, Q4
9	Pasture soil testing	Q3	Landowner/ Soil lab	Collection of multiple soil samples across the various paddocks	Q3
9	Spraying of vineyard	Prior to flowering	Landowner	Spraying in accordance viticulturist advice Spraying is to be used in accordance with manufacturer's instructions and standard occupational health and safety procedures. Spraying will be performed only in appropriate weather conditions to maximise application on to vines and minimise spray drift.	
9	Picking of Vineyard	Q2/3	Landowner/ Landowner family/Contractors	Picking picking will occur at an appropriate Baume Picking and crushing of grapes will occur in a matter of days	Q2/3
9	Pruning of Pinot Noir Vineyard	Q3	Landowner/ Landowner family/Contractors	Pruning of vines as per instruction from Viticulturist	Q3
9	Top dress pastures	Q1	Landowner	 Soil testing to guide the required fertiliser. 	Q1
9	Check for wildlife and pest attack on all plantings trees/ Vines	Q1, Q2	Landowner	Visual inspection	Q3
9	Soil and tissue testing of vines	Blooming	Landowner	Samples sent to laboratory	Q4
9	Install netting	Q4 previous year to Q1	Landover	Installation and removal of netting	Q1
9	Purchase weaned calves	March/April	Landowner	Induction programme (NILS transfer and tag, drench, ear tag, trace element treatment)	Q3
9	Sell cattle	May/ June	Landowner	Notify agent	May/ June
9	Purchase Hay	December	Landowner	Purchase from local farmers	December
9	Review management plan actions and submit year 9 to council	Q4	Landowner	 Record observations and notes throughout the year Record action progress 	Q4 Submit to council.
10	Check Rabbit burrows	Q1-Q4	Landowner	Fill in Rabbit burrows.	Q1-Q4
10	Weed control	Q2, Q4	Landowner	Chemical and physical	Q2, Q4
10	Weed control - Blackberries	Q1	Landowner	Chemical and physical	Q1
10	Weed control – Thistles	Q1	Landowner	Chemical and physical	Q1
10	Complete tree planting on boundary, wind break, paddock 1,2 tree belt and tree surrounding dwelling/ sheds.	Q3-Q4	Landowner	Further planting and replanting as required.	Q3, Q4

10	Pasture soil testing	Q3	Landowner/ Soil lab	 Collection of multiple soil samples across the various paddocks 	Q3
10	Spraying of vineyard	Prior to flowering	Landowner	Spraying in accordance viticulturist advice Spraying is to be used in accordance with manufacturer's instructions and standard occupational health and safety procedures. Spraying will be performed only in appropriate weather conditions to maximise application on to vines and minimise spray drift.	
10	Picking of Vineyard	Q2/3	Landowner/ Landowner family/Contractors	 Picking will occur at an appropriate Baume Picking and crushing of grapes will occur in a matter of days 	Q2/3
10	Pruning of Vineyard	Q3	Landowner/ Landowner family/Contractors	 Pruning of vines in Vineyard as per instruction from Viticulturist 	Q3
10	Top dress pastures	Q1	Landowner	 Soil testing to guide the required fertiliser. 	Q1
10	Check for wildlife and pest attack on all plantings trees/ Vines	Q1, Q2	Landowner	Visual inspection	Q3
10	Soil and tissue testing of vines	Blooming	Landowner	Samples sent to laboratory	Q4
10	Install netting	Q4 previous year to Q1	Landover	 Installation and removal of netting 	Q1
10	Purchase weaned calves	October/November	Landowner	Induction programme (NILS transfer and tag, drench, ear tag, trace element treatment)	October/ November
10	Sell cattle	November/ December	Landowner	Notify stock agent	November/ December
10	Purchase Hay	December	Landowner	Purchase from local farmers	December
10	Review management plan actions and submit year 10 to council	Q4	Landowner	Record observations and notes throughout the year Record action progress	Q4 Submit to council.

Attachment 1 – Aerial Photograph



Attachment 2 - Current Land Use Plan



Attachment 3 – Proposed Land Use Plan



Attachment 4 - Soil Test Results

John Gallienne & Co Pty Ltd Soil Analysis Report

Sample Identification: No 1 Top Soil (0-15cm). Paddock surrounding house site

Potential wine grape area south of house site

Date: May 2022

Date: May 2022		
ANALYTICAL TEST	TEST RESULT	
Phosphorus mg/kg (Olsen) Phosphorous mg/kg (Colwell)	40.3 92	High
Potassium mg/kg (Colwell)	460	High
Sulphur mg/kg (KCL40)	136.0	High
pH (1:5 water)	5.0	Strongly acidic
pH (Calcium Chloride)	4.3	
Conductivity (Salt) dS/m	0.435	Low
Organic Carbon %	3.78	Moderate
Copper mg/kg (EDTA)	0.72	Low
Zinc mg/kg (EDTA)	7.58	High
Manganese mg/kg (EDTA)	9.87	Moderate
Iron mg/kg (Reactive)	359.4	Moderate
Boron mg/kg (HWS)	1.03	Moderate
CATIONS (Exchangeable) Calcium meq/100g	9.28	
Magnesium meq/100g	1.80	
Sodium meq/100g	0.54	
Potassium meq/100g	0.97	
Aluminium meq/100g	0.640	
Calcium/magnesium ratio	5.1	High - desirable
Sodium % of Cations	4.0	Moderate - satisfactory
Aluminium % of Cations	4.8	Moderate - satisfactory

The test(s) reported have been performed in accordance with the terms of registration with the Australian Soil and Plant Advisory Council, Australia

John Gallienne & Co Pty Ltd - Soil Analysis Report

Sample Identification: No 2 Sub Soil (40-50 cm). Paddock surrounding house site.

Potential wine grape area south of house site.

Date: May 2022

ANALYTICAL TEST	TEST RESULT	
Phosphorus mg/kg (Olsen) Phosphorous mg/kg (Colwell)	7.8 13	Low
Potassium mg/kg (Colwell)	65	Low
Sulphur mg/kg (KCL40)	7.1	Low
pH (water)	5.0	Strongly acidic
pH (Calcium Chloride)	4.2	
Conductivity (Salt) dS/m	0.052	Low
Organic Carbon %	1.68	Low
Copper mg/kg (EDTA)	0.18	Low
Zinc mg/kg (EDTA)	0.23	Low
Manganese mg/kg (EDTA)	0.54	Moderate
Iron mg/kg (Reactive)	149.0	Low
Boron mg/kg (HWS)	0.44	Low
CATIONS (Exchangeable) Calcium meq/100g	2.06	
Magnesium meq/100g	0.23	
Sodium meq/100g	0.13	
Potassium meq/100g	0.07	
Aluminium meq/100g	0.830	
Calcium/magnesium ratio	8.9	High - desirable
Sodium % of Cations	3.9	Moderate - satisfactory
Aluminium % of Cations	25.0	High - unsatisfactory

The test(s) reported have been performed in accordance with the terms of registration with the Australian Soil and Plant Advisory Council, Australia

John Gallienne & Co Pty Ltd - Soil Analysis Report

Client Name:

Sample Identification: No 3 Top Soil (0-15cm). Paddock surrounding house site

Potential wine grape area west of house site

Date: May 2022

ANALYTICAL TEST	TEST RESULT	
Phosphorus mg/kg (Olsen) Phosphorous mg/kg (Colwell)	18.5 39	Moderate
Potassium mg/kg (Colwell)	213	High
Sulphur mg/kg (KCL40)	74.8	High
pH (1:5 water)	4.7	Very Strongly acidic
pH (Calcium Chloride)	3.9	
Conductivity (Salt) dS/m	0.253	Low
Organic Carbon %	4.82	Moderate
Copper mg/kg (EDTA)	0.71	Low
Zinc mg/kg (EDTA)	4.43	High
Manganese mg/kg (EDTA)	2.52	Moderate
Iron mg/kg (Reactive)	313.4	Moderate
Boron mg/kg (HWS)	1.02	Moderate
CATIONS (Exchangeable) Calcium meq/100g	7.87	
Magnesium meq/100g	1.49	
Sodium meq/100g	0.61	
Potassium meq/100g	0.41	
Aluminium meq/100g	0.840	
Calcium/magnesium ratio	5.2	High - desirable
Sodium % of Cations	5.4	Moderate - satisfactory
Aluminium % of Cations	7.4	Moderate - satisfactory

The test(s) reported have been performed in accordance with the terms of registration with the Australian Soil and Plant Advisory Council, Australia

John Gallienne & Co Pty Ltd - Soil Analysis Report

Client Name:

Sample Identification: No 4 Sub Soil (40-50 cm). Paddock surrounding house site.

Potential wine grape area West of house site.

Date: May 2022

Date: IVIAY 2022		
ANALYTICAL TEST	TEST RESULT	
Phosphorus mg/kg (Olsen) Phosphorous mg/kg (Colwell)	17.8 41	Moderate
Potassium mg/kg (Colwell)	209	Moderate
Sulphur mg/kg (KCL40)	38.0	High
pH (water)	4.9	Very Strongly acidic
pH (Calcium Chloride)	4.3	
Conductivity (Salt) dS/m	0.209	Low
Organic Carbon %	5.2	High
Copper mg/kg (EDTA)	0.98	Low-Moderate
Zinc mg/kg (EDTA)	4.64	High
Manganese mg/kg (EDTA)	1,25	Low
Iron mg/kg (Reactive)	278.6	Low-Moderate
Boron mg/kg (HWS)	0.86	Low
CATIONS (Exchangeable) Calcium meq/100g	8.11	
Magnesium meq/100g	1.01	
Sodium meq/100g	0.52	
Potassium meq/100g	0.37	
Aluminium meq/100g	1.030	
Calcium/magnesium ratio	8.0	High - desirable
Sodium % of Cations	4.7	Moderate - satisfactory
Aluminium % of Cations	9.3	High - unsatisfactory

The test(s) reported have been performed in accordance with the terms of registration with the Australian Soil and Plant Advisory Council, Australia