[redacted]

From: Jake Gaudion [redacted]
Sent: Friday, 13 May 2022 11:52 AM
To: Dorset Council <dorset@dorset.tas.gov.au>
Cc: Daniel Ferguson [redacted] Astrid Ketelaar [redacted]
Subject: Zoning Representation

To the General Manager,

On behalf of Daniel Ferguson, I would like to submit a representation regarding the proposed zoning of his property, Pirnhall, within the proposed Dorset Local Provisions Schedule (LPS) of the new statewide planning scheme.

Please find attached a cover letter and supporting Agriculture Report with this representation.

Please confirm receipt of the representation.

Should you have any questions, please don't hesitate to contact Daniel.

Kind regards,

Jake Gaudion
CONSULTANT

2nd Floor, 102-104 Cameron Street, Launceston TAS 7250
[redacted]

RMCG acknowledges Aboriginal and Torres Strait Islander peoples as the first inhabitants of Australia and the traditional custodians of the lands where we live, learn and work.

19 April 2022

General Manager
Dorset Council
PO Box 21
Scottsdale TAS 7260
Via email: dorset@dorset.tas.gov.au

To Whom It May Concern,

Representation Against Proposed 'Agriculture' Zoning of 'Pirnhall', Ten Mile Track, Under the Dorset Draft Local Provisions Schedule of the Tasmanian Planning Scheme.

I wish to make a representation against the proposed zoning of my property 'Pirnhall' at Ten Mile Trk, Springfield (CT 115755/1) under Dorset Council's draft Local Provisions Schedule of the Tasmanian Planning Scheme. As per the Draft Zoning mapping advertised on Dorset Council's website, my title is proposed to be zoned 'Agriculture'. However, based on the characteristics of my land and adjacent land that is proposed to be zoned 'Rural', I am of the opinion that my land would be more appropriately zoned 'Rural'. The property exhibits characteristics which are most similar to the adjacent properties which are proposed to be zoned 'Rural' in comparison to those to be zoned 'Agriculture'. Zoning the property 'Rural', would also safeguard the conservation covenant in the centre of the title which covers more than half of the title.

The limitations associated with the agricultural potential of the property is further discussed in an Agricultural Report completed by RMCG. This report discusses the assessed Land Capability, current and potential agricultural uses on the title and outlines the impacts of the conservation covenant fragmenting the title. I have provided the Agricultural Report as an accompaniment to this letter.

Rezoning this land to 'Rural' would be consistent with the purpose of the Rural Zone as described in the *Guideline No 1 – Local Provisions Schedule (LPS): Zone and Code Application* document (Guideline No 1). This describes the Rural Zone purpose as:

20.1.1 To provide for a range of use or development in a rural location:

(a) where agricultural use is limited or marginal due to topographical, environmental or other site or regional characteristics;

(b) that requires a rural location for operational reasons;

(c) is compatible with agricultural use if occurring on agricultural land;

(d) minimises adverse impacts on surrounding uses.

20.1.2 To minimise conversion of agricultural land for non-agricultural use.

20.1.3 To ensure that use or development is of a scale and intensity that is appropriate for a rural location and does not compromise the function of surrounding settlements. Rezoning the title also complies with the Application Guideline RLZ1 in the Guideline No 1 document:

The Rural Zone should be applied to land in non-urban areas with limited or no potential for agriculture as a consequence of topographical, environmental or other characteristics of the area, and which is not more appropriately included within the Landscape Conservation Zone or Environmental Management Zone for the protection of specific values.

As identified in Agricultural Report, my property is described as having small-scale producer characteristics, with the limited agricultural land's potential likely to be best realised and sustainably managed by a small-scale producer.

Under the existing *Dorset Interim Planning Scheme 2013* my land is zoned 'Rural Resource'. This means it was included in the Land Potentially Suitable for Agriculture Zone Mapping. I note RZ 3 under Guideline No 1 states the Rural Zone should may be applied to land identified in the 'Land Potentially Suitable for Agriculture Zone' layer if:

> (a) it can be demonstrated that the land has limited or no potential for agricultural use and is not integral to the management of a larger farm holding that will be within the Agriculture Zone;
> (b) it can be demonstrated that there are significant constraints to agricultural use occurring on the land;
> (c) the land is identified for the protection of a strategically important naturally occurring resource which is more appropriately located in the Rural Zone and is supported by strategic analysis;
> (d) the land is identified for a strategically important use or development that is more appropriately located in the Rural Zone and is supported by strategic analysis; or
> (e) it can be demonstrated, by strategic analysis, that the Rural Zone is otherwise more appropriate for the land.

Upon reviewing the *Northern Tasmanian Regional Land Use Strategy* rezoning my land to 'Rural' is consistent with sections D.2.2.1 – Productive Resource Areas and D.2.2.4 - Key Planning Principles for Rural Areas. Under D.2.2.4 it would be specifically in line with the following points:

- Conserve and manage rural areas to enhance their contribution to the regional economy, rural industries and regional rural landscape values;
- Protect quality agricultural land from incompatible development and provide for the expansion of agricultural production in Productive Resource Areas;

Small scale producers as defined by RMCG are more suited to the Rural Zone which is consistent with RZ 3 under Guideline No 1 and sections D.2.2.1 and D.2.2.4 of the *Northern Tasmanian Regional Land Use Strategy*.

Thank you for the opportunity to provide comment on the Draft Local Provision Schedule of the Tasmanian Planning Scheme for Dorset Council. Please consider my representation and please contact me if you have any queries or questions. I look forward to your response.

Kind regards

Daniel Ferguson
[redacted]

RMCG

27 JANUARY 2022

Agricultural Report

Report for: Daniel Ferguson

Property Location: Pirnhall, Ten Mile Track, Springfield TAS 7260

Prepared by: Astrid Ketelaar & Jake Gaudion
RMCG
Level 2, 102-104 Cameron Street
Launceston, TAS 7250

SUMMARY	
Client:	Daniel Ferguson
Property identification:	Ten Mile Track, Springfield, TAS 7260 Current Zoning: Rural Resource, Dorset Interim Planning Scheme 2013. Proposed Future Zoning: Agriculture, Dorset Local Provisions Schedule, Tasmanian Planning Scheme CT 115755/1, PID 6859959; 90.8ha
Proposal:	Agricultural Assessment to support re-zoning to 'Rural' under the upcoming Tasmanian Planning Scheme.
Land capability	Published Land Capability (1:100,000) Class 3 (1.1ha), Class 4 (48.6ha), Class 5 (22.2ha) Class 6 (18.9ha) Assessed Land Capability (1:10,000) Class 4 (39.3ha), the balance of the property (51.5ha) is under Conservation Covenant and so was not assessed.
Assessment comments:	An initial desktop feasibility assessment was undertaken followed by a field inspection on the 6th of December 2022, to confirm or otherwise the desktop study findings of the agricultural assessment. This report summarises the findings of the desktop and field assessment.
Conclusion:	Given the limitations of size, fragmentation, Land Capability and the existing conservation covenant over 51.5 ha of the 90.8 ha subject title, it is our view the title is best placed within the 'Rural' zone in the upcoming Tasmanian Planning Scheme. The title has limited ability to be managed productively at a commercial scale due to fragmentation of the productive areas either on its own or in conjunction with adjacent titles. Although the land has been leased to a neighbour in the past and managed in conjunction with other land, this arrangement has lapsed. The cost of the required inputs (fertiliser, weed control and fencing), reduce the potential for a leasing arrangement to farm the land in conjunction. The fragmented small area of usable agricultural land on the subject title due to the conservation covenant means that it is likely to be difficult to make a commercial gain on improving the land for productive use either on its own or farmed in conjunction. Based on these limitations, the agricultural potential of this title is more likely to be realised with a small-scale producer managing the property. Small scale producers are more likely to have an intent to develop a more intensive agricultural use on the suitable parts of the title, utilising the better soils and irrigation water resources, with a lower regard for the labour input costs. Small scale producers are more likely to value add and maximise the productive capacity of the limited resources and supplement income through value adding or off-farm income. Whilst the title is likely to be deemed unattractive by commercial scale producers due to the fragmentation of the title caused by the conservation covenant area, this is more likely to be considered an asset and be utilised by a small scale producer for demonstrating sustainability credentials. As the title is adjacent to titles proposed to go into the 'Rural' zone, we propose that the title be zoned 'Rural'. This would maintain uniformity and consistency within the planned zoning under the Tasmanian Planning Scheme. The 'Rural' zone is also a more appropriate zone for a title with a conservation covenant and areas of a mapped threatened vegetation community and threatened flora species. The title would be able support a dwelling which minimises impact on adjacent primary production by implementing adequate setbacks from current and potential future neighbouring agricultural uses.
Assessment by:	A.Ketelaar **Astrid Ketelaar** ASSOCIATE **Jake Gaudion** CONSULTANT

Table of Contents

1 Introduction

The subject title is located at Ten Mile Track, Springfield. Current zoning for the title is 'Rural Resource' under the Dorset Interim Planning Scheme, 2013 (the Planning Scheme). Under the draft Local Provisions Schedule for the upcoming transition to the Tasmanian State Planning Scheme, the property is proposed to be in the 'Agriculture' zone.

The proponent seeks to alter the proposed zoning from 'Agriculture' to 'Rural'. This report considers the agricultural aspects of the proposal.

The zone purpose sections of both the Agriculture and Rural zones in the Tasmanian Planning Scheme state:

21.0 Agriculture

21.1 Zone Purpose

The purpose of the Agriculture Zone is:

21.1.1 To provide for the use or development of land for agricultural use.

21.1.2 To protect land for the use or development of agricultural use by minimising:

- *a) conflict with or interference from non-agricultural uses;*
- *b) non-agricultural use or development that precludes the return of the land to agricultural use; and*
- *c) use of land for non-agricultural use in irrigation districts.*

21.1.3 To provide for use or development that supports the use of the land for agricultural use.

20.0 Rural

20.1 Zone Purpose

The purpose of the Rural Zone is:

20.1.1 To provide for a range of use or development in a rural location:

(a) where agricultural use is limited or marginal due to topographical, environmental or other site or regional characteristics;

(b) that requires a rural location for operational reasons;

(c) is compatible with agricultural use if occurring on agricultural land;

(d) minimises adverse impacts on surrounding uses.

20.1.2 To minimise conversion of agricultural land for non-agricultural use.

20.1.3 To ensure that use or development is of a scale and intensity that is appropriate for a rural location and does not compromise the function of surrounding settlements.

2 Method

All relevant information available at desktop level was considered to determine the site's ability to support agricultural use either individually or in conjunction with land in the vicinity. Publicly available data sets have been considered. These are available on LIST (www.maps.thelist.gov.au) and include:

- Enterprise suitability mapping
- Cadastral Parcels
- Hydrographic lines
- Contours (10 m)
- Tasmanian Interim Planning Overlay
- Tasmanian Interim Planning Scheme Zones
- TASVEG 4.0
- Land Capability
- Underlying Geology
- Landslide Hazard Bands
- Threatened Flora Point
- Threatened Fauna Point
- Land Potentially Suitable for the Agriculture Zone.

Imagery including;

- Google Earth (2011-2021)
- State Aerial Photography (Available on LIST)
- ESRI Imagery (Available on LIST)

Other data sets and published information such as;

- Water Information Management System
- Water Assessment Tool.

Land Capability has previously been assessed at a scale of 1:100,000 and is available on LIST:

- Published Land Capability by Tas Government at a Scale of 1:100,000 (see Figure A1-3).
  - Pipers Report, 1990.

The preferred new zoning (Rural) and the potential for residential use to constrain agricultural and primary industry use in the vicinity has also been considered.

A site assessment was conducted on the 6th of December 2021, to confirm or otherwise the desktop study findings. The onsite Land Capability Assessment (as per Grose 1999) was conducted on the title at a scale of 1:10,000 (see Appendix 3 for RMCG's Land Capability Assessment Protocol).

3 Description

3.1 LANDSCAPE CONTEXT

The subject title (CT 115755/1) has a total area of 90.8 ha. There are no existing dwellings on the land. There is a conservation covenant over more than half the title (approximately 51.5 ha), covering the entire central portion of the title and extending into the south eastern corner. The conservation covenant precludes agricultural use and was therefore excluded from the Land Capability assessment. There are two cleared portions of agricultural land in the north western and central eastern areas of the title, separated by the conservation covenant.

The cleared north western portion covers approximately 18.0 ha. There is an unnamed tributary of Brid River running to the north-west through this section of the title and an instream dam, registered as a stock and domestic dam along the western boundary. The land is slightly undulating, to the south-west of the tributary predominately north-easterly aspect and to the north-east of the tributary a south-westerly aspect.

The cleared central eastern portion of the title is approximately 20.9 ha, and there are two unnamed tributaries of the Great Forester River running to the north through this area. The aspect is predominantly northerly, with steepness increasing significantly to the south. The area is dissected by the Norwood to Scottsdale transmission lines.

The highest point of the title is near the south eastern corner, sitting at 350 m Above Sea Level (ASL), while the lowest point is in the north western corner of the title at slightly less than 200 m ASL. The prevailing wind is from the north west. The cleared portions of the title do not appear to be currently used for agricultural production, and there are large areas of blackberry infestation present, particularly within the north western portion of the title. The cleared portions have previously been grazed by livestock from neighbouring properties. Historical imagery suggests, and discussions with the landowner confirm, it has previously occasionally been utilised for crops such as potatoes. This appeared to occur only in the south western portion of the cleared north western section of the title, south-west of the unnamed tributary of Brid River.

The land is bound by titles used for forestry purposes to the south and west, and pasture used for grazing to the east and north.

Average annual rainfall in this area is approximately 968 mm[1].

3.2 SOILS AND GEOLOGY

There is no published soils mapping available for the title. The underlying geology for the majority of the title is Dgre (LIST map), which is described as 'Medium to coarse-grained, equigranular, biotite-hornblende granodiorite'.

[1] BOM Climate Statistics – Scottsdale (West Minstone Rd) - http://www.bom.gov.au/climate/averages/tables/cw_091219.shtml

3.3 VEGETATION

TASVEG 4.0 maps the cleared area as agricultural land (FAG). This was confirmed when on site. Where the Brid River tributary enters the title at the southern boundary, as well as where it leaves the northern boundary, the vegetation is mapped as *Eucalyptus viminalis* wet forest (WVI). WVI is a threatened vegetation community under *Nature Conservation Act 2002*. Vegetation within the conservation covenant is mapped as a mix of wet eucalyptus forest and rainforest communities (*Eucalyptus regnans* forest (WRE), *Nothofagus - Phyllocladus* short rainforest (RMS), *Nothofagus - Atherosperma* rainforest (RMT), *Acacia dealbata* forest (NAD) and *Acacia melanoxylon* swamp forest (NAF)). All vegetation within the conservation covenant as well as the two patches of WVI are mapped as Priority Habitat under the Interim Planning Scheme. Along the most southern tributary of the Great Forester, within the covenanted area, are multiple records of a threatened flora species (*Cyathea cunninghamii*, slender treefern). There are no records of threatened fauna species associated with the title.

3.4 LAND CAPABILITY

The published Land Capability mapping (1:100,000) shows the majority of the pasture area is predominately Class 4, with some portions of Class 3 and Class 5 Land Capability also within the assessment area. An onsite Land Capability assessment was undertaken at a scale of 1:10,000 in the cleared north western and central eastern portions of the title focusing particularly on the more productive areas of the title; the conservation covenant area was not assessed. The published Class 3 portion which covers approximately 1.2 ha was assessed as Class 4d. Class 4 land is described as land well suited to grazing, but which is limited to occasional cropping or a very restricted range of crops. The primary limitation that dictated the Class 4 assessment was soil drainage. Common and faint mottling occurred from 15-20 cm across all auger pits, which is an indicator of imperfectly drained soils. Full Land Capability Class descriptions are available in Appendix 2. See Appendix 3 for Land Capability Assessment results and soil profile descriptions.

The land is not classed as 'Prime Agricultural Land' under the Protection of Agricultural Land Policy 2009.

3.5 LAND USE ON SUBJECT TITLES AND EXISTING ASSOCIATED AGRICULTURAL ENTERPRISE

The land is currently not utilised for any agricultural production purposes. Previously, the cleared portions have been leased to neighbouring farms for livestock grazing and used for fodder production (hay and silage). The far western portion of the title has also been used for occasional potato cropping on a rotational basis (most recently approximately ten years ago, based on aerial imagery). When onsite there were no stock on the subject land, although there was evidence of cattle being grazed on the eastern portion of the land in the previous year or two. As the land is not being maintained for agricultural production, there is evidence of weed intrusion (blackberries) and damaged fencing. There are three dams located on the property, with the largest western dam supplying domestic water to an adjacent title (CT 115754/1) to the north of the subject title.

3.6 EXISTING AND POTENTIAL IRRIGATION ON THE TITLE

The western portion of the land is located within the Brid River Catchment, whilst the eastern portion falls within the Great Forester River catchment. The entire title is also within the Scottsdale Scheme Irrigation District. There are no bores located within the assessment area. There are several bores on neighbouring properties located 1–2 km east of the subject title. The yields for the majority of these are not provided, however bore 40723, located 2 km to the east has a recorded initial yield of 0.38 L/s. This is a relatively low yield and not sufficient for irrigation.

Across the subject title, there are two registered dams for stock use (dam ID; 4009, 4010) with a total registered capacity of 7.5 ML. Dam 4010 is located along the western boundary of the property, whilst the registered coordinates for dam 4009 are not entirely accurate but this appears to be the smaller dam on the western portion of the property. There is also an unregistered stock dam on the eastern portion of the property. There is no water licence associated with the enterprise, however we note the proponent has recently applied for a winter take irrigation allocation of 21 ML at surety 6 from the unnamed tributary of the Brid River, located to the west of the property. This application is under assessment.

Because the land is within the Brid River and Great Forester River catchments, there is limited scope to acquire reliable new surface water allocations for irrigation, as both catchments are now fully allocated for winter and summer take irrigation water allocations. Higher reliability surface water may be available through trade. The Scottsdale Irrigation Scheme currently has 2,610 ML available for purchase. The Scheme pipeline is located approximately 1.5 km east of the title and negotiating with neighbouring landholders would be required to secure access. The Scottsdale scheme water also appears to be available as direct take from the Brid River, which may be a more feasible offtake point, however this would still require negotiating access to an offtake point with neighbouring landholders.

Further development of irrigation water resources appears limited and unlikely.

3.7 SURROUNDING LAND USE

The subject title is surrounded to the west, south and southern portion of the eastern boundary by titles used for forestry purposes. These titles are proposed for the 'Rural' zone in the Tasmanian Planning Scheme. Immediately to the north is a small title with a dwelling which is not used for any agricultural purpose. The three larger titles along the northern boundary are owned by the same entity and have commercial scale characteristics[2]. These titles are farmed in conjunction with land to the north. This enterprise has access to irrigation water and appears to be used primarily for pasture for dairy and fodder production, with forestry activity also occurring on some areas of the holding. These titles are slated to be zoned 'Agriculture' under the Tasmanian Planning Scheme.

The title along the northern portion of the eastern boundary appears to be used for dryland livestock grazing. and is farmed in conjunction with five other titles to the north east. There does not appear to be irrigation water resources developed for this livestock enterprise, although the Scottsdale Scheme pipeline traverses one of the northern titles. The landholder does not appear to hold a Scottsdale Scheme water entitlement[3]. These titles are also proposed to be zoned 'Agriculture'.

The middle portion of the eastern boundary is adjoined by a 68 ha title, which appears to be used for livestock grazing. This title may be farmed in conjunction with land under different ownership or further distant.

3.8 POTENTIAL ENTERPRISES

Table 3-1 lists all the enterprises assessed within DNRET's Enterprise Suitability Project and their average mapped suitability for the subject title. Suitability was only considered for the cleared western and eastern portions of the title. Suitability also varied within specific areas of the subject title, as such the below should be considered as an approximate guide only.

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[2] *As defined by A. Ketelaar - Enterprise Scale for primary production in Tasmania*

[3] Water Entitlements register available on line at https://www.tasmanianirrigation.com.au/water-entitlement-register

Table 3-1: Enterprise Suitability

SUITABILITY	ENTERPRISES
Well Suited	*Pinus radiata*
Well Suited with Soil Management	
Suitable	*Eucalyptus nitens*, Industrial Hemp, Potatoes
Suitable with Soil Management	Barley, Blueberries, Carrots, Linseed, Lucerne, Poppies, Pyrethrum, Wheat
Suitable with Frost Protection Installed	Sparkling Wine Grapes
Moderately Suitable	Hazelnuts, Olives, Raspberries
Moderately Suitable with Soil Management	Onions, Table Wine Grapes
Moderately Suitable with Frost/Heat Management	Cherries
Marginally Suitable	
Unsuitable	*Eucalyptus globulus*, Strawberries, Pyrethrum

The Enterprise Suitability Mapping indicates that for the cleared eastern and western portions of the subject title a mix of broadacre and high value horticulture crops are potentially suitable with soil management. This correlates with Land Capability Class 4 soils. The majority of these crops would require water for irrigation and would be best occasionally cropped in rotation with pasture, which has been the case for this land in the past.

It is unlikely that the site would be utilised for forestry plantations (Pinus radiata) due to size, proximity of dwellings, the presence of a conservation covenant and the fragmentation of the property. It is also questionable as to whether the site would be attractive for development of a high value horticultural enterprise at a commercial scale (such as blueberries) due to the fragmented nature of the productive areas.

4 Discussion

4.1 PRODUCTIVE CAPACITY OF THE SUBJECT LAND

Both western and eastern cleared portions of the land have previously been periodically used for livestock grazing by neighbouring landholders' stock. Historically, the southwestern portion of the property has also been cropped on a rotational basis, although this appeared to be limited to the area to the west of the unnamed tributary of Brid River, approximately 3ha.

If the application for the 21 ML Surety 6 winter take is successful, then there would be sufficient irrigation water for approximately 4 ha of pasture and potentially slightly larger areas of crops. However, there is only sufficient storage for 7.5 ML of irrigation water, so additional storage would need to be constructed to fully utilise the water during the summer period. If the application is not successful, then the use of the water from the dam is limited to domestic scale irrigation and stock watering.

The most likely use of the cleared land is for dryland or irrigated grazing based on the assessed Land Capability for the property, which could include fodder conservation (silage and hay). Orchards, berries and vineyard production is also possible for this title, provided an adequate volume of irrigation water is secured or the scale is limited to 'domestic'. Soil drainage is likely to be the limiting factor based on the Land Capability assessment. However, given the fragmentation of the title and the presence of the conservation covenant, the land and water resources associated with the title are insufficient for a commercial scale agricultural activity.

The productivity of land with this sort of characteristics (Class 4 Land Capability and small grazing areas) is best realised if farmed in conjunction with other land. The fragmentation of the title by the conservation covenant area means the ability of this title to be farmed in conjunction with adjacent titles is relatively limited and more likely to occur under an opportunistic temporary arrangement by adjacent landholders, rather than a formal lease arrangement. Given the title is mostly covered in a conservation covenant, it is considered unlikely the subject title would be an attractive option to purchase for agricultural purposes.

While it is possible water could be purchased from the irrigation scheme, there are fixed and variable annual costs associated with this water in additional to pumping costs. In addition, negotiation with landholders to secure access would be required. Under these circumstances, to develop irrigation infrastructure for the title, given the relatively small size of the potential production area, is unlikely to be an economically feasible option.

Based on these limitations, the agricultural potential of this title is more likely to be realised with a small-scale producer[4] managing the property. Small-scale producers are more likely to have an intent to develop a more intensive agricultural use on the suitable parts of the title, utilising the better soils and irrigation water resources, with a lower regard for the labour input costs. Small-scale producers are more likely to value add and maximise the productive capacity of the limited resources and supplement income through value adding or off-farm income. Whilst the title is likely to be deemed unattractive by commercial scale producers due to the fragmentation of the title caused by the conservation covenant area, this is more likely to be considered an asset and be utilised by a small-scale producer for demonstrating sustainability credentials.

4.2 POTENTIAL FOR CONSTRAINING ADJACENT AGRICULTURAL LAND USE

If the title is to be zoned 'Rural', then the implications of this on surrounding agricultural uses needs to be considered. The State Planning Scheme includes requirements for adequate separation distances between discretionary uses in the Rural zone and agricultural uses on neighbouring properties to minimise potential for constraint. Any dwelling proposed to be located on the title under the upcoming State Planning Scheme would have to include adequate setbacks to minimise any potential for constraining agricultural activities on neighbouring titles. There is sufficient area on this title to provide for adequate setbacks from neighbouring titles.

Potential for conflict between any proposed new dwellings and adjacent primary industry uses needs to be considered. There are a range of activities associated with grazing and cropping. Learmonth et.al. (2007) detail the common range of issues associated with sensitive uses such as residential use in the Rural Resource zone which can constrain primary industry activities (see Appendix 5). Common conflict issues associated with residential use in the 'Rural Resource' or 'Agriculture' zones include spray drift from chemicals which would include fungicide, herbicide, and insecticide, noise from equipment (including shooting for game control), irrigation spray drift, odours, and dust.

[4] *As defined by A. Ketelaar, Enterprise Scale – for primary production in Tasmania*

The Western Australia Department of Health (DOH, 2012) has published guidelines relating specifically to minimising conflict between agricultural activities and residential areas through management of buffer areas. This study particularly focuses on spray drift and dust generation and recommends a minimum separation of 300 m to reduce the impact of spray drift, dust, smoke, and ash. Through the establishment of an adequately designed, implemented and maintained vegetative buffer, this minimum separation distance can be reduced to 40 m. The *Dorset Interim Planning Scheme 2013* requires a 200 m setback between 'Rural Resource' zoned land and new discretionary uses and the Tasmanian Planning Scheme (TPS) will require a 200 m setback between a new dwelling in the 'Rural' zone and adjacent land in the 'Agriculture' zone. The TPS also provides Performance Criteria to reduce this setback if it can be demonstrated the proposal will not impact on adjacent agricultural activity.

5 Conclusions

Given the limitations of size, fragmentation, Land Capability and the existing conservation covenant over 51.5 ha of the 90.8 ha subject title, it is our view the title is best placed within the 'Rural' zone in the upcoming Tasmanian Planning Scheme. The title has limited ability to be managed productively at a commercial scale due to fragmentation of the productive areas either on its own or in conjunction with adjacent titles. Although the land has been leased to a neighbour in the past and managed in conjunction with other land, this arrangement has lapsed. The cost of the required inputs (fertiliser, weed control and fencing), reduce the potential for a leasing arrangement to farm the land in conjunction. The fragmented small area of usable agricultural land on the subject title due to the conservation covenant means that it is likely to be difficult to make a commercial gain on improving the land for productive use either on its own or farmed in conjunction.

Based on these limitations, the agricultural potential of this title is more likely to be realised with a small-scale producer managing the property. Small scale producers are more likely to have an intent to develop a more intensive agricultural use on the suitable parts of the title, utilising the better soils and irrigation water resources, with a lower regard for the labour input costs. Small scale producers are more likely to value add and maximise the productive capacity of the limited resources and supplement income through value adding or off-farm income. Whilst the title is likely to be deemed unattractive by commercial scale producers due to the fragmentation of the title caused by the conservation covenant area, this is more likely to be considered an asset and be utilised by a Small Scale Producer for demonstrating sustainability credentials.

As the title is adjacent to titles proposed to go into the 'Rural' zone, we propose that the title be zoned 'Rural'. This would maintain uniformity and consistency within the planned zoning under the Tasmanian Planning Scheme. The 'Rural' zone is also a more appropriate zone for a title with a conservation covenant and areas of a mapped threatened vegetation community and threatened flora species.

The title would be able support a dwelling which minimises impact on adjacent primary production by implementing adequate setbacks from current and potential future neighbouring agricultural uses.

References

Department of Justice. (2017) Agricultural Land Mapping Project - Background Report, Tasmanian Government

DPIPWE. (2022). Cadastral Parcels Dataset. TASMAP Department of Primary Industries, Parks, Water and Environment

DPIPWE. (2007, November). Land Capability of Tasmania Dataset. Department of Primary Industries, Parks, Water and Environment

DPIPWE. (2020). Tasmanian Vegetation Monitoring and Mapping Program TASVEG 4.0. Department of Primary Industries, Parks, Water and Environment

Grose, C. J. (1999). Land Capability Handbook. Guidelines for the Classification of Agricultural Land in Tasmania. (Second Edition ed.). Tasmania, Australia: Department of Primary Industries, Water and Environment

Ketelaar, A. (2022). Enterprise Scale - for primary production in Tasmania, unpublished report for Flinders Council

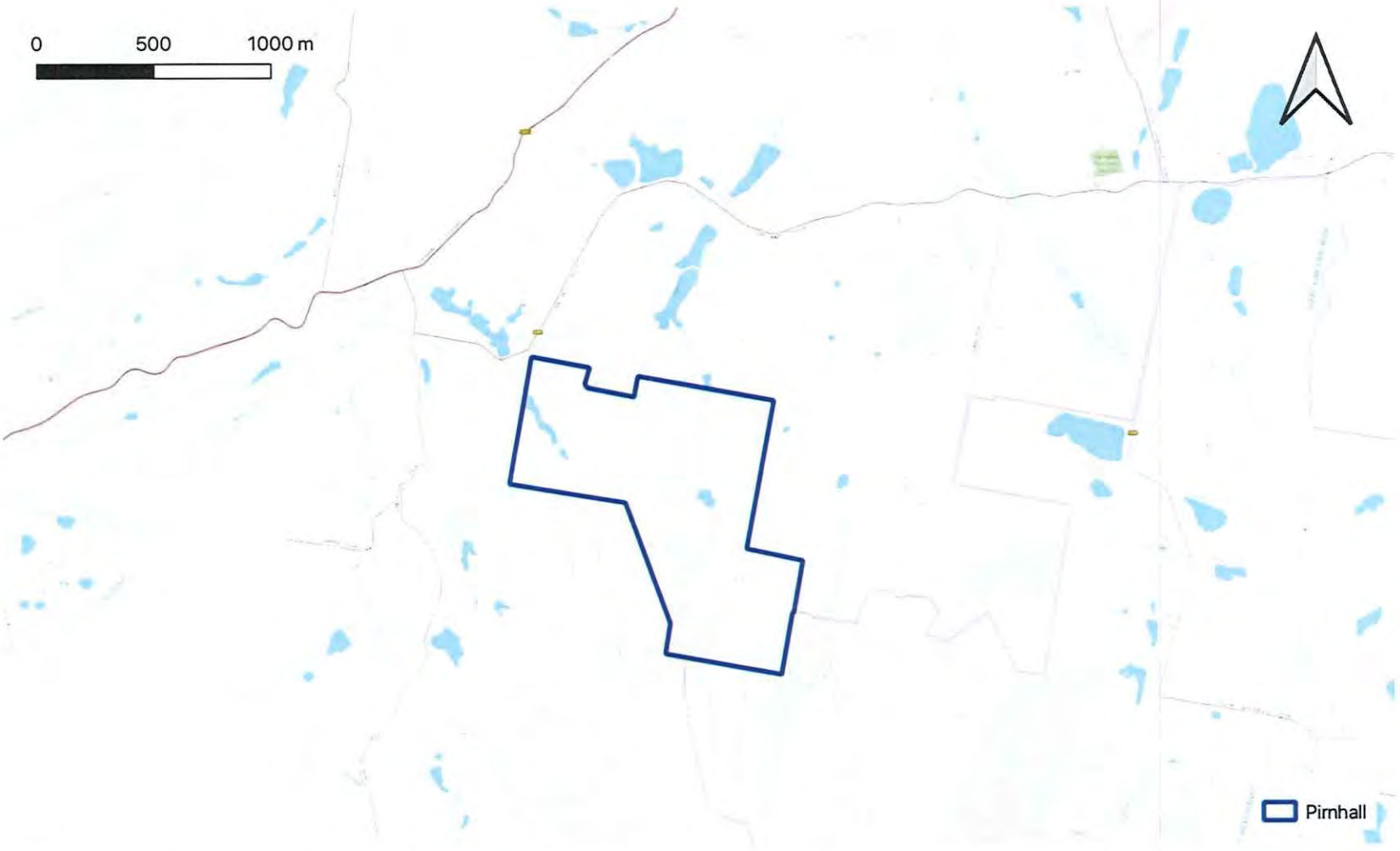
Noble, K. E. (1990) Pipers Report – Land Capability Survey of Tasmania. Department of Primary Industry Tasmania

Learmonth, R., Whitehead, R., Boyd, B., & Fletcher, S. (2007). Living and Working in Rural Areas. A handbook for managing land use conflict issues on the NSW North Coast. Centre for Coastal Agricultural Landscapes in Partnership with the Northern Rivers Catchment Management Authority

Tasmania Planning Commission. (2018). Tasmanian Planning Scheme – State Planning Provisions

West Australian Government. (2012). Guidelines for Separation of Agricultural Land and Residential Land Uses. Department of Health, WA

Appendix 1: Maps

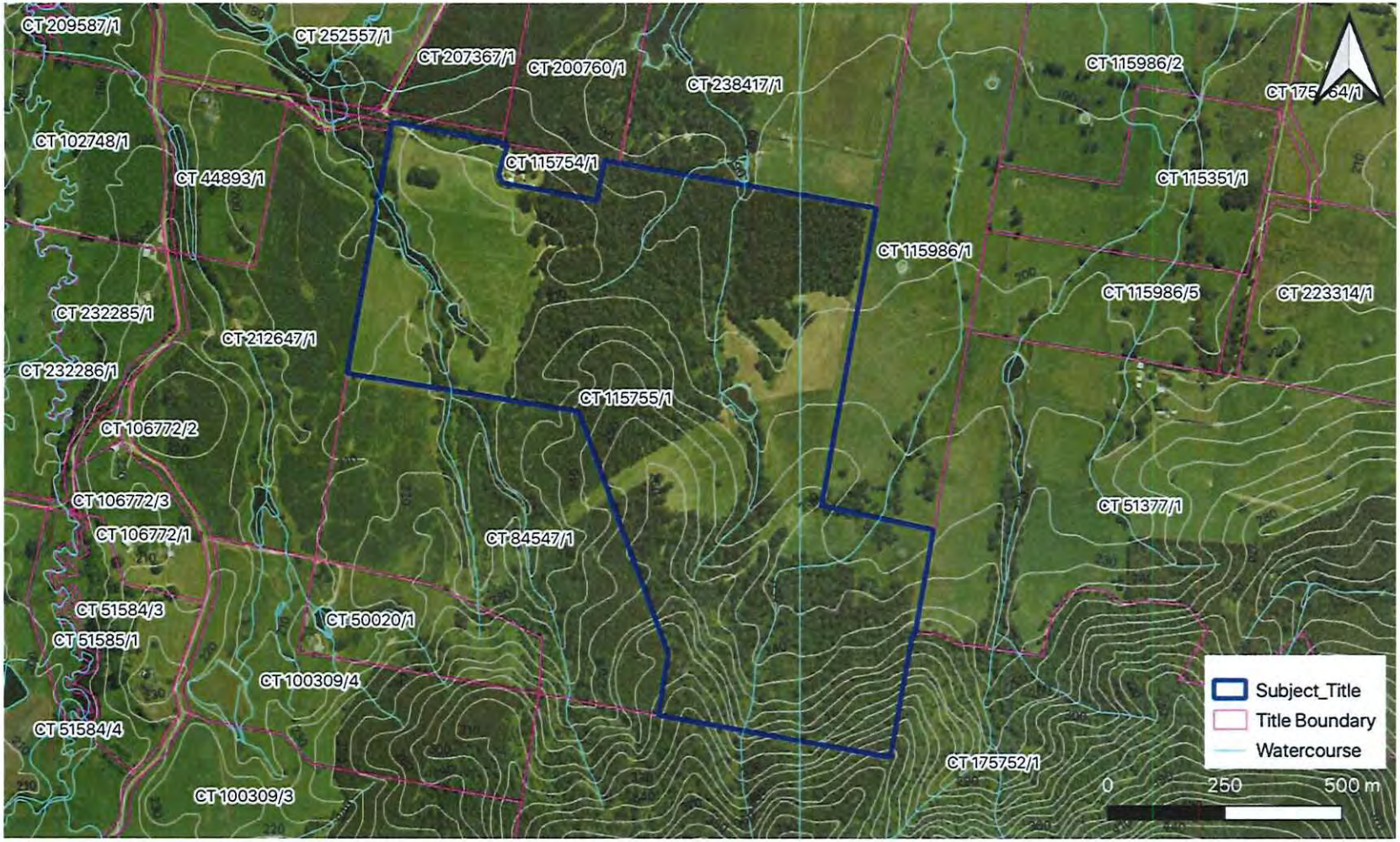


Map Name: Location
Project: Ag Report
Client: Ferguson, Daniel
Date: 18/1/22

BaseMap image by LIST Topo
Cadastre from LIST
(C) State of Tas

RMCG

Figure A1-1: Location Map

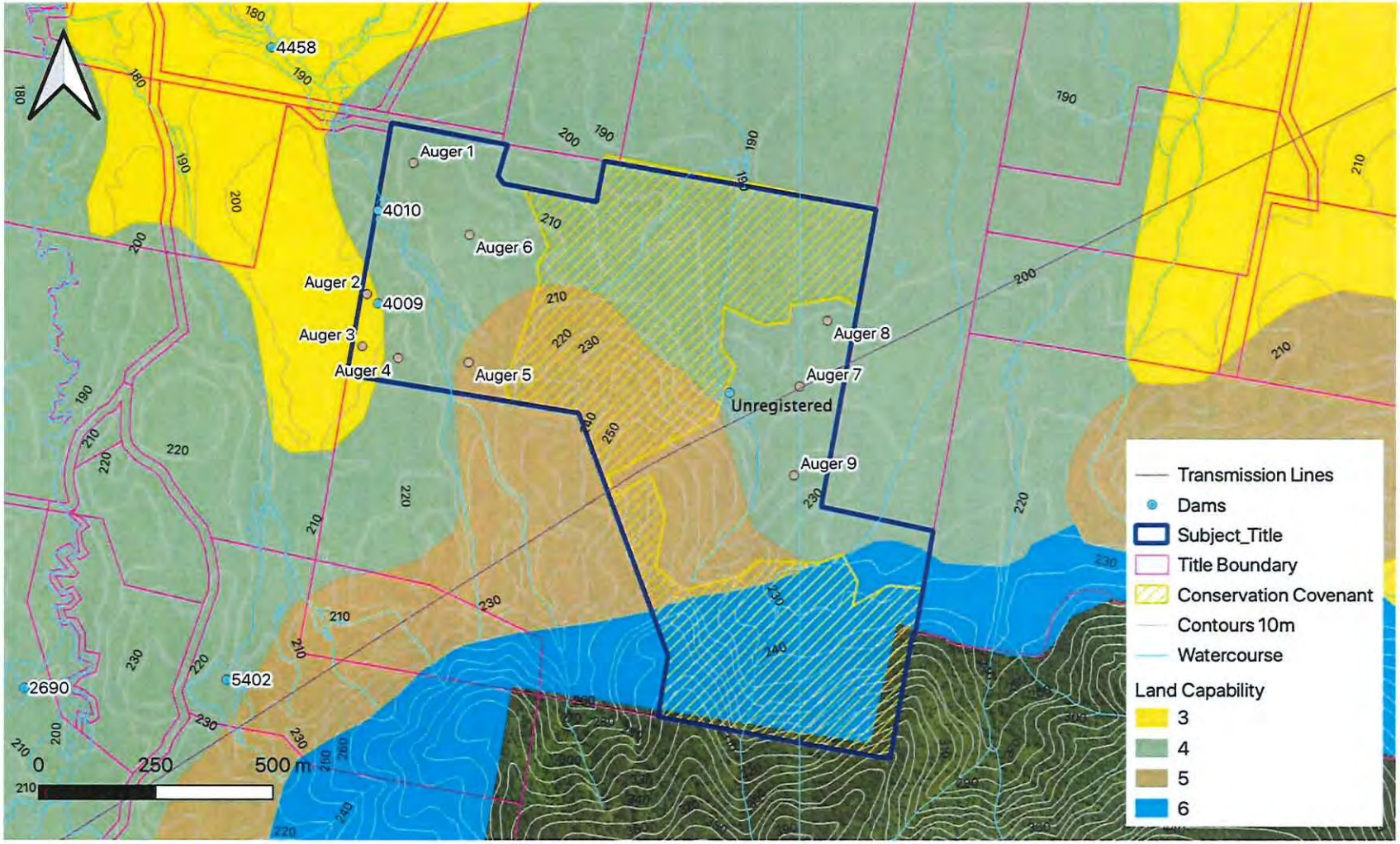


Map Name: Aerial
Project: Ag Report
Client: Ferguson, Daniel
Date: 18/1/22

BaseMap image by LIST Ortho
Cadastre, contours & watercourses from LIST
(C) State of Tas

RMCG

Figure A1-2: Aerial Image

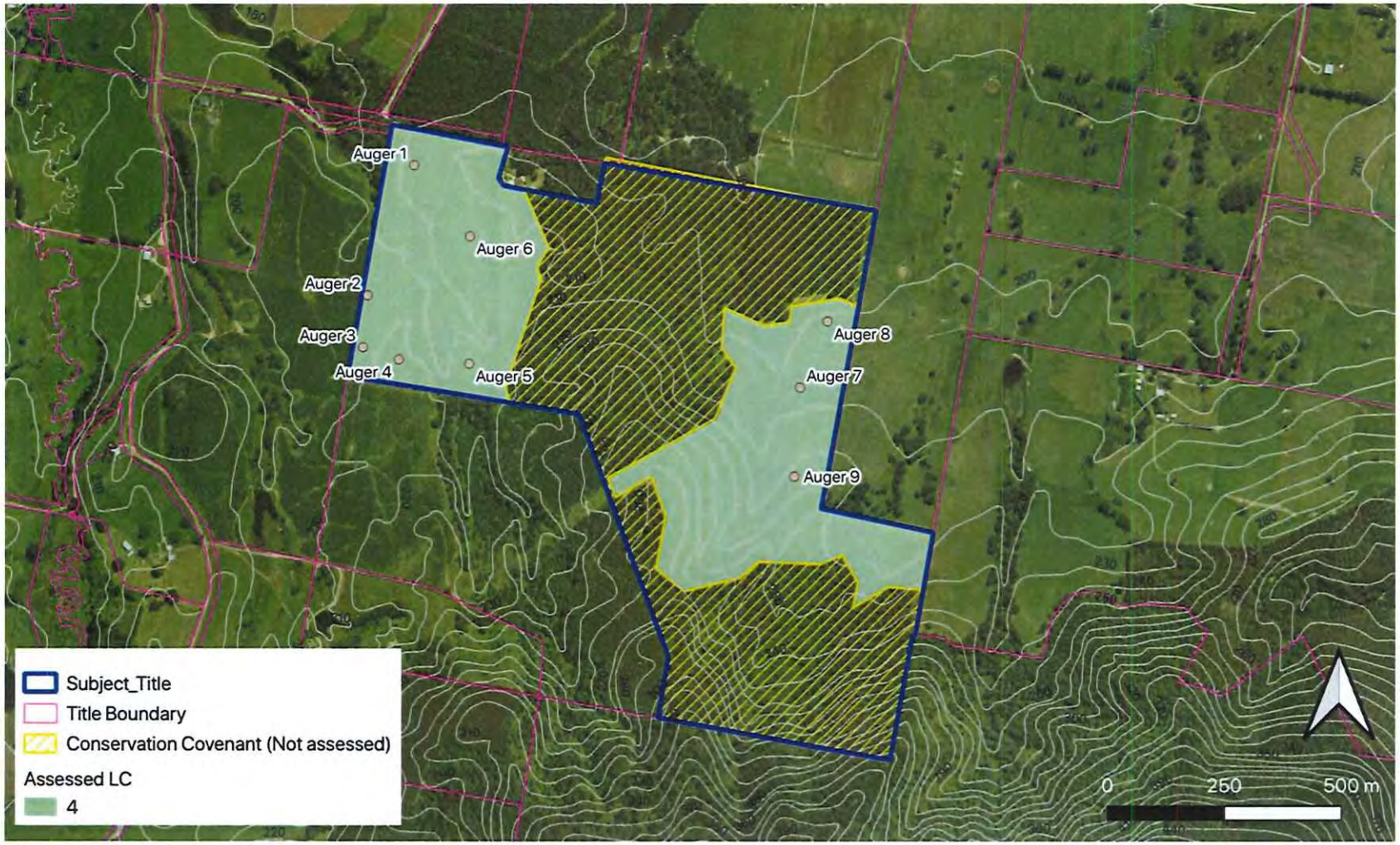


Map Name: Published Land Capability
Project: Ag Report
Client: Ferguson, Daniel
Date: 18/1/22

BaseMap image by LIST Ortho
Land Capability, Cadastre & contours from LIST
(C) State of Tas

RMCG

Figure A1-3: Published Land Capability (1:100,000), showing assessed auger pits



Map Name: Assessed Land Capability
Project: Ag Report
Client: Ferguson, Daniel
Date: 18/1/22

BaseMap image by LIST Ortho
Cadastre & contours from LIST
(C) State of Tas

RMCG

Figure A1-4: Assessed Land Capability (1:10000)

Appendix 2: Land Capability definitions from Grose (1999)

Prime agricultural land as described in the Policy for the Protection of Agricultural Land 2009:

CLASS 1: Land well suited to a wide range of intensive cropping and grazing activities. It occurs on flat land with deep, well drained soils, and in a climate that favours a wide variety of crops. While there are virtually no limitations to agricultural usage, reasonable management inputs need to be maintained to prevent degradation of the resource. Such inputs might include very minor soil conservation treatments, fertiliser inputs or occasional pasture phases. Class 1 land is highly productive and capable of being cropped eight to nine years out of ten in a rotation with pasture or equivalent without risk of damage to the soil resource or loss of production, during periods of average climatic conditions.

CLASS 2: Land suitable for a wide range of intensive cropping and grazing activities. Limitations to use are slight, and these can be readily overcome by management and minor conservation practices. However, the level of inputs is greater, and the variety and/or number of crops that can be grown is marginally more restricted, than for Class 1 land. This land is highly productive but there is an increased risk of damage to the soil resource or of yield loss. The land can be cropped five to eight years out of ten in a rotation with pasture or equivalent during 'normal' years, if reasonable management inputs are maintained.

CLASS 3: Land suitable for cropping and intensive grazing. Moderate levels of limitation restrict the choice of crops or reduce productivity in relation to Class 1 or Class 2 land. Soil conservation practices and sound management are needed to overcome the moderate limitations to cropping use. Land is moderately productive, requiring a higher level of inputs than Classes I and 2. Limitations either restrict the range of crops that can be grown or the risk of damage to the soil resource is such that cropping should be confined to three to five yens out of ten in a rotation with pasture or equivalent during normal years.

Non-prime agricultural land as described in the Policy for the Protection of Agricultural Land 2009:

CLASS 4: Land primarily suitable for grazing but which may be used for occasional cropping. Severe limitations restrict the length of cropping phase and/or severely restrict the range of crops that could be grown. Major conservation treatments and/or careful management is required to minimise degradation. Cropping rotations should be restricted to one to two years out of ten in a rotation with pasture or equivalent, during 'normal' years to avoid damage to the soil resource. In some areas longer cropping phases may be possible but the versatility of the land is very limited. (NB some parts of Tasmania are currently able to crop more frequently on Class 4 land than suggested above. This is due to the climate being drier than 'normal'. However, there is a high risk of crop or soil damage if 'normal' conditions return.).

CLASS 5: This land is unsuitable for cropping, although some areas on easier slopes may be cultivated for pasture establishment or renewal and occasional fodder crops may be possible. The land may have slight to moderate limitations for pastoral use. The effects of limitations on the grazing potential may be reduced by applying appropriate soil conservation measures and land management practices.

CLASS 6: Land marginally suitable for grazing because of severe limitations. This land has low productivity, high risk of erosion, low natural fertility or other limitations that severely restrict agricultural use. This land should be retained under its natural vegetation cover.

CLASS 7: Land with very severe to extreme limitations which make it unsuitable for agricultural use.

Appendix 3: Protocol for Land Capability assessment used by RMCG

This protocol outlines the standards and methodology that RMCG uses to assess Land Capability.

In general, we follow the guidelines outlined in the Land Capability Handbook (Grose 1999) and use the survey standards outlined in the Australian Soil and Land Survey Handbooks to describe (McDonald, et al. 1998), survey (Gunn, et al. 1988) and classify (Isbell 2002) soils and landscapes.

Commonly we are requested to assess Land Capability in relation to local government planning schemes. As such the level of intensity of the investigation is usually high and equivalent to a scale of 1:25 000 or better. The choice of scale or intensity of investigation depends on the purpose of the assessment. As the scale increases (becomes more detailed and the scale is a smaller number), the number of observations increases.

An observation can be as much as a detailed soil pit description or as little as measuring the gradient of an area using a clinometer or the published contours in a Geographical Information System and includes soil profile descriptions, auger hole descriptions, and observations confirming soil characteristics, land attributes or vegetation. The table below shows the relationship between scale, observations, minimum distances and areas that can be depicted on a map given the scale and suggested purpose of mapping.

Table A3-1: Land Capability Assessment Scales

SCALE	AREA (HA) PER OBSERVATION	MINIMUM WIDTH OF MAP UNIT ON GROUND	MINIMUM AREA OF MAP UNIT ON GROUND	RECOMMENDED USE
1:100 000	400 ha	300 m	20 ha	Confirmation of published land capability mapping
1:25 000	25 ha	75 m	1.25 ha	Assessments of farms, fettering or alienation of Prime Agricultural Land
1:10 000	4 ha	30 m	2000 m^2	Area assessments of less than 15 ha
1:5 000	1 ha	15 m	500 m^2	Site specific assessments for houses and areas less than 4 ha
1:1 000	0.04 ha	3 m	20 m^2	Shown for comparison purposes

Based on 0.25 observations per square cm of map, minimum width of mapping units is 3 mm on map as per (Gunn, et al. 1988).

Assessment methodology

With all assessments we examine a minimum of three observations per site or mapping unit and determine Land Capability on an average of these observations.

Land Capability is based on limitations to sustainable use of the land, including the risk of erosion, soil, wetness, climate and topography. The most limiting attribute determines the Land Capability class. This is not always a soil limitation and thus soil profile descriptions are not always required for each mapping unit. For example, land with slopes greater than 28%, areas that flood annually and areas greater than 600 m in elevation override other soil related limitations.

The availability of irrigation water can affect the Land Capability in some areas. An assessment of the likelihood of irrigation water and quality is made where it is not currently available.

As a minimum all assessment reports include a map showing the subject land boundaries, observation locations, published contours and Land Capability.

Definitions

Land Capability - A ranking of the ability of land to sustain a range of agricultural land uses without degradation of the land resource (Grose 1999).

Protocol references

Grose, C J. Land capability Handbook. Guidelines for the Classification of Agricultural Land in Tasmania. Second Edition. Tasmania: Department of Primary Industries, Water and Environment, 1999.

Gunn, R H, J A Beattie, R E Reid, and R H.M van de Graaff. Australian Soil and Land Survey Handbook: Guidelines for Conducting Surveys. Melbourne: Inkata Press, 1988.

Isbell, R F. The Australian soil classification. Revised Edition. Melbourne: CSIRO Publishing, 2002.

McDonald, R C, R F Isbell, J G Speight, J Walker, and M S Hopkins. Australian Soil and Land Survey Field Handbook. Second Edition. Canberra: Australian Collaborative Land Evaluation Program, CSIRO Land and Water, 1998.

On site land capability assessment

Published Land Capability (LIST 1:100,000) maps the subject land as partially Classes 3, 4, 5 & 6, but mostly Class 4 & 5 land.

A site inspection was undertaken on the 6th of December 2021 and a Land Capability assessment was undertaken at a scale of 1:10,000 for the cleared areas of the title, with a particular focus on the mapped Class 3 areas. Nine assessment pits were augured across the assessment area. This was accompanied by visual inspections across the title and slope calculations.

The results of the onsite Land Capability assessment found that the assessment area has a Land Capability of Class 4.

For the assessment pits augered the key characteristics that determined the assessed Land Capability was drainage (d) – All profiles showed imperfect drainage characteristics through mottling (common & distinct or common & faint) from around 20 cm–60 cm depth.

Pit 6 also showed a greater degree of mottling than the other test pits, with common and distinct mottling occurring from 20–60cm depth. This pit was assessed as Class 5 Land Capability as a result. However, given this was a single pit and the overall area is managed as Class 4, the average Land Capability was assessed as Class 4d.

Table A3-2: Land Capability Assessment Summary Table for Assessment Pits 2019

	SOIL	COMMENTS	COARSE FRAGMENT SIZE (MM)	COARSE FRAGMENT ABUNDANCE (G)	SOIL DRAINAGE (D)	SURFACE STONE (R)	TEXTURE	STRUCTURE (E)	SLOPE (E)	EROSION RISK		FLOOD RISK	COLOUR	LAND CAPABILITY
Pit No	Depth (cm)		Type, mm	%	Mottle Severity	Presence			%	Water	Wind			
1	0–20		2–60	2–20			Clay loam	Strong	5–12	V low	Low	Low	Dark brown	4d
	20–40		2–60	20–35	Common/faint		Light clay	Strong					Strong brown	
	40–60		2–60	20–35	Common/faint		Medium clay	Strong					Strong brown	
2	0–15						Loam	Strong	0–5	V low	Low	Low	Dark brown	4d
	15–20		2–60	20–35	Common/faint		Clay loam	Strong					Dark brown	
	25–60		2–60	50–70	Common/faint		Clay loam	Strong					Strong brown	
3	0–15		2–60	<2			Silty clay	Moderate	0–5	V low	Low	Low	Dark brown	4d
	15–30		2–60	2–20	Common/faint		Clay loam	Strong					Strong brown	
	30–60		2–60	2–20	Common/faint		Medium clay	Strong					Strong brown	
4	0–20		2–60	<2			Loam	Moderate	0–5	V low	Low	Low	Dark brown	4d
	20–40		2–60	2–20	Common/faint		Light clay	Strong					Dark brown	
	40–60		2–60	2–20	Common/faint		Medium clay	Strong					Strong brown	
5	0–20		2–60	<2			Loam	Moderate	0–5	V low	Low	Low	Dark brown	4d
	20–40		2–60	2–20	Common/faint		Light clay	Strong					Dark brown	
	40–60		2–60	2–20	Common/faint		Medium clay	Strong					Strong brown	
6	0–20		2–60	<2			Loam	Strong	5–12	V low	Low	Low	Dark brown	5d
	20–40		2–60	20–35	Common/distinct		Clay loam	Strong					Strong brown	
	40–60		2–60	20–35	Common/distinct		Moderate clay	Strong					Strong brown	
7	0–20		2–60	<2			Loam	Strong	5–12	V low	Low	Low	Dark brown	4d
	20–40		2–60	2–20	Common/faint		Clay loam	Strong					Dark brown	
	40–60		2–60	20–35	Common/distinct		Light clay	Strong					Strong brown	
8	0–30		2–60	2–20			Loam	Strong	0–5	V low	Low	Low	Black	4d
	30–55		2–60	2–20	Common/faint		Clay loam	Strong					Black	
	55–60		2–60	20–35	Common/distinct		Light clay	Strong					Black	
9	0–20		2–60	2–20			Loam	Strong	12–18	Mod	Low	Low	Dark brown	4d
	20–40		2–60	2–20	Common/faint		Light clay	Strong					Dark brown	
	40–60		2–60	2–20	Common/faint		Moderate clay	Strong					Dark brown	

Pit 1

Site: Pirnhall

Date: 6th December 2021

Pit: 1

Flood Risk: Low

Slope: 5–12%

Morphology: Hill sope - Gentle south westerly aspect

Surface condition: Semi-improved Pasture.

Table A3-3: Profile description

DEPTH (CM)		MUNSELL COLOUR		STRUCTURE	TEXTURE	GRAVEL	MOTTLE	COMMENTS
0	20	7.5YR	3/3	S	CL	2–20%	-	
20	40	7.5YR	5/6	S	LC	20–35%	4	
40	60	7.5YR	5/6	S	MC	35–50%	4	

Duplex profile with well-structured soils with a Clay Loam at the surface, over a Light Clay and a Medium Clay at depth. At 20–40 cm there is a 20-35% gravel presence, however, this is not limiting to root growth. Mottling (common & faint) in the light and medium clay layers indicates these soils are 'imperfectly' drained, which dictates a Land Capability classification of Class 4d. Pits 2, 3, 4 and 5 displayed similar characteristics, but with the light clay layer occurring at slightly different depths (15–20 cm). The remaining pits were consistent with this profile; however, pit 6 displayed common and distinct mottling from 20 cm onwards, dictating a Class 5 classification.

Appendix 4: Photographs

Taken by Jake Gaudion, 6 December 2021.

Figure A4-1: View towards the north-west corner of the subject title towards Ten Mile Track. Neighbouring plantation to left of image

Figure A4- 2: Southwest corner of subject title looking southwest, showing weed intrusion. Neighbouring eucalypt plantation located in background of image.

Figure A4-3: Plantation adjacent to western boundary of subject title. Extensive presence of fox glove in the plantation understorey and blackberry on the boundary.

Figure A4-4: View from cleared eastern portion of subject title, fragmented by transmission lines, looking south. Conservation covenant and stock dam to right of image.

Figure A4- 5: View from south-east of subject title, looking to the north-west. Transmission lines in the centre, conservation covenant and neighbouring farm to the north in background of image.

Appendix 5: Potential conflict issues

Living and Working in Rural Areas. A handbook for managing land use conflict issues on the NSW North Coast. Learmonth, R., Whitehead, R., Boyd, B., and Fletcher, S. n.d.

Table 1. Typical rural land use conflict issues in the north coast region

Issue	Explanation
Absentee landholders	Neighbours may be relied upon to manage issues such as bush fires, straying stock, trespassers etc. while the absentee landholder is at work or away.
Access	Traditional or informal 'agreements' for access between farms and to parts of farms may break down with the arrival of new people.
Catchment management	Design, funding and implementation of land, water and vegetatin management plans are complicated with larger numbers of rural land-holders with differing perspectives and values.
Clearing	Neighbours may object to the clearing of trees, especially when it is done apparently without approvals or impacts on habitat areas or local amenity.
Cooperation	Lack of mutual co-operation through the inability or unwillingness on behalf individuals to contribute may curtail or limit traditional work sharing practices on-farm or in the rural community.
Dogs	Stray domestic dogs and wild dogs attacking livestock and wildlife and causing a nuisance.
Drainage	Blocking or changing drainage systems through a lack of maintenance or failure to cooperate and not respect the rights of others.
Dust	Generated by farm and extractive industry operations including cultivating, fallow (bare) ground, farm vehicles, livestock yards, feed milling, fertiliser spreading etc.
Dwellings	Urban or residential dwellings located too close to or affecting an existing rural pursuit or routine land use practice.
Electric fences	Electric shocks to children, horses and dogs. Public safety issues.
Fencing	Disagreement about maintenance, replacement, design and cost.
Fire	Risk of fire escaping and entering neighbouring property. Lack of knowledge of fire issues and the role of the Rural Fire Service.
Firearms	Disturbance, maiming and killing of livestock and pest animals, illegal use and risk to personal safety.
Flies	Spread from animal enclosures or manure and breeding areas.
Heritage management	Destruction and poor management of indigenous and non indigenous cultural artefacts, structures and sites.
Lights	Bright lights associated with night loading, security etc.
Litter	Injury and poisoning of livestock via wind blown and dumped waste. Damage to equipment and machinery. Amenity impacts.
Noise	From farm machinery, scare guns, low flying agricultural aircraft, livestock weaning and feeding, and irrigation pumps.
Odours	Odours arising from piggeries, feedlots, dairies, poultry, sprays, fertiliser, manure spreading, silage, burning carcases/crop residues.
Pesticides	Perceived and real health and environmental concerns over the use, storage and disposal of pesticides as well as spray drift.
Poisoning	Deliberate poisoning and destruction of trees/plants. Spray drift onto non-target plants. Pesticide or poison uptake by livestock and human health risks.
Pollution	Water resources contaminated by effluent, chemicals, pesticides, nutrients and air borne particulates.
Roads	Cost and standards of maintenance, slow/wide farm machinery, livestock droving and manure.
Smoke	From the burning of crop residues, scrub, pasture and windrows.
Soil erosion	Loss of soil and pollution of water ways from unsustainable practices or exposed soils. Lack of adequate groundcover or soil protection.
Straying livestock	Fence damage, spread of disease, damage to crops, gardens and bush/rainforest regeneration.
Theft/vandalism	Interference with crops, livestock, fodder, machinery and equipment.
Tree removal	Removal of native vegetation without appropriate approvals. Removal of icon trees and vegetation.
Trespass	Entering properties unlawfully and without agreement.
Visual/amenity	Loss of amenity as a result of reflective structures (igloos, hail netting), windbreaks plantings (loss of
Water	Competition for limited water supplies, compliance with water regulations, building of dams, changes to flows. Stock access to waterways. Riparian zone management.
Weeds	Lack of weed control particularly noxious weeds, by landholders.

Based on: Smith, RJ (2003) Rural Land Use Conflict: Review of Management Techniques – Final Report to Lismore Living Centres (PlanningNSW).

Appendix 6: Agricultural requirements and potential constraints

It is very difficult to provide an assessment of the commercial viability of a single farm business activity as generally more than one farm business activity contributes to a farming business. Table A6-1 is designed to describe the general characteristics of a commercial scale farm business activity in Tasmania. Table A6-1 can be used to characterise land and water resources to determine whether they have the capacity to contribute to a commercial scale farm business activity. For example, a farming business with less than 3,000 DSE would need additional farming activities to be viable.

Table A6-1: Characteristics of commercial scale agricultural farm business activities in Tasmania

RESOURCE	LIVESTOCK			BROAD ACRE CROPS		VEGETABLES		BERRIES	ORCHARD FRUITS & VINES	NURSERIES & CUT FLOWERS	FORESTRY PLANTATIONS
	SHEEP	CATTLE	DAIRY	CEREALS	OTHERS	PROCESSED	FRESH MARKET				
Land Capability	LC generally 3–6.	LC generally 3–5/6.	LC generally 3–5.	LC 1–4.	LC 1–4.	LC 1–4.	LC 1–4.	LC 1–4/5.	LC 1–4/5.	LC 1–4 or N/A	LC 4–6
Minimum paddock sizes	No minimum	No minimum	To suit grazing system.	10–15 ha min	5–10 ha min.	10 ha min.	10 ha min.	2–4 ha.	2–5 ha.	2–4 ha min.	10–20 ha min.
Size for a 'viable' business if conducted as single farm business activity (1)	Generally, 3,000–10,000 dse -area depends on rainfall). (2)		Capacity for at least 350 milkers.(3)	Broadacre cropping will be a mix of crops in rotation with pasture and livestock. The area required for viability is highly variable.				4–10 ha.	10–30 ha.	5–10 ha.	TBC
Irrigation water	Not essential	Not essential	Preferable 4–6ML/ha.	Not necessary.	Mostly necessary, 2–3 ML/ha.	Necessary, 2–6 ML/ha.	Necessary, 2–6ML/ha.	Necessary, 1–3 ML/ha.	Necessary, 2–3 ML/ha.	Necessary, small quantity.	Not required.
Climate specifications	Lower rainfall preferred for wool.	No preferences.	High rainfall (or irrigation).	Susceptible to spring frosts. Difficult to harvest in humid coastal conditions.	Susceptible to spring frosts.	Susceptible to spring frosts.	Susceptible to spring frosts.	High rainfall (or irrigation).	Susceptible to spring frosts for vines. Susceptible to summer rains for cherries. Susceptible to disease in high humidity in March for vines.	Preferably low frost risk area.	Rainfall above 700–800 mm.
Infrastructure	Yards & shearing shed.	Yards, crush, loading ramp.	Dairy shed, yards, crush, loading ramp.	Minimal.	Irrig facilities.	Irrig facilities.	Irrig facilities. Possibly a packing shed unless using a contract packer or growing on contract	Irrig facilities. Packing shed	Irrig facilities. Packing shed	Plastic/glass houses.	Firefighting dams. Access roads
Plant & equipment	Minimal.	Minimal; hay feeding plant.	General purpose tractor, hay/silage feeding.	Tractors & implements.	Tractors & implements.	Tractors & implements.	Tractors & implements.	Tractors & implements.	Tractors & implements.	Small plant.	Contract services.
Market contracts	Not required.	Not required.	Necessary.	Not required.	Generally required.	Necessary.	Highly preferred.	Desired.	Desired.	Contracts preferable.	Varies.
Labour	Medium.	Low.	High.	Low.	Low.	Low.	Variable/medium.	High at times.	High at times.	High at times.	Low.
Local services	Shearers.	Vet.	Vet, dairy shed technician.	Agronomist, contractors.	Agronomist, contractors.	Agronomist, contractors.	Agronomist, contractors.	Pickers.	Pickers.	Pickers.	Contractors.
Regional suitability	Dryer areas good for wool. All areas suitable; larger farm sizes needed for viability.	All areas suitable.	Economics dictate large area necessary. Needs high rainfall or large water resource for irrigation.	Generally large areas, so need larger paddocks and larger farms.	Generally large areas, so need larger paddocks and larger farms.	Medium sized paddocks & farms; area for crop rotations and irrigation.	Medium sized paddocks & farms; area for crop rotations and irrigation.	Specific site requirements; proximity to markets and transport/carriers.	Specific site requirements; potentially available in most municipalities.	Proximity to markets is important.	Low rainfall areas less preferred.

Table notes:

1. The Agricultural Land Mapping Project (ALMP) (Dept of Justice, 2017) defined minimum threshold titles sizes that could potentially sustain a standalone agricultural farm business activity. The ALMP have 333 ha for a livestock farm business activity, 40 ha for dairy, 133 ha for cereals and other broadacre crops, 25 ha for processed and fresh market vegetable, 10 ha for berries, other fruits & vines and nurseries and cut flowers and no specified minimum area for plantation forestry.
2. Kynetec (March 2021) Farm Intel Information brochure uses 100 ha as the minimum farm area for livestock.
3. Kynetec (March 2021) Farm Intel Information brochure uses 75 ha as the minimum farm area for dairy.

Tables A6-2 to A6-5 describes the frequency and intensity of the management activities associated with various farming activities which could occur on the boundaries on adjacent land.

The Tasmanian Planning Scheme, as an acceptable solution, requires a minimum setback for a sensitive use in the Rural zone of 5 m or if the setback of an existing building is within 5 m, then not less than the existing building. For the Agriculture zone this is extended to 200 m or not less than an existing building used for a sensitive use. The performance criteria under the Tasmanian Planning Scheme requires consideration of additional factors.

Farm business activity scale in combination with Table 6-6 can be used to provide guidance on appropriate separation distances when there are no additional mitigating factors. Tables A6-2 to A6-5 provide further explanatory text on constraints in relation to farming activities.

Table A6-2: Grazing

MANAGEMENT ACTIVITY	ISSUES LIKELY TO CONSTRAIN THE ACTIVITY	COMMENT
Pasture sowing Herbicide spraying Cultivation Drilling	Spray drift, noise Noise, dust Noise, dust	Ground based or aerial – often very early in the morning
Graze	Noise at certain time eg weaning calves Livestock trespass	Tractor
Forage conservation Mow, Rake, Bale, Cart bales	Noise, dust	Tractor
Fertiliser spreading	Noise	Tractor
Insecticide spraying	Spray drift Noise	Ground based or aerial – often very early in the morning

Table 6-3: Plantation forestry

MANAGEMENT ACTIVITY	ISSUES LIKELY TO CONSTRAIN THE ACTIVITY	COMMENT
Ground preparation	Spray drift, noise, dust Vehicle movement	Windrowing, Ripping, pre-emergent herbicide. Once per rotation
Planting	Dust from fertiliser Vehicle movement	Manual, once per rotation
Herbicide/ fungicide / insecticide	Spray drift	Ground and aerial; likely to be early in the morning. Annual.
Pruning/ thinning	Dust, Noise, Vehicle movement	Use of loud machinery and regular heavy vehicle movement. Intermittent
Harvesting	Dust Noise	Use of loud machinery and regular heavy vehicle movement. Once per rotation

Table A6-4: Poppy crop

MANAGEMENT ACTIVITY	ISSUES LIKELY TO CONSTRAIN THE ACTIVITY	COMMENT
Pre-cultivation spray	Spray drift Noise	Ground based or aerial – often very early in the morning
Cultivation – several passes (2-4)	Noise Dust	Tractor Dust is unlikely as soils are likely to be moist
Lime spreading	Noise	Tractor
Drilling	Noise	Tractor
Herbicide sprays (2)	Spray drift Noise	Ground based or aerial often very early in the morning
Insecticide & fungicide sprays (2-3)	Spray drift Noise	Ground based or aerial – likely to be very early in the morning
Irrigation	Spray drift Noise	Potentially turbid and not potable Pump
Harvesting	Noise	Tractor
Potential forage crops after harvesting, cultivation Broadcast seed & harrow, Irrigate	Noise Noise Noise, spray drift	Tractor Tractor Pump

Table A6-5: Farming Activity - Potato crop

MANAGEMENT ACTIVITY	ISSUES LIKELY TO CONSTRAIN THE ACTIVITY	COMMENT
Pre-cultivation spray	Spray drift Noise	Ground based or aerial – often very early in the morning
Cultivation – several passes (2-4)	Noise Dust	Tractor Dust is unlikely as soils are likely to be moist
Planting	Noise	
Herbicide spray	Spray drift Noise	Ground based or aerial – often very early in the morning
Insecticide & fungicide sprays (5+)	Spray drift Noise	Ground based or aerial – likely to be very early in the morning
Fertiliser Spreading	Noise Odour	Tractor From manure/organic fertilisers
Irrigation	Spray drift Noise	Potentially turbid and not potable Pump
Harvesting	Noise	Tractor

Table 6-6: Separation distances

RESOURCE	LIVESTOCK			BROAD ACRE CROPS		VEGETABLES		BERRIES	ORCHARD FRUITS & VINES	NURSERIES & CUT FLOWERS	FORESTRY PLANTATIONS
	SHEEP	CATTLE	DAIRY	CEREALS	OTHERS	PROCESSED	FRESH MARKET				
Recommended min. buffer for individual dwellings (1)	50m to dryland and 100m to irrigated grazing area (3)	50m to dryland and 100m to irrigated grazing area.(3).	50m to dryland and, 100m to irrigated grazing, 300m to dairy shed and 250m to effluent storage or continuous application areas (2).	200m to crop.	200m to crop.	200m to crop.	200m to crop.	200m to crop.	200m to crop.	200m to crop.	100m from crop for aerial spraying.
Recommended min. buffer for residential areas (1)	50m to dryland and 100m to irrigated grazing area.(3)	50m to dryland and 100m to irrigated grazing area.(3)	50m to dryland and, 100m to irrigated grazing, 300m to dairy shed and 250m to effluent storage or continuous application areas (2).	300m to crop.	300m to crop.	300m to crop.	300m to crop.	300m to crop.	300m to crop.	300m to crop.	Site specific (1).

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1.0	Final	27/1/22	J. Gaudion M. Tempest	A. Ketelaar	E. Kelly	A. Ketelaar	Client