Attachment to item number 5.2 -

Mediation Offer

Dam Feasibility Report

Rogerson & Birch Surveyors – Proposed Subdivision Plan, Overlay Plan and Falls Site Building Plan

Agricultural Report and Peer review

BILLETTLEGAL
0417 344 749
naomi@billettlegal.com.au
PO Box 29 North Hobart 7002
www.billettlegal.com.au

11 December 2025

Ms Mea Quartararo
Abetz Curtis

By email: mquartararo@abetzcurtis.com.au
Without Prejudice

Dear Mea

PLANNING APPEAL – 255 MARCHWIEL ROAD, BREAM CREEK
SECRET SOUNDS GROUP PTY LTD V SORELL COUNCIL - P/2025/13

I refer to the mediation held on 9 July 2025. To briefly recap, during the mediation, the parties reached an in-principle agreement to support the grant of a permit for three lots. That, of course, is subject to:

(a) The matter being remitted to a Council meeting for the Council's consideration;

(b) The Applicant/Appellant providing further information to demonstrate the feasibility of dams to be accommodated upon each lot; and

(c) Adjustment of the eastern boundary of what was proposed as Lot 3 to accommodate additional flat land within the area of Lot 2. Lot 2 was proposed to be amalgamated with Lot 1 to reflect the agreed 3-lot subdivision.

Attached to this correspondence is a revised plan of subdivision that shows Lots 1 and 2 to be combined as a single lot, now numbered Lot 1. The boundary between what is now Lot 1 and Lot 3 has been adjusted to increase the area of flat pasture to be accommodated within Lot 1 while still maintaining sufficient land within Lot 3. As discussed, my client's preferred future for Lot 3 is to retain this lot and develop a vineyard/cellar door site.

Lot 3 is reduced in area from 53.2ha to 47.7ha. The selected boundary now follows the easement over the property, with the easement to be located wholly within the area of Lot 1.

Mr Max Möller from Flüssig Engineers has been engaged to undertake a concept-level feasibility study to identify the suitability of each lot to include dams/water storage. That study is **attached**. Please note that the lot numbers identified in this assessment differ to those on the plan of subdivision.

The study has proceeded on the basis of identifying dam sites with sufficient capacity to accommodate 10ML water storage for each lot in areas where water supply is available. This is based on comparable sites in the area that support viticultural activity so as to be consistent with the agricultural assessment submitted with the application.

Each dam location has been identified outside of hazard risk areas and areas of excessive slope for the purpose of the feasibility assessment. The selected dam locations are not intended to identify the only available sites for each lot, but rather identify sites that are free from significant constraints, as to enable them to be supported without further studies at this stage. Mr Möller then provides recommendations to guide the next stage of development in the event that the dam sites were selected in the future.

Based on the above matters, we would ask that the Council confirm whether the agreement foreshadowed at the mediation can now be confirmed and provide draft conditions to enable the preparation of a consent agreement.

Please feel free to contact me with any questions that may arise.

Yours faithfully

Naomi Billett
Principal | Billett Legal
Email: naomi@billettlegal.com.au

Prepared for

Secret Sounds Group Pty Ltd

Marchwiel Road

Dam Feasibility Report

FE_25629

21 October 2025

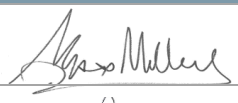
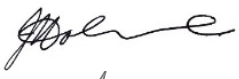
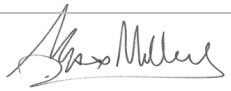
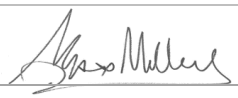
flüssig Engineers

L4/ 116 BATHURST ST
HOBART TASMANIA 7000
ABN: 16 639 276 181

Document Information

Title	*Client*	*Document Number*	*Project Manager*
25629_Marchwiel Road, Dam Feasibility Report	**Secrete Sounds Group Pty Ltd**	FE_25629	Max W. Möller *Principal Hydraulic Engineer*

Document Initial Revision

REVISION 00	Staff Name	Signature	Date
Prepared by	Max W. Moller ***Principal Hydraulic Engineer***		02/09/2025
Prepared by	Ash Perera ***Senior Hydraulic Engineer***		03/09/2025
Prepared by	Christine Keane ***Senior Water Resources Analyst***		02/09/2025
GIS Mapping	Fraser Cumming ***GIS Specialist***		02/09/2025
Reviewed by	John Holmes ***Senior Engineer***		09/09/2025
Reviewed by	Max W. Möller ***Principal Hydraulic Engineer***		20/10/2025
Authorised by	Max W. Moller ***Principal Hydraulic Engineer***		21/10/2025

Rev No.	Description	Prepared by	Authorised by	Date

Contents

List of Tables

List of Figures

1. Introduction and Scope

Flüssig Engineers has been engaged by **Secrete Sounds Group Pty Ltd** to undertake a site-specific feasibility assessment of proposed farm dams within Lots 1, 2 and 3 at Marchwiel Road, Marion Bay, Tasmania.

The purpose is to evaluate storage potential, water sources, planning considerations, and overall suitability of the sites for small-scale agricultural water storages.

The proposed storages include:

- Lot 1: New 10 ML dam
- Lot 2: New 10 ML dam
- Lot 3: New 7 ML and Existing 3 ML dam (to be maintained)

Additional smaller farm storages already exist within Lots 1 and 2, which can continue to provide supplementary water for animal drinking and stock purposes.

1.1 Site Development

The subject site is located along Marchwiel Road, Marion Bay, Tasmania, within the Bream Creek catchment on the state's south-east coast. The properties form part of a rural landscape characterised by gently undulating terrain, open grazing land, and a network of minor watercourses that ultimately discharge to the coast near Marion Bay.

1.2 Regional Setting

The site is situated north-east of the Bream Creek township and inland from Marion Beach.

The broader catchment includes several small tributary creeks, such as Sebury Creek and Lukes Creek, which drain eastward towards Bream Creek and the Marchwiel Marsh system before discharging to Marion Bay.

The surrounding landscape is a mix of cleared pastureland used for agriculture and grazing, interspersed with patches of remnant vegetation along creek lines and slopes.

1.3 Accessibility and Land Use

Marchwiel Road provides primary access to the site, with connecting rural roads such as Burnt Hill Road and Marion Bay Road linking to nearby settlements.

Land use within the subject properties is primarily grazing and general farming, with existing small farm dams already used for animal drinking water. These existing storages complement the proposed new dams by ensuring stock supply even during drier periods.

2. Hydrology and Water Supply

The proposed farm dams at Marchwiel Road, Marion Bay will rely entirely on local overland flow paths as their primary source of inflow. These natural drainage lines traverse each lot and converge within low-lying depressions that have been identified as suitable sites for dam construction. By intercepting and storing seasonal runoff generated across the surrounding catchments, the dams will provide a reliable water supply for stock and general agricultural use.

2.1 Contributing Catchments

The extent of the contributing catchments varies significantly between the three lots, reflecting the differences in landform and drainage patterns:

- **Lot 1 (10 ML proposed dam):**
  The largest catchment, estimated between 200 and 500 hectares, drains through a well-defined

overland flow system. This substantial contributing area provides a high level of confidence that the proposed 10 ML storage can be reliably filled under average rainfall conditions. The dam will function as a primary water source for farm operations, with significant inflow capacity during peak runoff periods.

- **Lot 2 (10 ML proposed dam):**
  The catchment is more modest, estimated at 20 to 30 hectares. While smaller in scale, the catchment is still adequate to maintain the proposed 10 ML capacity, particularly during winter and spring rainfall events when runoff is highest. The dam will serve as a supplementary storage, supporting livestock supply and potentially limited irrigation demands.
- **Lot 3 (7 ML proposed and existing 3 ML dam):**
  The proposed and existing dam area situated within a minor drainage line, with a contributing catchment estimated at 5 to 7 hectares. This storage is already established and functional, indicating that the catchment yields are sufficient for a farm supply. The new and existing dam will continue to provide a reliable source of water and remain integrated into the overall water management strategy for the property. Alternatively, a small area in the eastern corner of the lot could accommodate a dam with an approximate capacity of 3 ML.

Figure 1 below shows the full extent of the contributing catchment to the site.

Figure 1. Hydrological Catchment Area.

2.2 Rainfall and Runoff

The Marion Bay region receives an average annual rainfall of approximately 500 to 700 millimetres, which is evenly distributed across the year but with higher intensity during the winter months. Based on this rainfall, the contributing catchments are expected to yield runoff volumes adequate to maintain the proposed storage capacities, provided that good land management practices are implemented. Key considerations include maintaining groundcover, preventing excessive soil compaction, and ensuring that inflow paths remain unobstructed to promote consistent runoff into the storages. A climate overview including average rainfall patters is shown in Figure 2.

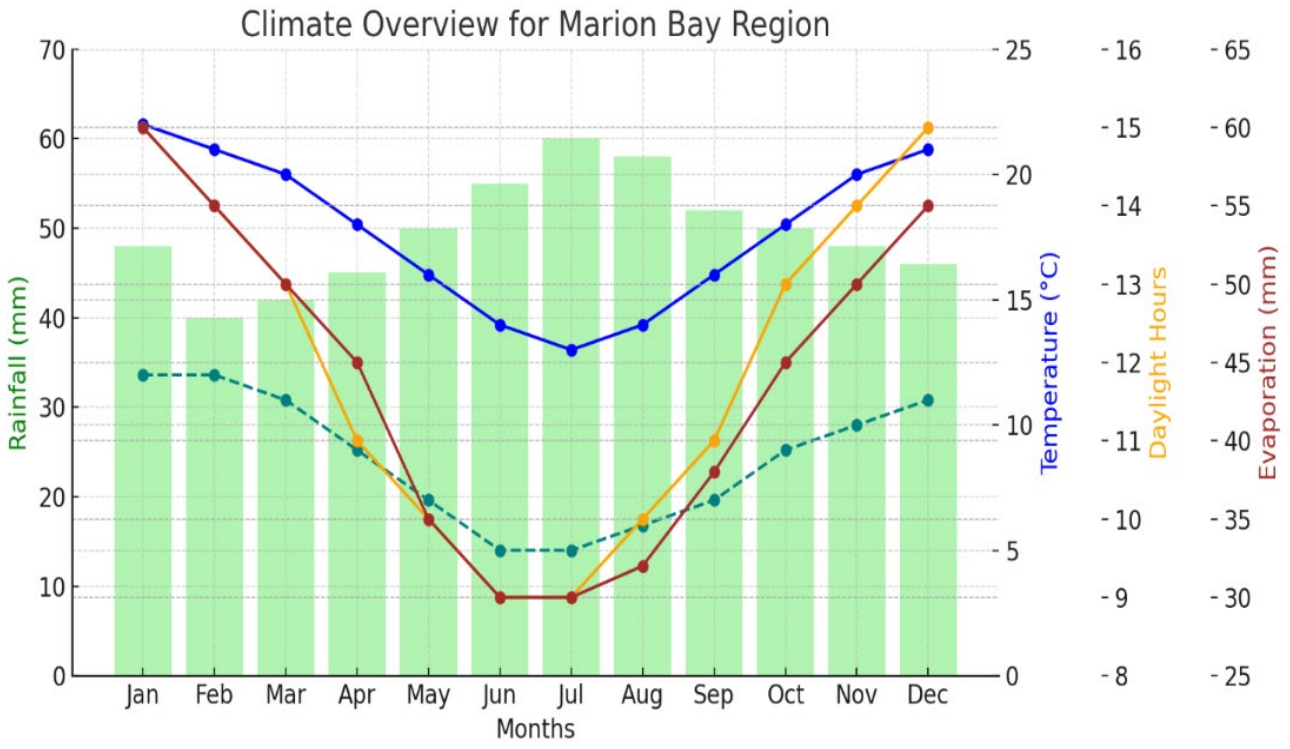


Figure 2. Climate overview for the site, (BOM)

2.3 Existing Small Farm Dams

Lots 1 and 2 also contain existing small farm dams that currently supply animal drinking water. These storages will remain operational and will play an important role in providing resilience during low-flow periods or extended dry conditions. By supplementing the proposed larger storages, these small dams add redundancy to the system and ensure that livestock water requirements can be met consistently throughout variable seasonal conditions.

3. Functional Requirements

The construction of new farm storages at Marchwiel Road is intended to address both current and future water security requirements for agricultural operations within Lots 1, 2 and 3. The proposed dams will serve multiple complementary purposes, ensuring that the landholders have reliable access to water across a range of farming activities.

3.1 Secure Farm Water Supply

The foremost function of the proposed dams is to provide a dependable on-farm water supply for high value crops and general agricultural use. At present, water availability is heavily dependent on rainfall timing and runoff into existing small farm storages. By constructing new dams of greater capacity, the farm enterprise will gain resilience against dry spells, reducing the risk of agricultural water shortages during summer and autumn when natural runoff is limited.

3.2 Supplementary Irrigation Storage

The larger capacity dam proposed for Lot 1 (10 ML) is particularly suited to act as a supplementary irrigation storage. With a substantial contributing catchment and a reliable inflow regime, this storage has the potential to support small-scale irrigation activities such as pasture improvement or crop establishment during critical growth phases. The addition of irrigation capacity provides flexibility to the landholder, allowing for improved productivity and more sustainable land management practices.

3.3 Existing Dams

Existing small farm dams within Lots 1, 2 and 3 will remain in service and will continue to provide direct water supply for high value crops and general agricultural use. When combined with the new proposed storages, the system of dams across the properties will provide a layered approach to water security, ensuring that stock have access to water even during extended dry periods. The ongoing availability of these smaller storages reduces pressure on the larger dams and ensures that water can be distributed effectively across the farm.

4. Geotechnical and Environmental Considerations

A preliminary review of the terrain at Marchwiel Road indicates that the area is underlain by shallow soils transitioning into weathered rock, which is typically considered suitable for the development of small to medium earth embankment farm dams. The landform includes well defined natural depressions and valley alignments that appear favourable for dam siting, with adjacent abutments that visually present as stable and capable of supporting embankment construction. These natural features suggest that the concept layouts are practical from a surface assessment perspective and could allow efficient storage construction with minimal excavation.

However, while the general landscape characteristics are encouraging, it is critical to emphasise that for future dam design a detailed geotechnical investigation must be undertaken by a qualified geotechnical specialist before progressing to design and construction. Such an investigation is essential to:

- Confirm the depth, strength, and variability of soils and weathered rock across the proposed dam foundations and abutments.
- Assess the permeability of subsurface layers to ensure that seepage risks are manageable and, if required, identify the need for cut-off trenches, clay cores, or seepage control measures.
- Evaluate slope stability at embankment abutments and downstream areas, particularly under saturated conditions.
- Identify any dispersive or reactive soils that may compromise dam integrity if not properly managed.
- Provide laboratory-tested parameters to inform the structural design, compaction specifications, and earthworks methodologies.

From an environmental perspective, a review of publicly available datasets indicates that the proposed dam sites are not located within mapped threatened species habitats, conservation reserves, or registered cultural heritage areas. Nevertheless, all dam construction projects carry a level of environmental responsibility, and field verification by qualified environmental and heritage specialists will still be required at the detailed design stage. This will ensure that site preparation, excavation, and embankment works do not inadvertently disturb sensitive ecological or cultural values that may not be captured in desktop datasets.

5. Model Results

The assessment of the proposed dam locations has been undertaken using 1% AEP model scenarios, representing extreme rainfall events, to evaluate the potential risk of flooding at each site.

5.1 Lot 1 Proposed 10ML Dam

A potential 10 megalitre (ML) farm dam has been identified within Lot 1 at Marchwiel Road, Marion Bay. The selected location sits within a gently sloping valley floor and is well aligned with the local hydrology of the area. The proposed storage would intercept and retain flows from the overland flow path connected to Sedbury Creek, which is a key drainage feature traversing the northern part of the lot. The catchment contributing to this section of Sedbury Creek is substantial, ensuring that seasonal runoff will be sufficient to maintain the proposed dam capacity during typical rainfall years.

The proposed dam site is positioned downslope of the main catchment inflows, where runoff from the existing Creek and its adjoining flow paths converges. During high rainfall events, the overland flow paths shown in the mapping indicate significant sheet flow across the paddock areas, reinforcing the suitability of the location for water harvesting.

In addition to the proposed 10 ML storage, Lot 1 already contains an existing smaller farm dam located further south within the same paddock system. This dam is currently in use for stock drinking water and general farm supply. The existing dam will be retained and maintained in its current role, ensuring that livestock continue to have access to secure water supplies close to grazing areas.

The combination of a new 10 ML dam and the existing smaller farm dam will create an integrated water storage system within Lot 1. The larger storage will serve as the primary supply for agricultural operations and potential supplementary irrigation, while the smaller storage will continue to provide resilience and convenience for general agriculture. Together, they will enhance the overall water security of the property.

5.2 Lot 2 Proposed 10ML Dam

A potential 10 ML farm dam is proposed within Lot 2 at Marchwiel Road. The selected location lies along a natural overland flow path that crosses the centre of the property, where surface runoff from surrounding paddocks naturally converges. This ensures the proposed storage can intercept and retain flows without the need for major diversions.

The contributing catchment is estimated at 20 to 30 hectares, which under the local average rainfall regime of 650–700 mm per year is expected to generate sufficient inflows to maintain the proposed storage capacity. The hydrological setting is therefore favourable for the development of a small to medium farm dam to support agricultural activities.

Lot 2 also contains and existing small farm dam. These dams will be retained in service, ensuring that agricultural watering demands continue to be met, while the proposed new dam functions as the primary reserve for longer-term supply. The proposed footprint, shown on the mapping in Figure 3 to Figure 5, is centrally located within the property, avoiding building areas and boundary conflicts. Ready access is available from Marchwiel Road, which will simplify both construction and ongoing maintenance.

In summary, the proposed 10 ML dam in Lot 2 is well sited within the natural drainage corridor, supported by a modest but adequate catchment and complemented by existing smaller storages. Together, these will create a reliable and resilient water supply system for farm operations.

5.3 Lot 3 Proposed 7ML and Existing 3ML Dam to be Maintained

A potential new 7ML is proposed Lot 3 that also contains an existing farm dam with a capacity of approximately 3 ML, located near Marchwiel Road within a natural drainage corridor. This storage is already functional and is used primarily for stock watering and general farm purposes. The dam is positioned to intercept local overland flow, which provides reliable inflows during wetter months and has proven to be a suitable source of water under current farming practices.

The mapping indicates that the dam is well integrated into the natural hydrology of the lot, with runoff from surrounding slopes and shallow drainage lines converging into the site. The location allows water to be harvested without major diversion works, and the structure can continue to provide dependable supply as part of the broader farm water system.

The proposed 7ML dam has been positioned in the available space at the top centre of the lot if required in the future. The drainage corridor to the west provides a potential location where overland flow could be efficiently captured. This optional development would add resilience to the existing system, offering increased storage capacity during high rainfall years and further strengthening drought security .

In summary, Lot 3 is already serviced by a functional 3 ML storage dam that will remain in operation, and the property also has capacity to develop an additional 7 ML dam in another location if farm water demand increases in the future. Alternatively, a small area in the eastern corner of the lot could accommodate a dam with an approximate capacity of 3 ML.

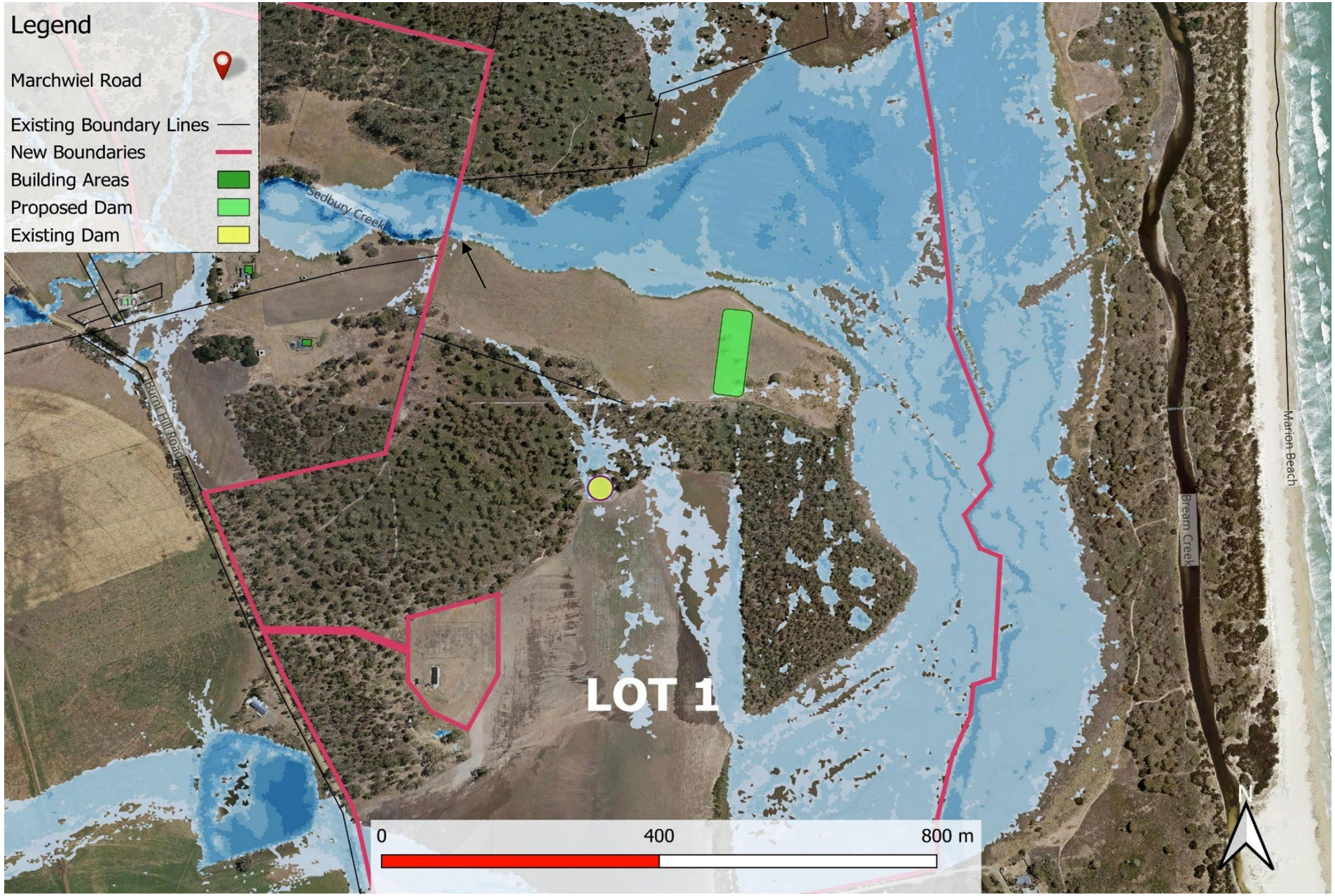


Figure 3. Potential Dam Lot 1 at 1% AEP Flood Event

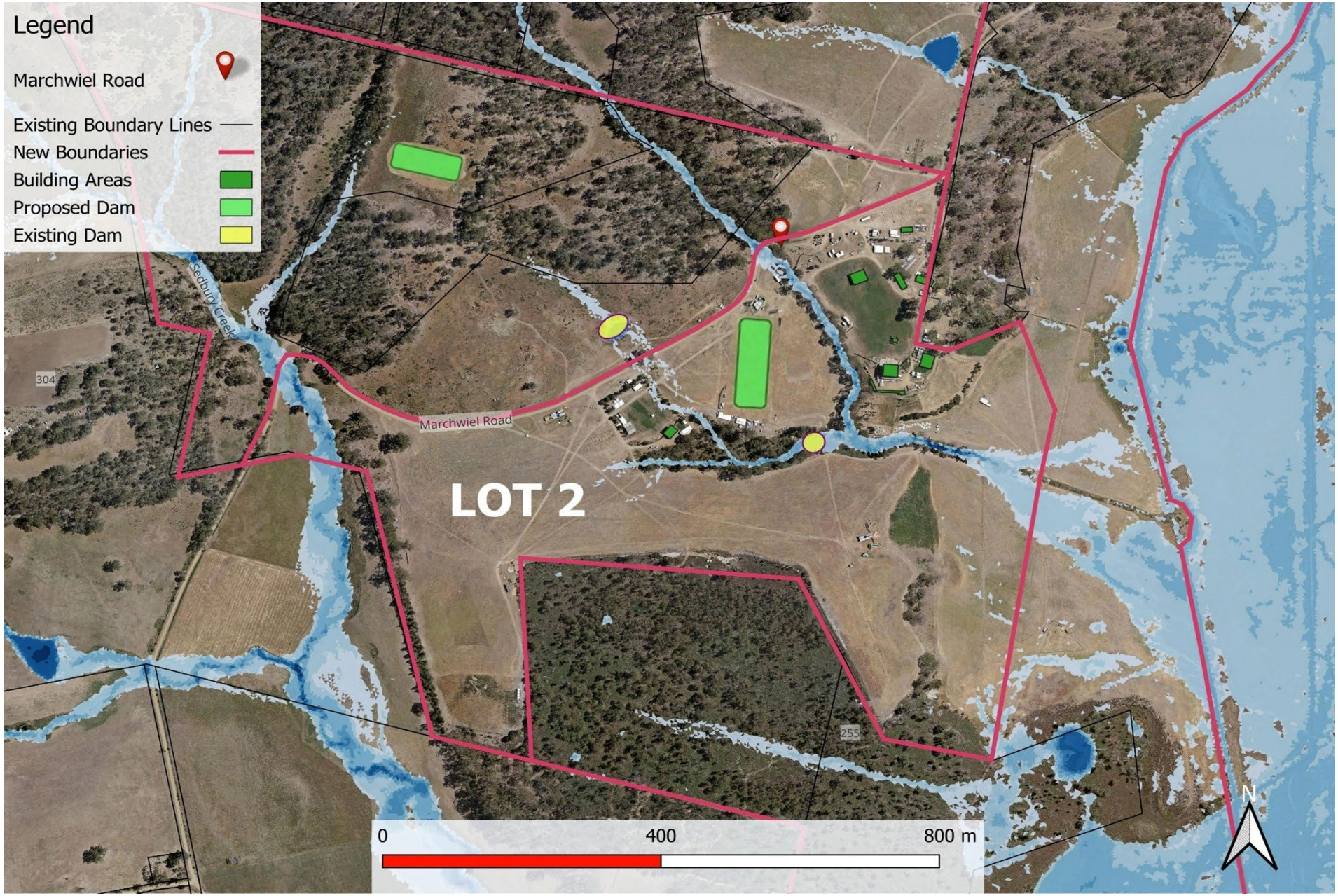


Figure 4. Potential Dam Lot 2 at 1% AEP Flood Event

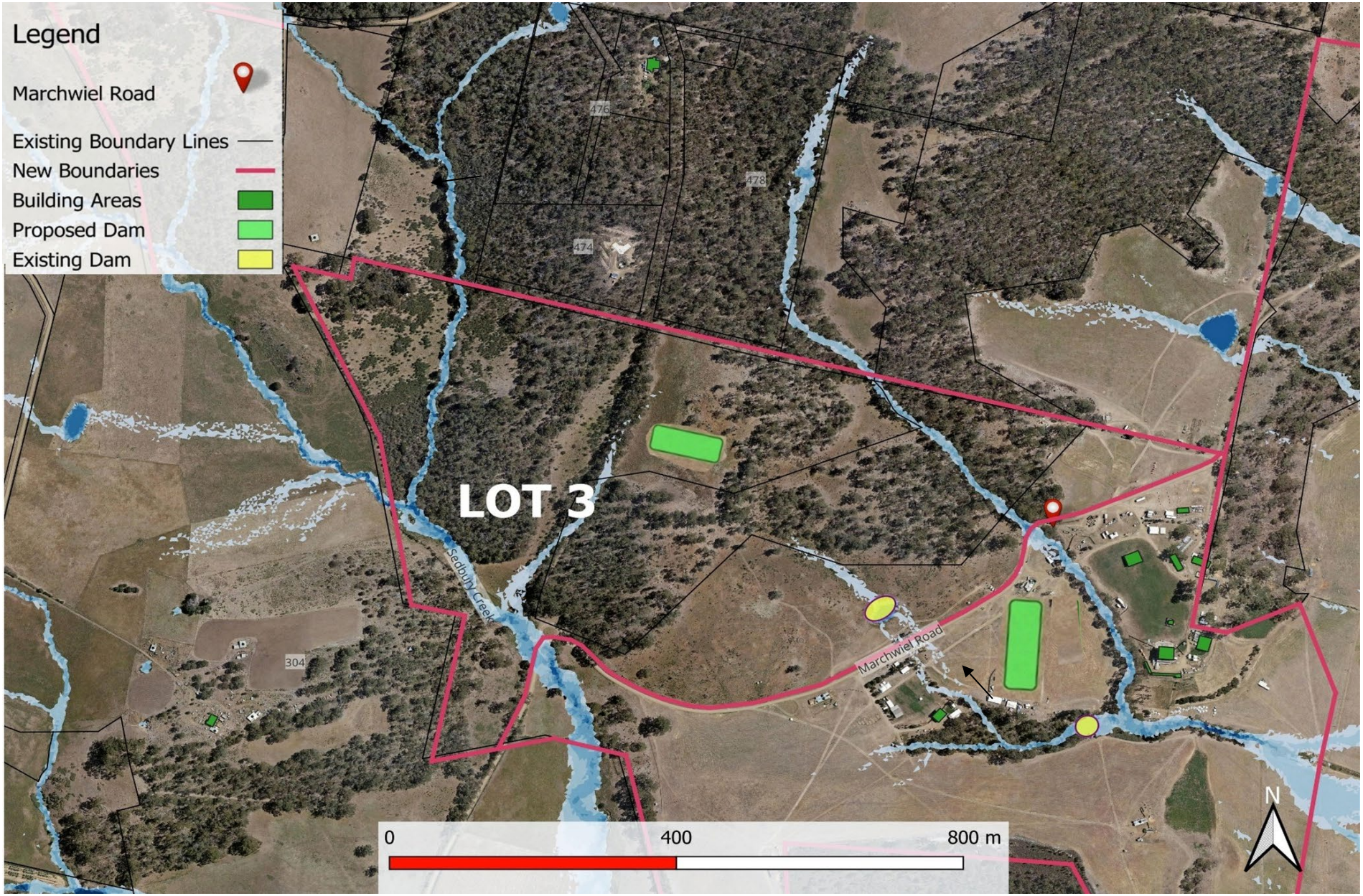


Figure 5. Existing Dam Lot 3 at 1% AEP Flood Event

6. Regulatory and Safety Classification

6.1 Consequence Category Assessment

The proposed storages at Marchwiel Road have been assessed against the ANCOLD (2012) Guidelines for Consequence Categories of Dams. With a combined new capacity of 27 ML and considering their rural setting with no downstream townships or critical infrastructure, they are expected to fall within the Low Consequence Category. This means that, in the unlikely event of failure, potential impacts would be limited to farmland and minor drainage lines, with negligible population at risk.

In Tasmania, the development of farm dams is regulated under the Water Management Act 1999 and the Dam Works Code 2015, administered by the Department of Natural Resources and Environment Tasmania (NRE Tas). Any future dam must be designed, constructed, and operated in accordance with these requirements. Obligations include securing a Dam Works Permit prior to construction, registering the dam in the Tasmanian Dam Safety database, and complying with prescribed standards for operation, surveillance, and maintenance. These responsibilities apply irrespective of consequence category, ensuring consistent protection of downstream environments and users.

In addition to regulatory approvals, the storages must incorporate standard engineering measures consistent with both ANCOLD and Tasmanian guidelines. These provisions include ensuring adequate freeboard to accommodate storm inflows and settlement, providing a spillway designed to pass the appropriate design flood for low consequence structures, implementing erosion protection such as grass cover or rock armouring, and installing seepage control measures such as cut-off trenches or clay cores to safeguard long-term structural integrity.

The table below summarises compliance requirements across ANCOLD guidelines and Tasmanian legislation:

Table 1. Compliance Requirements Table

Compliance	Guideline	Requirement
Requirement	ANCOLD 2012	Tasmanian Dam Works Code 2015 / Water Management Act 1999
Consequence Category	Classification into Low, Significant, High, etc.	Adoption of ANCOLD framework in local permitting processes
Design Standards	Safety provisions, freeboard, spillway capacity, erosion and seepage control	Dam Works Permit requires compliance with ANCOLD principles
Approval	Not statutory but national best practice guidance	Mandatory Dam Works Permit issued by NRE Tas
Registration	Not required at national level	Compulsory registration in Tasmanian Dam Safety database
Surveillance & O&M	Encouraged through ANCOLD surveillance guidance	Legally required under Dam Works Code (inspections, monitoring, maintenance)

The classification of the proposed storages as Low Consequence sets the baseline for design requirements, but Tasmanian regulation ensures that any future dam must comply fully with statutory obligations and ANCOLD safety provisions. Together, these frameworks guarantee that the storages will be constructed and managed to a standard that secures water supply while protecting the community and environment.

7. Conclusion

The assessment of the three potential future dams at Marchwiel Road, a 10 ML storage on Lot 1, a 10 ML storage on Lot 2, and a combined 10 ML storage on Lot 3 (new 7 ML plus existing 3 ML), indicates that all are expected to fall within the Low Consequence Category under the ANCOLD (2012) Guidelines. Their modest size, rural location, and the absence of significant downstream population or infrastructure suggest that, in the unlikely event of failure, impacts would be limited to farmland and minor drainage corridors.

While classified as low consequence, any future dam must comply fully with the Tasmanian Water Management Act 1999 and the Dam Works Code 2015, administered by NRE Tas. This includes securing a Dam Works Permit before construction, registering the storages in the Tasmanian Dam Safety database, and undertaking regular surveillance and maintenance throughout the life of each dam. These requirements ensure consistent oversight and safeguard both downstream environments and water users.

All proposed or alternative dam locations have been carefully selected to be outside any identified overland flow paths, landslide-prone areas, potential dispersive soil areas, and waterways or coastal protection areas.

In addition, the three storages must incorporate the essential safety features specified in ANCOLD and Tasmanian guidelines. These include adequate freeboard to manage storm inflows and settlement, spillways designed to safely pass the relevant design flood, erosion protection of embankments and spillway channels, and seepage control measures such as cut-off trenches or clay cores.

In conclusion, the three potential future dams at Marchwiel Road can be developed safely and responsibly within the existing regulatory framework. The integration of ANCOLD best practice with Tasmanian statutory requirements provides a robust pathway to ensure that the storages deliver long-term water security for farm operations while maintaining environmental protection and compliance with national and state standards.

8. Recommendations

Based on the preliminary feasibility assessment of the three potential future storages at Marchwiel Road, the following recommendations are made to guide the next stages of development:

- A full topographic survey should be undertaken at each proposed dam site to confirm catchment areas, dam footprints, storage capacities, and embankment alignments. This will provide accurate inputs for design and regulatory approval.
- A comprehensive geotechnical investigation must be carried out by a qualified specialist at all three sites. This should include test pits, boreholes, and laboratory testing to determine soil strength, permeability, foundation stability, and the presence of dispersive or reactive materials. Findings will directly inform design specifications for embankment stability, seepage control, and cut-off requirements.
- Applications should be lodged with NRE Tasmania for Dam Works Permits under the Water Management Act 1999 and the Dam Works Code 2015. Each dam must also be registered in the Tasmanian Dam Safety database and managed in accordance with surveillance and operational obligations.
- Future Dam design of each Lot must adopt the standards set out in ANCOLD (2012) Guidelines and Tasmanian regulatory requirements. Key design provisions should include:
    - Adequate freeboard for settlement and storm inflows.
    - Appropriately sized spillways to pass design flood events.
    - Erosion protection for embankments and spillway channels.

  - Seepage control measures such as cut-off trenches or clay cores.

- Although no mapped overlays are present, Future dam design must conduct a field inspection should confirm the absence of threatened species, cultural heritage sites, or sensitive vegetation within the dam footprints. This will ensure compliance with environmental responsibilities.
- The existing dams within Lots 1 and 2 should be retained and maintained as supplementary storages for stock water. This layered storage system will improve resilience during dry conditions and support efficient farm water distribution.
- Lot 3 has capacity for an additional 7 ML small dam if required. Should farm water demand increase, this option should be revisited, subject to the same access to the proposed dam location, geotechnical, regulatory, and environmental requirements as the current proposals.

9. Limitations

This assessment has been prepared as a conceptual-level feasibility study to consider the suitability of three potential future storages at Marchwiel Road. The findings are based on available mapping, desktop data, and site context information, and are intended to provide only an initial indication of dam capacity, location, and regulatory requirements.

The consequence category assessment presented in this report is preliminary in nature, relying on the ANCOLD (2012) framework applied in a desktop context. Final classification of each dam must be confirmed through detailed design and formal regulatory review. Similarly, the hydrological estimates used to assess catchment areas and runoff volumes have been derived from regional mapping and rainfall records. These figures provide a useful indication of feasibility but should not be relied upon for detailed design without site-specific hydrological analysis supported by accurate ground survey.

No geotechnical or feasible access investigations have been undertaken as part of this study. The suitability of foundations, abutments, and embankment alignments therefore remains unverified. A full geotechnical investigation, structural and civil engineering by a qualified specialists will be essential prior to advancing any design. In addition, environmental and cultural heritage considerations have only been examined through desktop review of publicly available datasets. Field surveys will be required to confirm the absence of sensitive values within the proposed dam footprints.

The safety provisions and regulatory obligations outlined in this report are presented as general requirements. Specific design criteria, permit conditions, and compliance measures will ultimately be determined by the Department of Natural Resources and Environment Tasmania through the Dam Works approval process.

In conclusion, this report confirms that the proposed storages are feasible in principle, but it must be emphasised that the assessment is conceptual only. Any future dam must undergo detailed survey, geotechnical investigation, environmental verification, regulatory approval, and design in accordance with ANCOLD guidelines and Tasmanian statutory requirements before construction can proceed. The recommendations set out in this report provide the pathway for these essential next steps.

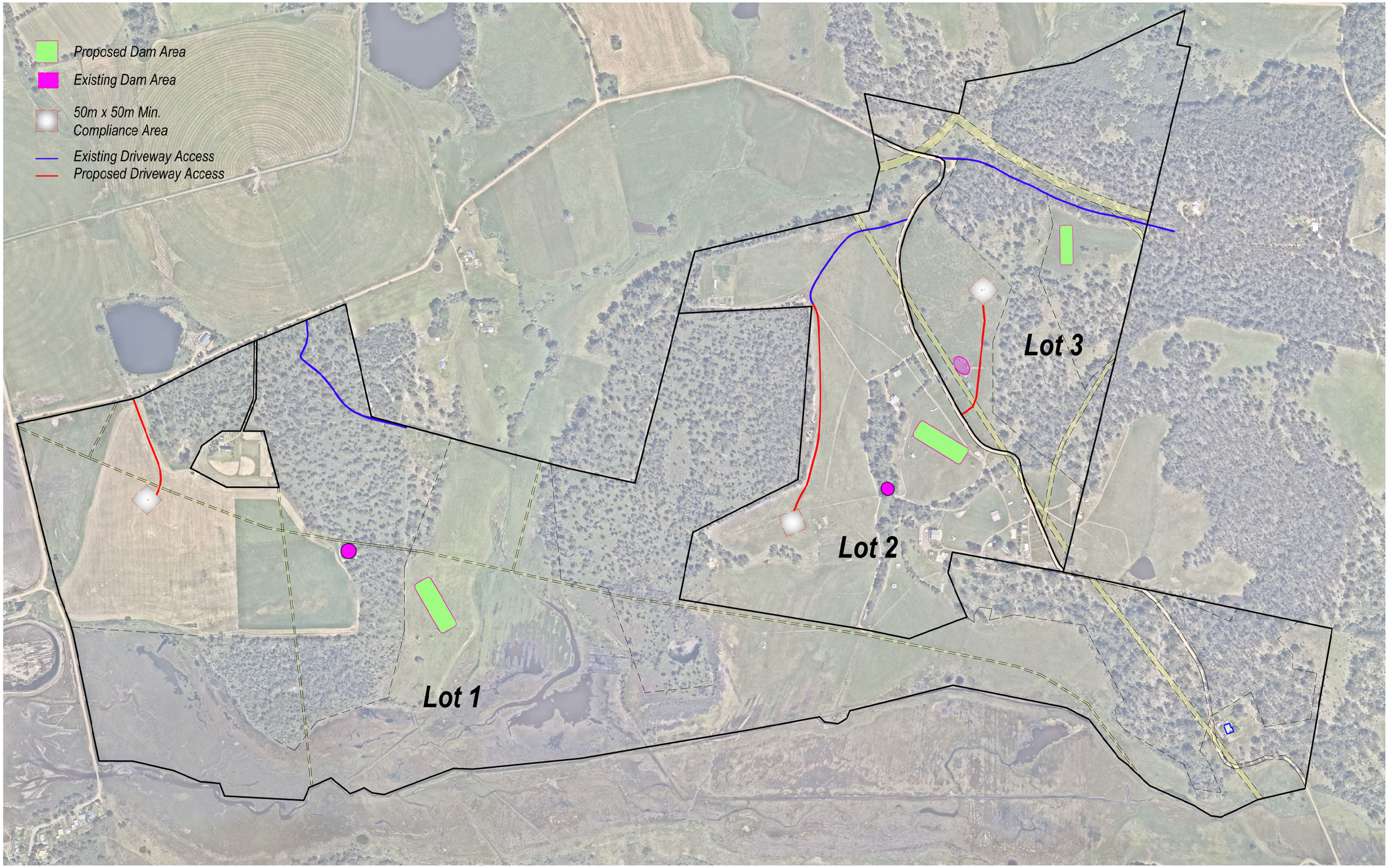
Flüssig Engineers accepts no responsibility for the accuracy of third-party documents supplied for the purpose of this report.

10. References

- ANCOLD, 2012. *Guidelines on the Consequence Categories for Dams*. Australian National Committee on Large Dams Inc., Hobart.
- ANCOLD, 2019. *Guidelines on Dam Safety Management*. Australian National Committee on Large Dams Inc., Hobart.
- Australian Institute for Disaster Resilience, 2014. *Australian Disaster Resilience Guideline 7-3: Technical Flood Risk Management Guideline – Flood Hazard*. AIDR, Melbourne.
- Ball, J., Babister, M., Nathan, R., Weeks, W., Weinmann, E., Retallick, M. & Testoni, I. (eds.), 2019. *Australian Rainfall and Runoff: A Guide to Flood Estimation*. Commonwealth of Australia, Canberra.
- Cromer, W. C., 2025. *Kingborough Sports Precinct Geotechnical Investigations: Factual Geotechnical Report*. Unpublished report for Kingborough Council by William C. Cromer Pty Ltd, Hobart.
- Department of Natural Resources and Environment Tasmania (NRE Tas), 2015. *Dam Works Code 2015*. Government of Tasmania, Hobart.
- Department of Natural Resources and Environment Tasmania (NRE Tas), 1999. *Water Management Act 1999*. Government of Tasmania, Hobart.
- Grose, M. R., Barnes-Keoghan, I., Corney, S. P., White, C. J., Holz, G. K., Bennett, J. & Bindoff, N. L., 2010. *Climate Futures for Tasmania: General Climate Impacts Technical Report*. Antarctic Climate & Ecosystems Cooperative Research Centre, Hobart.
- Remenyi, T. A., Earl, N., Love, P. T., Rollins, D. A., & Harris, R. M. B., 2020. *Climate Change Information for Decision Making – Climate Futures Programme*. Discipline of Geography & Spatial Sciences, University of Tasmania, Hobart.
- Standards Australia, 2017. *AS 3778: Measurement of Water Flow in Open Channels*. Standards Australia, Sydney.
- Tasmanian Planning Commission, 2017. *Tasmanian Planning Scheme: State Planning Provisions*. Tasmanian Government, Hobart.

Appendices

Appendix A Potential Dams Concept Design



NOT FOR CONSTRUCTION
PRELIMINARY ONLY - SUBJECT TO REVIEW AND CERTIFICATION

NOTES :

1. THE COPYRIGHT OF THIS DRAWING IS VESTED IN FLUSSIG ENGINEERS AND IT MAY NOT BE REPRODUCED IN WHOLE OR PART OR USED FOR THE MANUFACTURE OF ANY ARTICLE WITHOUT THE EXPRESS PERMISSION OF THE COPYRIGHT HOLDERS.
2. WORK TO FIGURED DIMENSIONS ONLY.
3. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECT'S, SERVICE ENGINEER'S AND FLUSSIG ENGINEERS DRAWINGS AND SPECIFICATIONS.

REV:	DESCRIPTION:	BY:	DATE:
00	CONCEPT DESIGN	RU	25/08/25

STATUS: DRAFT

flüssig ENGINEERS
e: admin@flussig.com.au
p: (03) 6288 7704
w: www.flussig.com.au
a: 116 Bathurst St, Level 4 Hobart, 7000, TASMANIA

CLIENT: SECRET SOUNDS GROUP PTY LTD

SITE: MARCHWIEL RD, MARION BAY

TITLE: FULL SITE CONCEPT DAM

PROJECT: MARCHWIEL RD, MARION BAY
DAM CONCEPT DESIGN

SCALE: AT A3:	DATE:	DRAWN:	CHECKED:
4000	25/08/2025	RU	MM

PROJECT NO:	DRAWING NO:	REVISION:
FE-25630	G-000	00

NOT FOR CONSTRUCTION
PRELIMINARY ONLY - SUBJECT TO REVIEW AND CERTIFICATION

NOTES :

1. THE COPYRIGHT OF THIS DRAWING IS VESTED IN FLUSSIG ENGINEERS AND IT MAY NOT BE REPRODUCED IN WHOLE OR PART OR USED FOR THE MANUFACTURE OF ANY ARTICLE WITHOUT THE EXPRESS PERMISSION OF THE COPYRIGHT HOLDERS.
2. WORK TO FIGURED DIMENSIONS ONLY.
3. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECT'S, SERVICE ENGINEER'S AND FLUSSIG ENGINEERS DRAWINGS AND SPECIFICATIONS.

REV:	DESCRIPTION:	BY:	DATE:
00	CONCEPT DESIGN	RU	25/08/25

STATUS: DRAFT

flussig ENGINEERS
e: admin@flussig.com.au
p: (03) 6288 7704
w: www.flussig.com.au
a: 116 Bathurst St, Level 4 Hobart, 7000, TASMANIA

CLIENT: SECRET SOUNDS GROUP PTY LTD

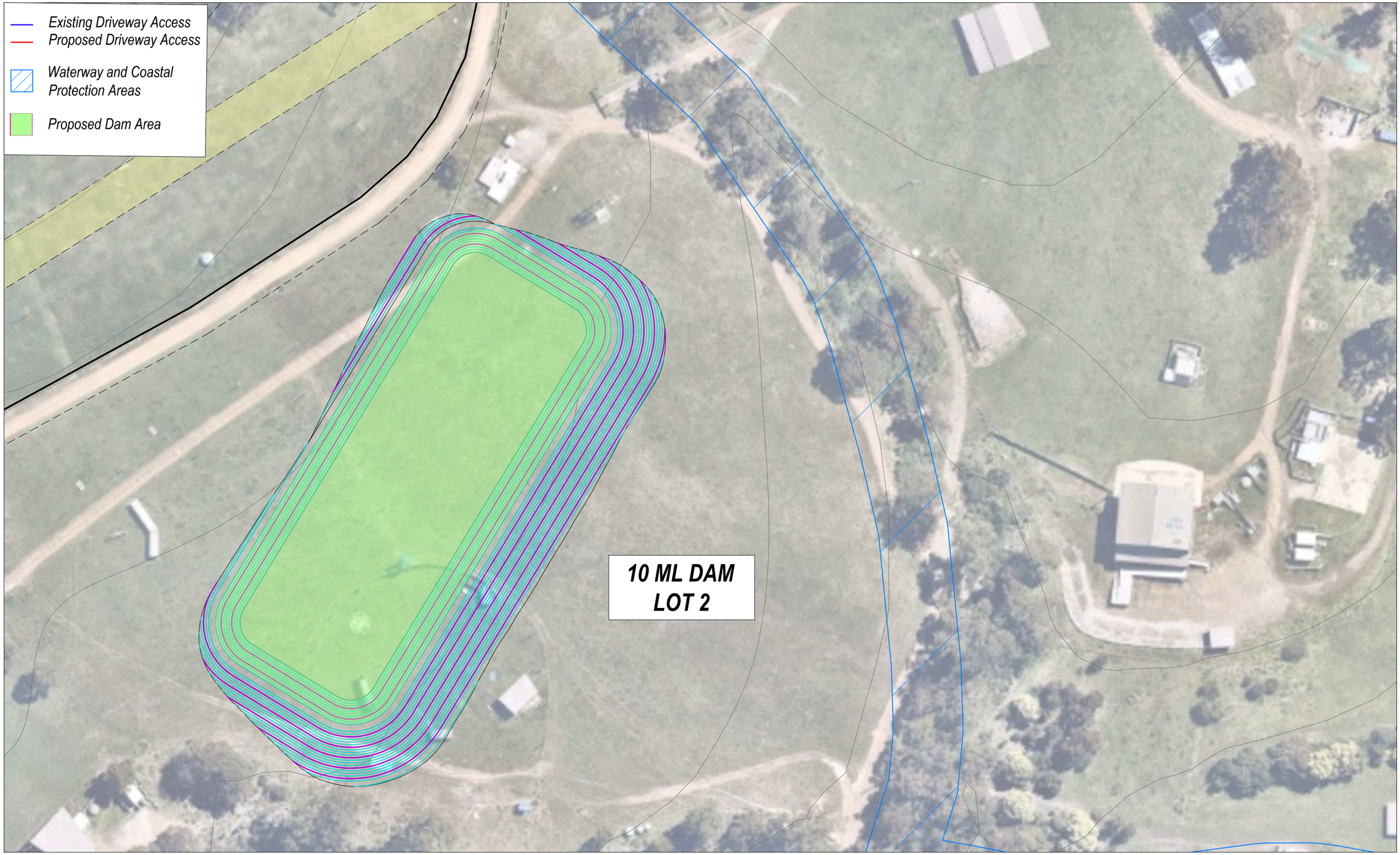
SITE: MARCHWIEL RD, MARION BAY

TITLE: LOT 1 CONCEPT DAM

PROJECT: MARCHWIEL RD, MARION BAY
DAM CONCEPT DESIGN

SCALE AT A3:	DATE:	DRAWN:	CHECKED:
500	25/08/2025	RU	MM

PROJECT NO:	DRAWING NO:	REVISION:
FE-25630	G-100	00



NOT FOR CONSTRUCTION
PRELIMINARY ONLY - SUBJECT TO REVIEW AND CERTIFICATION

NOTES :

1. THE COPYRIGHT OF THIS DRAWING IS VESTED IN FLUSSIG ENGINEERS AND IT MAY NOT BE REPRODUCED IN WHOLE OR PART OR USED FOR THE MANUFACTURE OF ANY ARTICLE WITHOUT THE EXPRESS PERMISSION OF THE COPYRIGHT HOLDERS.
2. WORK TO FIGURED DIMENSIONS ONLY.
3. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECT'S, SERVICE ENGINEER'S AND FLUSSIG ENGINEERS DRAWINGS AND SPECIFICATIONS.

REV:	DESCRIPTION:	BY:	DATE:
00	CONCEPT DESIGN	RU	25/08/25

STATUS: DRAFT

flüssig ENGINEERS
e: admin@flussig.com.au
p: (03) 6288 7704
w: www.flussig.com.au
a: 116 Bathurst St, Level 4 Hobart, 7000, TASMANIA

CLIENT: SECRET SOUNDS GROUP PTY LTD

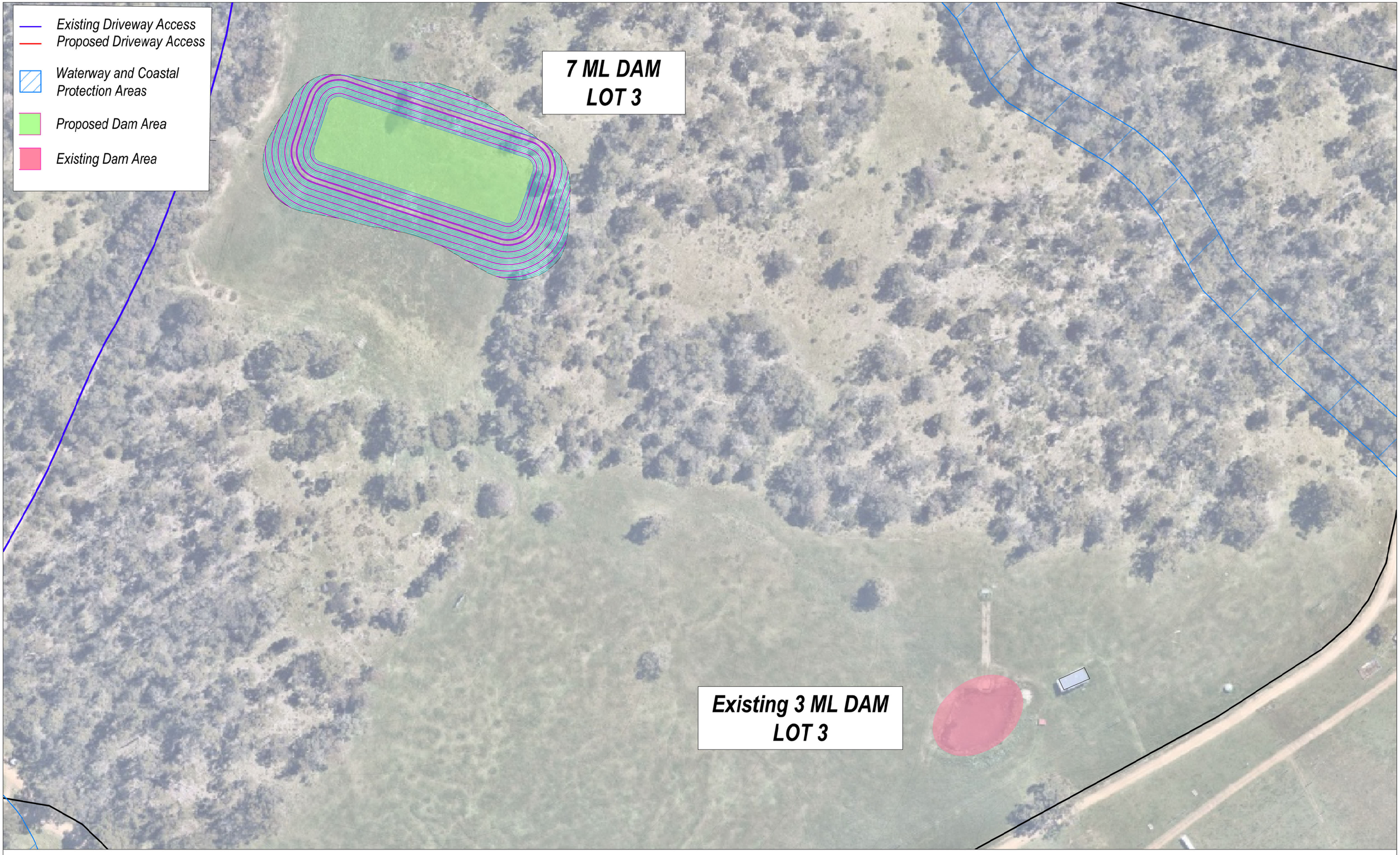
PROJECT: MARCHWIEL RD, MARION BAY
DAM CONCEPT DESIGN

SITE: MARCHWIEL RD, MARION BAY

TITLE: LOT 2 CONCEPT DAM

SCALE AT A3:	DATE:	DRAWN:	CHECKED:
500	25/08/2025	RU	MM

PROJECT NO:	DRAWING NO:	REVISION:
FE-25630	G-200	00



NOT FOR CONSTRUCTION
PRELIMINARY ONLY - SUBJECT TO REVIEW AND CERTIFICATION

NOTES :

1. THE COPYRIGHT OF THIS DRAWING IS VESTED IN FLUSSIG ENGINEERS AND IT MAY NOT BE REPRODUCED IN WHOLE OR PART OR USED FOR THE MANUFACTURE OF ANY ARTICLE WITHOUT THE EXPRESS PERMISSION OF THE COPYRIGHT HOLDERS.
2. WORK TO FIGURED DIMENSIONS ONLY.
3. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECT'S, SERVICE ENGINEER'S AND FLUSSIG ENGINEERS DRAWINGS AND SPECIFICATIONS.

REV:	DESCRIPTION:	BY:	DATE:
00	CONCEPT DESIGN	RU	25/08/25

STATUS: DRAFT

flüssig ENGINEERS
e: admin@flussig.com.au
p: (03) 6288 7704
w: www.flussig.com.au
a: 116 Bathurst St, Level 4 Hobart, 7000, TASMANIA

CLIENT: SECRET SOUNDS GROUP PTY LTD

SITE: MARCHWIEL RD, MARION BAY

TITLE: LOT 3 CONCEPT DAM

PROJECT: MARCHWIEL RD, MARION BAY
DAM CONCEPT DESIGN

SCALE: AT A3:	DATE:	DRAWN:	CHECKED:
500	25/08/2025	RU	MM

PROJECT NO:	DRAWING NO:	REVISION:
FE-25630	G-300	00

Contact Project Manager: **Max Moller**

flüssig Engineers

P: 03 6288 7704
M: 0431 080 279
E: max@flussig.com.au
W: www.flussig.com.au
A: Level 4, 116 Bathurst Street
Hobart TAS 7000

ROGERSON & BIRCH SURVEYORS

UNIT 1, 2 KENNEDY DRIVE
CAMBRIDGE 7170
PHONE: (03)6248 5898
EMAIL: admin@rbsurveyors.com
WEB: www.rbsurveyors.com

This plan has been prepared only for the purpose of obtaining preliminary subdivsional approval from the local authority and is subject to that approval.

All measurements and areas are subject to the final survey.

50m x 50m Min. Compliance Area
Existing Driveway Access
Proposed Driveway Access
Conservation Covenant

Lot 4
47.8Ha±

Lot 3
47.7Ha±

Lot 1
180.5Ha±

C353040 CPR5736
C353039 CPR5508
C625725 CPR6862

Existing House

Reserved Road 10.06 Wide
Reserved Road 20.12 Wide
Wayleave Easement 12.00 Wide
Marchwiel Road (user road)
Pipeline Easement 'A' 4.00m Wide
Right of Way (Private) 4.00 Wide

MARCHWIEL ROAD
BURNT HILL ROAD
MARION BAY ROAD

Gate

LOCATION PLAN

C.T.159559/2

REV	AMENDMENTS	DRAWN	DATE	APPR.
J	Update proposed boundary & Remove Lot 2	LH	03/09/25	LH
I	Update Lot 4 building area location	LH	13/05/24	LH
H	Update proposal plan per client request	LH	05/12/23	LH
G	Update covenants per CPR plans	LH	18/08/23	LH
F	Update Boundaries per request	LH	13/07/23	LH
E	Update Boundaries to avoid covenant	LH	28/04/23	LH
D	Update boundaries	LH	19/01/23	CBR
C	Update building area locations	LH	27-10-22	LH
B	Update plans for Council RFI	LH	20-10-22	LH
A	UPDATES	SH/LH	05-08-22	SH/LH

OWNER: ONE BRIGHT SHINING MOMENT PTY LTD
TITLE REFERENCE: C.T.159559/2
LOCATION: 255 MARCHWIEL ROAD, **BREAM CREEK**

Proposed Subdivision

Date:	Reference:
13-07-2022	QUINB01 14425-03
Scale: 1:10,000 (A3)	**Municipality:** SORELL

ROGERSON & BIRCH SURVEYORS

UNIT 1, 2 KENNEDY DRIVE
CAMBRIDGE 7170
PHONE: (03)6248 5898
EMAIL: admin@rbsurveyors.com
WEB: www.rbsurveyors.com

This plan has been prepared only for the purpose of obtaining preliminary subdivsional approval from the local authority and is subject to that approval.

All measurements and areas are subject to the final survey.

50m x 50m Min. Compliance Area
Existing Driveway Access
Proposed Driveway Access
Waterway and Coastal Protection Areas
Potential Dispersive Soils
Landslide Hazard Area

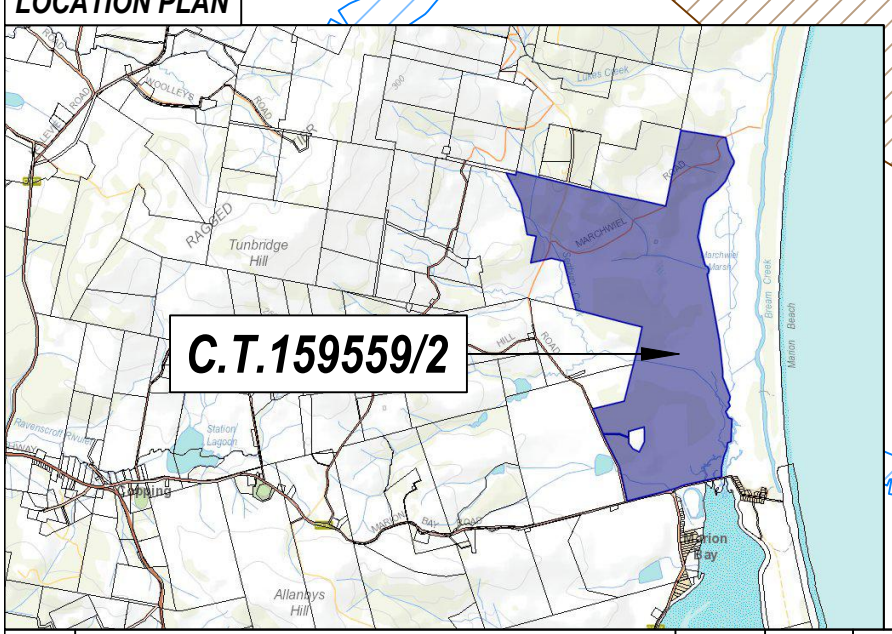
Existing House

Lot 4

Lot 3

Lot 1

LOCATION PLAN

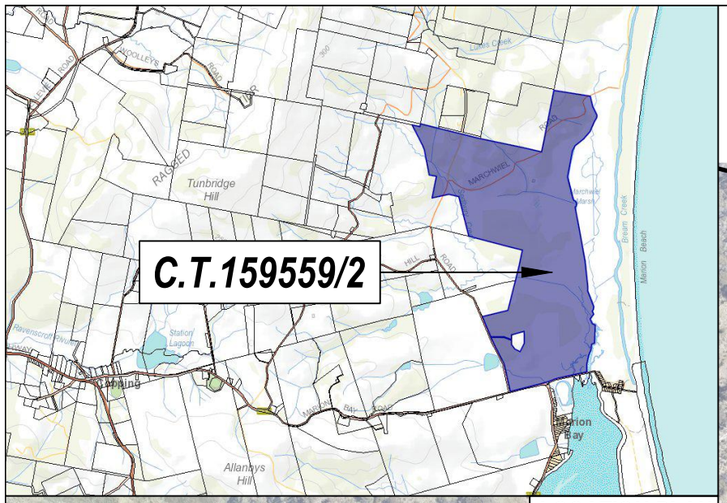


REV	AMENDMENTS	DRAWN	DATE	APPR.
J	Update proposed boundary & Remove Lot 2	LH	03/09/25	LH
I	Update Lot 4 building area location	LH	13/05/24	LH
H	Update proposal plan per client request	LH	05/12/23	LH
G	Update covenants per CPR plans	LH	18/08/23	LH
F	Update Boundaries per request	LH	13/07/23	LH
E	Update Boundaries to avoid covenant	LH	28/04/23	LH
D	Update boundaries	LH	19/01/23	CBR
C	Update building area locations	LH	27-10-22	LH
B	Update plans for Council RFI	LH	20-10-22	LH
A	UPDATES	SH/LH	05-08-22	SH/LH

OWNER: ONE BRIGHT SHINING MOMENT PTY LTD
TITLE REFERENCE: C.T.159559/2
LOCATION: 255 MARCHWIEL ROAD, **BREAM CREEK**

OVERLAY PLAN

Date:	Reference:
13-07-2022	QUINB01 14425-03
Scale: 1:10,000 (A3)	**Municipality:** Sorell



LOCATION PLAN

This plan has been prepared only for the purpose of obtaining preliminary subdivsional approval from the local authority and is subject to that approval.

All measurements and areas are subject to the final survey.

Base image by TASMAP (www.tasmap.tas.gov.au), © State of Tasmania
Base data from the LIST (www.thelist.tas.gov.au), © State of Tasmania

C.T.203584/1

5.73

Marchwiel Road (user road)

Bar

Merch Store

Toilets

Sound Tower

Bar

Main Stage

Toilets

Bus Bar

4.25

Toilets

Bar

Second Stage

REV	AMENDMENTS	DRAWN	DATE	APPR.
J	Update proposed boundary & Remove Lot 2	LH	03/09/25	LH
I	Update Lot 4 building area location	LH	13/05/24	LH
H	Update proposal plan per client request	LH	05/12/23	LH
G	Update covenants per CPR plans	LH	18/08/23	LH
F	Update Boundaries per request	LH	13/07/23	LH
E	Update Boundaries to avoid covenant	LH	28/04/23	LH
D	Update boundaries	LH	19/01/23	CBR
C	Update building area locations	LH	27-10-22	LH
B	Update plans for Council RFI	LH	20-10-22	LH
A	UPDATES	SH/LH	05-08-22	SH/LH

ROGERSON & BIRCH SURVEYORS

UNIT 1, 2 KENNEDY DRIVE
CAMBRIDGE 7170
PHONE: (03)6248 5898
EMAIL: admin@rbsurveyors.com
WEB: www.rbsurveyors.com

OWNER: ONE BRIGHT SHINING MOMENT PTY LTD
TITLE REFERENCE: C.T.159559/2
LOCATION: 255 MARCHWIEL ROAD, **BREAM CREEK**

Falls Site Building Plan

Date:	Reference:
20-10-2022	QUINB01 14425-03
Scale: 1:3000 (A3)	**Municipality:** Sorell

RMCG

29 APRIL 2025

Agricultural Report

Report for:	Sorell Council
Property Location:	255 Marchwiel Rd, Bream Creek
Prepared by:	Michael Tempest RMCG Level 2, 102-104 Cameron Street Launceston, TAS 7250

SUMMARY	
Client:	Sorell Council
Property identification:	255 Marchwiel Rd, Bream Creek, 7175 Zoning: Agriculture & Environmental Management, Tasmania Planning Scheme - Sorell. CT 159559/2, PID 3081213 276.7ha
Proposal:	Proposed four lot subdivision of one existing title
Land capability	Published land capability mapping at 1:100 000 scale shows the land to be a mix of Class 4 land (37.5ha), Class 5 land (156.9ha), Class 6 land (54.2ha) and Class 7 land (27.8ha). An onsite survey at a scale of 1:25,000 confirmed published land capability
Assessment comments:	An initial desktop feasibility assessment was undertaken followed by a field inspection on the 9th of April 2025, to confirm or otherwise the desktop study findings of the agricultural assessment. This report summarises the findings of the desktop and field assessment.
Conclusion:	The subject title is 276.7ha in area with approximately 130ha of existing pasture. The existing agricultural use is grazing. The intensity of grazing is variable across the site. On its own it is unlikely that a viable 'commercial scale' grazing enterprise could be run on this property. Hence, to realise its agricultural potential it is best farmed in conjunction with surrounding or nearby agricultural land. The site is limited by land capability and a lack of existing irrigation water resources. There appears to be scope to access irrigation water on the site. This would also require construction of storage dams. Irrigation water would increase the productive potential of the land, however given the site's land capability limitations irrigation would need to be carefully managed. The current proposal is to subdivide the subject title into four lots ranging from 42.7ha to 132.3ha. This will fragment the existing agricultural use and thus further reduce the agricultural productivity of the land. The productive capacity of the new lots would be reduced compared to the current site's potential. There may be scope to complete a 2-lot subdivision on the site, this would excise off the existing dwelling and nearby Class 6 land from the rest of the property. Under this scenario the balance lot would be required to have an agreement placed on it prohibiting the construction of a dwelling in the future.
Assessment by:	 _____ Michael Tempest Senior Consultant

Table of Contents

ACKNOWLEDGEMENT OF COUNTRY

Tasmania is Aboriginal land. We acknowledge the palawa and pakana, the Tasmanian Aboriginal people, as the Traditional Owners and continuing custodians of the lands, seas and waterways of lutruwita, Tasmania on which this project has been conducted. We recognise their continuing connection to land, waters and culture and pay our respects to their Elders past and present, and we acknowledge emerging leaders. Moreover, we express gratitude for the knowledge and insight that Traditional Owners and other Aboriginal and Torres Strait Islander people contribute to our shared work in Australia.

We pay respects to all Aboriginal and Torres Strait Islander communities. We recognise that Australia was founded on the genocide and dispossession of First Nations people and acknowledge that sovereignty was not ceded in this country. We embrace the spirit of reconciliation, working towards self-determination, equity of outcomes, and an equal voice for Australia's First People.

1 Introduction

1.1 BACKGROUND

An application was made to Sorell Council for a four-lot subdivision of 255 Marchwiel Rd, Bream Creek in 2024. The subject title is zoned Agriculture & Environmental Management under the Tasmanian Planning Scheme – Sorell. The application was refused by Sorell Council pursuant to Section 57 of the Land Use Planning and Approvals Act 1993 because it was determined the proposal does not comply with clause 21.5.1 A1 and fails to satisfy clause 21.5.1 P1 as:

a. Each lot cannot sustain the operation of an agricultural use due to topographical constraints, soil condition and water surety;
b. The subdivision will materially diminish the agricultural productivity of the land and fails to protect the long-term productive capacity of the agricultural land through impediments to existing grazing activity and absence of reasonable levels of certainty that high value enterprises are suitable for the smaller lot sizes proposed.

The refusal has been appealed by the proponent and the matter has now been referred to the Tasmanian Civil & Administrative Tribunal (TASCAT).

RMCG have been engaged by Sorell Council to conduct an independent Agricultural Assessment of the subject site. The purpose of this report is to consider the site's agricultural characteristics, as well as the proposed subdivision from an agricultural perspective and to make an assessment as to whether in RMCG's opinion the proposal complies with the applicable Planning Scheme Clauses (particularly 21.5.1.P1). As part of the assessment a site visit was undertaken which included an onsite land capability assessment at a scale of 1:25,000.

A further aspect of this report was to consider whether there may be an alternate subdivision option that in our opinion can comply with the Planning Scheme if we determine the current proposal does not.

1.2 PROPOSAL

The proponents of the development, Secret Sounds Group Pty Ltd, are proposing to subdivide the existing title at 255 Marchwiel Rd into four lots. The title is currently 276.7 ha in area and is predominately in the Agriculture Zone, with areas also in the Environmental Management Zone. The proposed site plan identified four lots at the following sizes (see site plan, Figure A1-3 and A1-4):

- Lot 1 – 42.7 ha
- Lot 2 – 132.3 ha
- Lot 3 – 53.2 ha
- Lot 4 – 47.8 ha.

1.3 PLANNING CONTEXT

Clause 21.5.1 of the Planning Scheme provides avenues for subdivision in the Agriculture Zone, these are shown in Table 1-1.

Table 1-1: Planning Clause 21.5.1 Lot Design

<table>
<tr><td colspan="2">Objective:

To provide for subdivision that:

(a) relates to public use, irrigation infrastructure or Utilities; and

(b) protects the long term productive capacity of agricultural land.</td></tr>
<tr><td>Acceptable Solutions</td><td>Performance Solutions</td></tr>
<tr><td>A1

Each lot, or a lot proposed in a plan of subdivision, must:

a) be required for public use by the Crown, a council or a State authority;
b) be required for the provision of Utilities or irrigation infrastructure; or
c) be for the consolidation of a lot with another lot provided both lots are within the same zone.</td><td>P1

Each lot, or a lot proposed in a plan of subdivision, must:

a) provide for the operation of an agricultural use, having regard to:
i. not materially diminishing the agricultural productivity of the land;
ii. the capacity of the new lots for productive agricultural use;
iii. any topographical constraints to agricultural use; and
iv. current irrigation practices and the potential for irrigation;

b) be for the reorganisation of lot boundaries that satisfies all of the following:
i. provides for the operation of an agricultural use, having regard to:
a. not materially diminishing the agricultural productivity of the land;
b. the capacity of the new lots for productive agricultural use;
c. any topographical constraints to agricultural use; and
d. current irrigation practices and the potential for irrigation;
ii. all new lots must be not less than 1ha in area;
iii. existing buildings are consistent with the setback required by clause 21.4.2 A1 and A2;
iv. all new lots must be provided with a frontage or legal connection to a road by a right of carriageway, that is sufficient for the intended use; and
v. it does not create any additional lots; or

a) be for the excision of a use or development existing at the effective date that satisfies all of the following:
i. the balance lot provides for the operation of an agricultural use, having regard to:
a. not materially diminishing the agricultural productivity of the land;</td></tr>
</table>

	b. the capacity of the balance lot for productive agricultural use; c. any topographical constraints to agricultural use; and d. current irrigation practices and the potential for irrigation; ii. an agreement under section 71 of the Act is entered into and registered on the title preventing future Residential use if there is no dwelling on the balance lot; iii. any existing buildings for a sensitive use must meet the setbacks required by clause 21.4.2 A2 or P2 in relation to setbacks to new boundaries; and iv. all new lots must be provided with a frontage or legal connection to a road by a right of carriageway, that is sufficient for the intended use.
A2 Each lot, or a lot proposed in a plan of subdivision, must be provided with a vehicular access from the boundary of the lot to a road in accordance with the requirements of the road authority.	**P2** Each lot, or a lot proposed in a plan of subdivision, is capable of being provided with reasonable vehicular access to a boundary of a lot or building area on the lot, if any, having regard to: a) the topography of the site; b) the distance between the lot or building area and the carriageway; c) the nature of the road and the traffic, including pedestrians; and d) the pattern of development existing on established properties in the area.

The proposal does not meet the A1 Acceptable Solutions and so was assessed against the P1 Performance Criteria. The proposal sought to demonstrate compliance with P1.a. Hence this is also the Performance Solution RMCG has considered the proposal against. RMCG have not considered the proposal against A2 or P2.

2 About RMCG

2.1 COMPANY BACKGROUND

RMCG is a multi-disciplinary consultancy specialising in environment, agriculture and communities. We provide advice to government agencies, water authorities, institutions and private sector clients in the fields of environment, water, agriculture, economics and communities.

We apply our expertise and insight to drive sustainable resource use. RMCG provides policy, planning and technical consulting services to ensure a healthy future for the environment, industry and communities by helping them to plan and implement change.

RMCG is one of Australia's strongest regionally focused consulting groups. We have achieved this position through a commitment to the sustainable development of rural industries and communities.

Visit our website at www.rmcg.com.au for further information.

2.2 QUALITY MANAGEMENT SYSTEM

RMCG is a service-focused consultancy that aims to provide the highest possible standard of advice to its clients. To achieve this, RMCG has developed a Quality Management System (QMS) to guarantee that rigorous and consistent processes are followed in the delivery of projects to meet client requirements.

RMCG's QMS is accredited to ISO9001:2015 standards.

2.3 ABOUT THE AUTHOR

Michael Tempest (B. Env) is a senior consultant with experience in community and stakeholder engagement, environmental assessment and land use assessments, within the natural resource management sector. He has been working in this sector for close to 10 years.

Michael has a particular interest in the success of the agricultural sector and rural communities and the environments they sit within. His work is focused on engaging with rural landholders, agencies and developers to understand their needs and meet their planning requirements. Michael provides strategic advice on agricultural and rural communities to government bodies such as local councils and state government departments. He has technical skills in land capability assessments that contribute to Agricultural Assessments for proposed land use planning assessments. These range from single dwelling proposals to subdivisions to large scale renewables assessments and their potential impact on affected agricultural land. He also has supporting technical skills in GIS, bushfire assessments, effluent reuse and biosolids use on farmland.

3 Description

This section describes the sites characteristics. Supporting maps and photos are located in Appendix 1 (maps) and 2 (photos).

3.1 LANDSCAPE CONTEXT

The subject title is 276.7 ha in area. There is an existing dwelling in the most northern section of the title. To the south west of the dwelling is approximately 10 ha of land where there is leftover infrastructure (stages and buildings) from when the site hosted Falls Festival. There are also other pieces of leftover infrastructure from the festival in other locations on the northern half of the subject site.

The subject site's highest point is in the north west corner at 100m Above Sea Level (ASL). The lowest point is along the eastern boundary at <5m ASL. Typically, the western half of the land is at higher elevations with undulating slopes that typically have an easterly aspect. The eastern half is predominately flat and almost at sea level. Average annual rainfall for the site is 573mm[1].

3.2 SOILS AND GEOLOGY

There is no published soils mapping for the site or surrounding titles. Underlying geology mapping at a scale of 1:50,000 (Sorell, Sheet 8412S) shows five geological types across the site:

- Tb – Basalt, mapped in small areas hill sides in areas associated with proposed Lot 1 and Lot 3.
- Qha – River alluvium, swamp marsh, beach (strand lines indicated, and pit deposits). Areas mapped as Qha generally align with existing saltmarsh/wetland on the eastern edge of the subject site, as well around Sedbury Creek where it flows through proposed Lot 2 in a west to east direction.
- Qhw – Windblown sand deposits. Mapping aligns with flat areas on the eastern half of the property not mapped as Qha. The flats at higher elevations on proposed lot 3 is also mapped as Qhw.
- Rss – Quartz sandstone. Mapping shows Rss on higher elevation/hillsides on the western half of the subject site.
- JDi – Dolerite – typically mapped in the highest elevation area in the north west corner of the title, where Lot 4 is proposed, a small area is also mapped near the hilltop in the south western corner associated with proposed Lot 1.

Acid sulfate soils mapping available on LISTmap indicates that land associated with Qha and Qhw has very low to high probability of acid sulfate soils (see Figure A1-5). Specific soil testing would need to be conducted to confirm this. Acid sulfate soils are best left undisturbed. Salinity mapping also available on LISTmap also indicates that the same areas have moderate to high risk of salinity occurring. Some evidence of localised salinity was identified on the eastern flats (see Figure A2-5).

3.3 VEGETATION

TASVEG 4.0 by the Department of Natural Resources and Environment (NRE) maps the site as a mix of native vegetation communities, agricultural land and regenerating cleared land. In total there are 13 communities

[1] Bureau of Meteorology (BoM) Weather Station Data, Dunnalley (Stroud Point) station number 94254, mean annual rainfall 2012-2024. Accessed April 2025

mapped on the site. The mapped communities are shown in Figure A1-7 and are also listed below in Table 3.1.

Table 3-1: TasVeg 4.0 mapped vegetation communities on the subject site

VEGETATION COMMUNITY	VEGETATION GROUP	LAND AREA (HA)
ARS – saline sedgeland/rushland	Saltmarsh and wetland	18.5
ASS – Succulent saline herbland	Saltmarsh and wetland	15.2
DAC – *Eucalyptus amygdalina* coastal forest and woodland	Dry eucalyptus forest and woodland	28.5
DAS – *Eucalyptus amygdalina* forest and woodland on sandstone	Dry eucalyptus forest and woodland	1.5
DGL – Eucalyptus globulus dry forest and woodland	Dry eucalyptus forest and woodland	17.3
DOB – *Eucalyptus obliqua* forest and woodland	Dry eucalyptus forest and woodland	19.7
DOV – *Eucalyptus ovata* forest and woodland	Dry eucalyptus forest and woodland	10.3
DPU – *Eucalyptus pulchella* forest and woodland	Dry eucalyptus forest and woodland	24.6
DTD – *Eucalyptus tenuiramis* forest and woodland on dolerite	Dry eucalyptus forest and woodland	0.1
FAG – Agricultural land	Modified land	130.6
FPF – Pteridium esculentum femland	Modified land	1.5
FRG – Regenerating cleared land	Modified land	8
QAQ – Water, sea	Other natural environments	0.4
		276.2

The mapped vegetation generally aligns with aerial imagery and onsite characteristics. Native vegetation communities were not confirmed as part of RMCG's site visit. Of the listed vegetation communities DGL, DOV and DAS are listed as threatened communities under the Nature Conservation Act 2002. ARS and ASS are part of a larger saltmarsh/wetland landform that extends to the east. These two communities are predominately within the Environmental Management zoned portion of the subject site. They are also subject to the Natural Assets Code of the Planning Scheme.

The mapped FAG areas generally align with the actual on ground pastured areas. The majority of forested land on the title is protected by Conservation Covenants/private reserves (see Figure A1-4).

3.4 LAND CAPABILITY

Published Land Capability mapping at 1:100 000 scale shows the land to be a mix of Class 4 land (37.5ha), Class 5 land (156.9ha), Class 6 land (54.2ha) and Class 7 land (27.8ha). See Figure A1-6.

- Class 4 land capability is described as land that is well suited to grazing, but which is limited to occasional cropping or a very restricted range of crops.
- Class 5 land is described as land unsuited to cropping and with slight to moderate limitations to pastoral use.
- Class 6 land is defined as; land that is marginally suitable for grazing due to severe limitations.
- Class 7 Land is described as land with very severe to extreme limitations that make it unsuitable for agricultural use.

The land is not classed as Prime Agricultural Land under the *Protection of Agricultural Land Policy 2009* (PAL Policy). However, it is noted that there is a very small corner (0.1ha) of the south-west of the title that is mapped as Class 3 land, which is considered Prime Agricultural Land under the PAL Policy. However, this is a small corner of a larger mapped area of Class 3 land that extends to the north and west. The 0.1ha area on the subject site is covered in native vegetation and is within one of the Conservation Covenant areas, hence it is not available for agricultural use and based on existing vegetation cover and land use it has been considered as part of the adjacent Class 5 on the subject site.

While onsite a Land Capability Assessment was conducted across the site at a scale of 1:25,000. This included augering 8 soils pits where soil profiles were assessed. From the assessment it was determined that the published mapping is generally correct. There would be scope to slightly realign the boundaries of the land capability classes, but not to a point that changes the overall land capability of the site.

The soils profiles showed limiting factors such as weak soil structure which increases erosion risk, as well as soil drainage limitation. The Class 4 areas display imperfectly drained soils as the key limitation. For the Class 5 areas, there are a mix of limitations. In the central northern section there are sandy soils with weak structure which are at high risk of erosion if vegetation cover is removed. Other class 5 areas display poor drainage characteristics which included common and distinct mottling in soil profiles, evidence of pugging and abundant pin rushes which like wet soils. The Class 5 area associated with Sedbury Creek appears to be associated with the creek's floodplain.

The Class 6 areas are generally steep and have retained native vegetation, which indicates there is minimal agricultural potential. All mapped Class 7 land is associated with the saltmarsh/wetland.

Full land capability class descriptions are available in Appendix 3, and the full land capability assessment details are included in Appendix 4, this includes soil profile descriptions.

3.5 LAND USE ON SUBJECT TITLE

The land is currently utilised for low level grazing. It is the author's understanding that the title is leased via the adjacent agricultural enterprise to the west (Bream Creek Dairy) and is utilised for cattle grazing. RMCG have not been provided with any of the details surrounding the leasing arrangement. When onsite there were only young dairy cattle grazing in the south paddock of the property. Part of the paddock is irrigated with a quarter centre pivot irrigator (discussed further in Section 3.6). This paddock has an area of approximately 28ha, with 18ha of the 28ha within the centre pivot's irrigation area. All other pastured areas on the property appear to be utilised for occasional dryland grazing. There was evidence of cattle previously being in all paddocks, although for the northern paddocks it did not appear to be recently. It was noted that available feed was variable within the dryland areas, which is not surprising so soon after summer in a dry year. There was fencing across the site, with native forests and wetland areas being fenced to exclude stock.

3.6 EXISTING AND POTENTIAL IRRIGATION ON THE TITLE

The title has no known existing water resources (irrigation dams or surface water licences) for irrigation. It is assumed that the centre pivot irrigator utilises water from the leasee's (Bream Creek Dairy) available water supply. The site is not within any existing irrigation schemes or any proposed irrigation schemes.

Sedbury Creek enters the subject site in the north western corner and flows in a north to south direction. Due to the shape of the subject site, the Creek leaves the site before re-entering in the central area where it flows west to east and then draining into the adjacent wetlands to the east. There are a further two drainage lines in the northern section of the subject site that converge and then flow off the site to the east. There is another drainage line that flows west to south east in the most south western corner of the title. NRE's Water Assessment Tool (WAT Tool) was run at two locations on Sedbury Creek (both locations where the creek crosses the subject title) as well as on the unnamed drainage lines. The WAT tool is used as the guiding tool by NRE when determining surface water availability at a given location[2]. The potentially available water is summarised below in Table 3-2.

Table 3-2: WAT tool water availability

ASSESSED LOCATION (GDA94)	HIGH AVAILABILITY (ML)	MID AVAILABILITY (ML)	TOTAL POTENTIALLY AVAILABLE (ML)
Sedbury Creek, northern location (N569238.67, E5260781.05)	36.91	23.95	60.86
Sedbury Creek, southern location (E570436.78, N5259729.24)	-53.12 (availability limit of 146.38, with 199.5 currently allocated)	41.84 (Availability limit of 94.96, this reduces to 41.84 when over allocation of high reliability water is subtracted)	41.84
Northern drainage line (E570090.79, N5260735.58)	12.74	8.26	21
Southern drainage line (E570134.29, N5258865.25)	-45.12	-42.49	-87.61

Note that as the two Sedbury Creek assessed locations are in the same catchment, if a water licence was obtained for the northern site on Sedbury Creek, this would reduce the amount of water available from the southern location.

All available water is for a winter take period only (1 May to 30 November). This means that to utilise this water during the peak irrigation periods over summer, storage dams would need to be constructed. Dams are assessed outside of the Tasmanian Planning Scheme and under the *Water Management Act 1999.* High surety

[2] WAT Tool, available at: https://nre.tas.gov.au/water/water-monitoring-and-assessment/water-assessment-tool-(wat), accessed April 2025

water (Surety 5 water as per the Act) is expected to be available eight years out of ten, whereas mid availability water (Surety 6 water as per the Act) is expected to be available approximately six years out of ten.

Based on the above figures there is potentially surface water available for irrigation (potentially approximately 85ML in total). However, this would be subject to approval by the Water Assessment Branch of NRE, especially given there are over-allocations in some of the allocation availabilities generated by the WAT. Storage dams would also need to be constructed, which would require further assessments to identify suitable locations and consider environmental factors as per the Act's requirements. Consideration of any water allocations would also take into account the saltmarsh/wetland to the east that all drainage lines drain into. According to the Conservation of Freshwater Ecosystem Values (CFEV) database this wetland has a high to very high conservation management priority. This may influence how an application for irrigation water is assessed, as it is a requirement that any application for water is accompanied by a CFEV report.

The potential for an instream dam on the southern section of Sedbury Creek appears to be complicated by mapped acid sulfate soils potential and a pipeline easement shown on Figure A1-3.

A scan of adjacent recorded groundwater bore holes was undertaken to determine whether there may be potential for accessing groundwater. There were 8 registered bore features within 2km of the subject title. Only one of these was registered as functioning (the status was last updated in 1998). The yield of this bore is recorded as 0.32 L/s. The remaining 7 registered bores are abandoned or capped. Given the proximity to the coastline, salinity may also be an issue with any available groundwater on the subject title.

As shown on the proposed subdivision's site plan (Figure A1-3), there is an existing pipeline easement that traverses the subject site. This pipeline provides Bream Creek Dairy access to a water resource they have rights to further to the north. There may be opportunity for the subject site to access this water, however this would be subject to negotiations with the Bream Creek Dairy.

There are a lot of uncertainties around the subject site gaining access to its own water resource for irrigation. This then makes the likelihood of higher value agricultural enterprises occurring on the site low.

3.7 SURROUNDING LAND USE

Surrounding land use is varied in activity and scale. Figure A1-8 identifies adjacent titles.

To the north and east is 313 Marchwiel Rd (CT 159560/1). This title is 430ha in area. Its zoning is a mix of Agriculture and Environmental Management. The Environmental Management Zone area is associated with saltmarshes and the coastline (coast is adjacent to the east). This includes the saltmarsh/wetland to the east of the subject site. The land in the Agriculture Zone is to the north of the subject site. Land in this area is a mix of pasture for grazing with patches of native vegetation that are under conservation covenants. Based on aerial imagery there appears to be a centre pivot irrigator located within this area. This title also appears to be under the same ownership and farmed in conjunction with land further to the north. There is a substantial dam located on the land further north, the dam has shared rights associated with this holding and Bream Creek Dairy to the south west of the subject title. It is the author's understanding that some visitor accommodation occurs on this site. 313 Marchwiel Rd is accessed via Marchwiel Rd which passes through the subject site. This holding appears to display 'commercial scale agricultural' enterprise characteristics[3]

Adjacent to the north are four titles across three addresses, 474, 478 and 529 Bream Creek Rd (CT 133344/1, CT 112447/2 and CT 203584/1, CT 251384/1). All three titles are zoned Rural.

[3] As defined by RMCG 2022, see Appendix 5 for definitions.

- 474 Bream Creek Rd (CT 133344/1) is 3.2ha in area, is covered in native vegetation and has an existing dwelling. Hence this title displays ‘lifestyle’ characteristics.
- 478 Bream Creek Rd is 8.6ha in area and is entirely covered in native vegetation. This title is under the same ownership as a title to the north west, which is also covered in native vegetation, is a similar size and has an existing dwelling. This holding also displays ‘lifestyle’ characteristics.
- The final two titles adjacent in this direction are associated with 529 bream Creek Rd (CT 203584/1 and CT 251384/1). CT 203584/1 has a land area of 33.7ha and CT 251384/1 has a land area of 70.3ha. these titles are a mix of pasture for dryland grazing and native vegetation (with areas within conservation covenants). The land appears to be under the same ownership as three further titles to the west that have a combined area of approximately 55ha and appear to be utilised for grazing. With the apparent agricultural enterprise being dryland grazing, this holding appears to be managed at a ‘hobby scale’ to ‘small-scale producer’ level.

Adjacent to the north west is CT 147874/1, located on Bream Creek Rd. This title is 19.9ha in area and appears to be predominately managed for pasture with a small area (2.4ha) of plantation. This title appears to be under similar ownership as land further to the west and appears to be part of a ‘commercial scale’ grazing enterprise. This title is zoned Rural.

Adjacent to the central west are three titles across two addresses, 304 Bream Creek Rd (CT 37839/1) and 114 Burnt Hill Rd (CT 233248/1 & CT 116209/1). These titles are in the Rural Zone.

- 304 Bream Creek Rd is 63ha in area and appears to be predominately utilised for grazing. There is an existing dwelling and there is also a 10ML dam with an associated water licence for irrigation. This title appears to display ‘hobby scale’ to ‘small-scale producer’ characteristics.
- 114 Burnt Hill Rd has a combined area of 52ha. There are two dwellings, one on each title and an existing dam with a 3.5ML capacity on the northern title. This holding appears to display ‘hobby scale’ to ‘small-scale producer’ characteristics.

Adjacent to the south west of the subject site are two titles that are separated from the subject title by Burnt Hill Rd and Marion Bay Rd. The most northern of the two is 198 Burnt Hill Rd (CT 156892/1), the southern title is 460 Marion Bay Rd (CT 161908/1). Both titles are zoned Agriculture and farmed as part of the Bream Creek Dairy, which is a ‘commercial scale’ agricultural enterprise with other land to the west and north west.

- 198 Burnt Hill Rd is 77ha in area. It has a full centre pivot irrigator and a half centre pivot irrigator that cover the majority of the land. There is an existing irrigation dam with an 80ML capacity located in the south eastern section near the subject title, as well as part of a 170ML dam in the north west corner.
- 460 Marion Bay Rd is 60ha in area and also has a centre pivot irrigator and a half centre pivot irrigator with approximately three quarters of the title appearing to be irrigated. In the south east section is a 90ML irrigation dam.

To the south east, south of Marion Bay Rd is land in the Low Density Residential Zone and Environmental Management Zone associated with the Marion Bay settlement as well as Propoise Hole (the bay).

There is also 58 Burnt Hill Rd (CT 158719/3) which is surrounded by the subject title near the south west corner. This title is 2.1ha in area. This title is zoned Agriculture and is directly adjacent to the where the existing centre pivot irrigator is located on site. This title has an existing dwelling and is best described as a ‘lifestyle’ lot. This title may have previously been part of the subject site, and been excised in the past, however this is an assumption only.

Adjacent agricultural activity occurs to the north, west and south west with the main activity being grazing including dairy (mix of dryland and irrigated grazing). The scale of adjacent grazing varies from ‘hobby scale’

to ‘commercial scale’. This appears to be typical of the wider area. It is noted there are also two nearby small vineyards. These are Breem Creek Vineyard that appears to have 4.5ha of vines and Cape Bernier that appears to have. 3.5ha of vines. The current grazing land use of the subject site is in line with the surrounding dominate land use. There is scope for this title to be farmed in conjunction with adjacent land.

The subject title is part of a band of land zoned Agriculture, it connects land in the Agricultural Zone to the north with land in the Agriculture Zone to the south west.

4 Discussion

4.1 PRODUCTIVE CAPACITY OF THE SUBJECT LAND

The subject title is 276.7ha in area with just under half of the area (130ha) utilised for grazing. Of the 130ha, 18ha is currently irrigated with water from and adjacent holding, with the remainder utilised for occasional dryland grazing. The balance of the land is generally either covered in native vegetation that is under conservation convents/private reserves, or part of the saltmarsh/wetlands. Hence there is no scope to increase the grazing land area on the site. On its own this title is unlikely to be able to support a viable[4] 'commercial scale' grazing enterprise based on existing characteristics. Land with these sort of characteristics is best farmed in conjunction with other land. This is what is currently occurring with the adjacent commercial scale dairy to the south west.

Given there potentially is surface irrigation water available on the site, there may be scope to develop irrigation infrastructure (including dams) on the site so that it is not reliant on the adjacent agricultural enterprise for irrigation resources. Increasing irrigation resources would need to be closely balanced with the limitations of the site. There is only 37ha of Class 4 land (11.5 of this Class 4 land is covered in native vegetation), with half of this area already irrigated. The Class 5 area of pasture have limitations such as weak soil structure or poor drainage and in some areas there are potential salinity issues. Increasing irrigation would promote intensification of use of these areas, which can lead to soil decline if not managed effectively.

The potential irrigation water may also provide scope to develop other higher value agricultural enterprises such as grapes for wine production as there are examples of vineyards nearby. However, the two nearby vineyards are located on land mapped as land capability Class 3 and Class 4+3, land which is prime agricultural land, and land that is borderline prime agricultural land respectively. This is different to the subject site. Hence, any intensification of the site would need to further consider the site's limitations and determine if such a venture is feasible including the feasibility of developing water resources. Such ventures would require significant investment in infrastructure.

4.2 THE PROPOSAL'S IMPACT ON SITE PRODUCTIVE CAPACITY

The current proposal is to subdivide the site into four titles. This proposal effectively splits up the existing grazing land across all four lots. This will further impact on the sites limited existing agricultural potential, as it would allow for individual ownership of each lot, which significantly reduces the likelihood of the lots to be farmed in conjunction with adjacent agricultural land (currently occurring) as part of a 'commercial scale' enterprise.

It also increases the potential for further dwellings to be constructed as shown on the site plan (see Figure A1-3) which further reduces the likelihood for the area to be utilised for commercial agricultural activities.

Table 4-1 breaks down the agricultural characteristics and productive potential of each proposed lot.

[4] RMCG's definition of a 'viable' enterprise is an enterprise that can support at least one full time equivalent employee. In our opinion it is questionable as to whether an enterprise with a gross income of less than $350k could be considered 'viable'. The subject report does not provide a definition of 'viable' for RMCG to consider.

Table 4-1: Productive potential of each lot

LOT	CHARACTERISTICS	PRODUCTIVE CAPACITY
1	Lot 1 is proposed to be 42.7ha in area. Of this area approximately 28ha is utilised for grazing, with 18ha under a centre pivot irrigator. The balance is either associated with the wetlands (under a private reserve) or is covered in native vegetation. Of the pastured area approximately 17ha is mapped as Class 4 land, with the balance pasture mapped as Class 5.	This lot displays productive capacity on its own, due the existing irrigation infrastructure matched to some of the better-quality land on the site. However, the current irrigation regime on this proposed lot is completely reliant on the adjacent property that leases the area. The proposed subdivision would cut this lot off from a potential water source at Sedbury Creek that is on the current subject site. It also splits half of the Class 4 land from the other half of the Class 4 land that is proposed to go onto Lot 2.
2	Lot 2 is proposed to be 132.3ha, meaning it is the largest proposed lot. It also incorporates the existing dwelling. However, of the 132.3ha, only approximately 32ha is currently managed as pasture. The pasture area will incorporate the balance of mapped Class 4 land (8.5ha). There is a further 11.5ha of the Class 4 land that is covered in native vegetation and under a conservation covenant. The un-pastured areas are a mix of native vegetation (most covered by conservation covenants) and the wetlands.	This lot has minimal productive capacity potential. Only approximately one quarter of the land area has agricultural potential, with the balance displaying natural values. The site does have access to Sedbury Creek which suggest water resources could potential be developed, however there are limited areas where this could be applied. The pastured areas are generally flat and displayed imperfect to poor drainage characteristics which suggests the area is not ideal for a higher value enterprise such as grapes which typically prefer well drained soils. Mapping indicates soils have varied potential for acid sulfate soils as well as salinity potential. The alignment of the boundary between Lot 2 and Lot 3 also splits existing dryland pasture paddocks, which is not ideal.
3	Lot 3 is proposed to be 53.2ha in area. It contains the majority of old festival infrastructure. All land on this site is mapped as Class 5 land with approximately 50ha mapped as pasture. However, some of the mapped pastured area contains the festival infrastructure. This lot has potential access to irrigation water via the northern drainage line and the northern section of Sedbury Creek. The only existing native vegetation is located along drainage lines, this title does not have any native vegetation associated with a conservation covenant, nor are any of the site's wetlands within its boundary.	This site has some limited productive capacity potential. 50ha of Class 5 dryland pasture does display some agricultural potential. However, the limitations associated with Class 5 land limit how intensely this land can be grazed. Hence, dryland pasture with these characteristics is best farmed in conjunction with a larger area. The proposal reduces the opportunity to do this. Given the potential access the irrigation water, there may be scope to irrigate some areas of the pasture (again best done in conjunction with adjacent land). Or consider a higher value enterprise such as grapes. However, any investment in a higher value enterprise would require confirmation that water can be secured, and a storage dam/s can be constructed. Further assessment of soil suitability would also be required. These types of investigations and works should be done before a subdivision is approved.

4	Lot 4 is proposed to be 47.8ha in area. Of this area approximately 34ha is mapped as Class 6 land, with the balance mapped as Class 5 land. Approximately 20ha is mapped as pasture with the balance covered in native vegetation. Part of the native vegetation is under a conservation covenant. Of the pasture area only 5ha is mapped as Class 5 land with the balance mapped as Class 6 land. The Class 5 land is also predominately steeply sloped and south facing. The lot does have access to Sedbury Creek so theoretically has potential to develop irrigation resources, however given the sites limitations this is considered unlikely.	This lot has negligible agricultural potential on its own. The land associated with this lot should be farmed as part of a larger scale enterprise to realise any productivity. The proposal significantly reduces the limited agricultural potential of the land associated with this lot by cutting it off from the rest of the property.

4.3 PLANNING REQUIREMENTS

This section considers the proposal against the application Planning Scheme Requirements (Clause 25.1.1.P1.a).

Clause 25.1.1.a)

Each Lot, or a lot proposed in a plan of subdivision, must:

(a) provide for the operation of an agricultural use, having regard to:

(i) not materially diminishing the agricultural productivity of the land;

The proposed four lot subdivision splits the existing 130ha of grazing land onto four individual lots. The subject title already has limitations to it agricultural potential, with the proposal further impacting on the productivity of the land. Grazing land, especially grazing land that has land capability limitations is best farmed as larger areas to enable sufficient stock rotation. The proposal facilitates the opposite. The proposal takes one title with limited agricultural potential and splits it into four titles with less agricultural potential. Supporting reports indicate that this will facilitate investment in high value agricultural enterprises on each lot. However, this is reliant on the future lot owners proposed plans, as well as further assessments to confirm access to irrigation water and site suitability to such ventures.

The proposal splits off the only area irrigated from the rest of the property. This also effectively splits this area from the subject sites' potential irrigation resource. Hence this irrigated area would continue to be reliant on water from an adjacent holding, with no scope of developing on site water resources. The proposal also splits up the Class 4 land on the site.

If higher values enterprises and associated water resources were already established on the site, then this may assist with demonstrating that the proposal aligned with these enterprises and thus would not materially dimmish the agricultural productivity. However, as grazing is the enduring agricultural use on the site, the proposal will diminish this agricultural use.

(ii) the capacity of new lots for productive agriculture

Of the four proposed lots, Lots 1 and 3 appear to have some agricultural potential on their own. But as mentioned above, Lot 1 would continue to be reliant on the adjacent property. Lot 3 would be reliant on significant investment in irrigation and the infrastructure associated with a high value agricultural enterprise such as grapes. This would also be dependent on investigations to confirm access to water, dam site suitability

and confirmation that the proposed crop could be established on the site based on land capability limitations. It's also reliant on the future lot owner investing in the required capital works and infrastructure.

For Lot 2, while it has potential access to a water resource, it has limited land that would be attractive to irrigate. The existing dwelling is also retained on this lot. Hence there is a high chance this lot becomes a large 'lifestyle' or 'hobby scale' lot. Lot 4 has negligible agricultural potential due to its land capability limitations and existing native vegetation.

(iii) any topographical constraints to agricultural use

The site's topography is varied and changeable across the proposed lots. Lot 4 is constrained by steep south facing slopes which limit agricultural potential. The flat areas along the eastern sections associated with lots 1 & 2 are limited by the existing wetlands. Flat pastured areas on lots 2 and 3 near the wetlands are also limited by poor drainage characteristics.

(iv) current irrigation practices and the potential for irrigation

18ha in the south west section of the subject site (within proposed Lot 1) is irrigated by a centre pivot irrigator. Water is sourced from the adjacent property to the west as part of the existing leasing arrangement for the subject site.

As identified in Section 3.6 there may be scope to source irrigation water from Sedbury Creek and a drainage line in the northern section of the subject site. However, this would be subject to an application under the *Water Management Act 1999.* Only winter take water is available, so to be able to utilise the water in the summer period storage dams would need to be constructed. While water may be accessed on Lots 2, 3 and 4, land capability limitations indicate that there are limited areas where it would be appropriate to irrigate regularly. The proposal also cuts off the existing centre pivot irrigator from Sedbury Creek which is a possible water source. This means Lot 1 would continue to rely on the adjacent agricultural enterprise for water resources. Or if sold to different owner, it could lose access to irrigation water completely.

4.3.1 SUMMARY

Based on our assessment, the proposal cannot demonstrate compliance with the applicable Planning Clause. The proposal will fragment the existing grazing land which will reduce its already limited productive capacity. The proposal is reliant on future lot owners developing the lots for high value agricultural activities.

4.4 ALTERNATE OPTIONS

It would potentially be feasible to undertake a 2-lot subdivision via Clause 21.5.1.P1.a (see Table 1-1). This Clause would allow for the dwelling and adjacent conservation covenant and Class 6 land to be excised from the balance of the agricultural land. A Part 5 agreement would be required on the Agricultural Lot to prohibit the construction of a future dwelling. This would unencumber the majority of the agricultural land from the dwelling, which would likely make it more attractive to be farmed in conjunction with adjacent or nearby agricultural land. It would also ensure the potential irrigation water is retained with the more productive areas. It would then provide the opportunity for the dwelling lot to be sold independently from the agricultural land.

There may also be scope to do a boundary adjustment with the adjacent holding that currently leases the grazing land. There may be a few different options that such a boundary adjustment could look like, but the intension would be to provide the maximum amount of grazing land with the adjacent title.

5 Conclusions

The subject title is 276.7ha in area with approximately 130ha of existing pasture. The existing agricultural use is grazing. The intensity of grazing is variable across the site. On its own it is unlikely that a viable ‘commercial scale’ grazing enterprise could be run on this property. Hence, to realise its agricultural potential it is best farmed in conjunction with surrounding or nearby agricultural land.

The site is limited by land capability and a lack of existing irrigation water resources. There appears to be scope to access irrigation water on the site. This would also require construction of storage dams. Irrigation water would increase the productive potential of the land, however given the site’s land capability limitations irrigation would need to be carefully managed.

The current proposal is to subdivide the subject title into four lots ranging from 42.7ha to 132.3ha. This will fragment the existing agricultural use and thus further reduce the agricultural productivity of the land. The productive capacity of the new lots would be reduced compared to the current site’s potential.

There may be scope to complete a 2-lot subdivision on the site, this would excise off the existing dwelling and nearby Class 6 land from the rest of the property. Under this scenario the balance lot would be required to have an agreement placed on it prohibiting the construction of a dwelling in the future.

References

BOM (Bureau of Meteorology) (2025). Monthly rainfall: Launceston (Dunnalley).

Sorell Council (2022). Tasmanian Planning Scheme - Sorell.

DNRET (2025). Tasmanian Register of Water Licences and Dam Permits. Retrieved from Water Information Management System: https://wrt.tas.gov.au/wist/ui.

DNRET (2025). Water Assessment Tool. Available at: : https://nre.tas.gov.au/water/water-monitoring-and-assessment/water-assessment-tool-(wat)

DPI (2007, November). Land Capability of Tasmania Dataset. Department of Primary Industries, Tasmania.

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

Derose, R.C & Tobb, D.J (2001). Nugent Report – Land Capability Survey of Tasmania, Scale 1:100,000. Tasmania, Australia: Department of Primary Industries, 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

The List (2025). LISTmap. Department of Natural Resources and Environment Tasmania.

RMCG (2022). Enterprise Scale – For primary production in Tasmania. Report prepared to further the concept of the Rural Enterprise Concept for Flinders Local Provisions Schedule. Report prepared for Town Planning Solutions on behalf of Flinders Council

Appendix 1: Maps

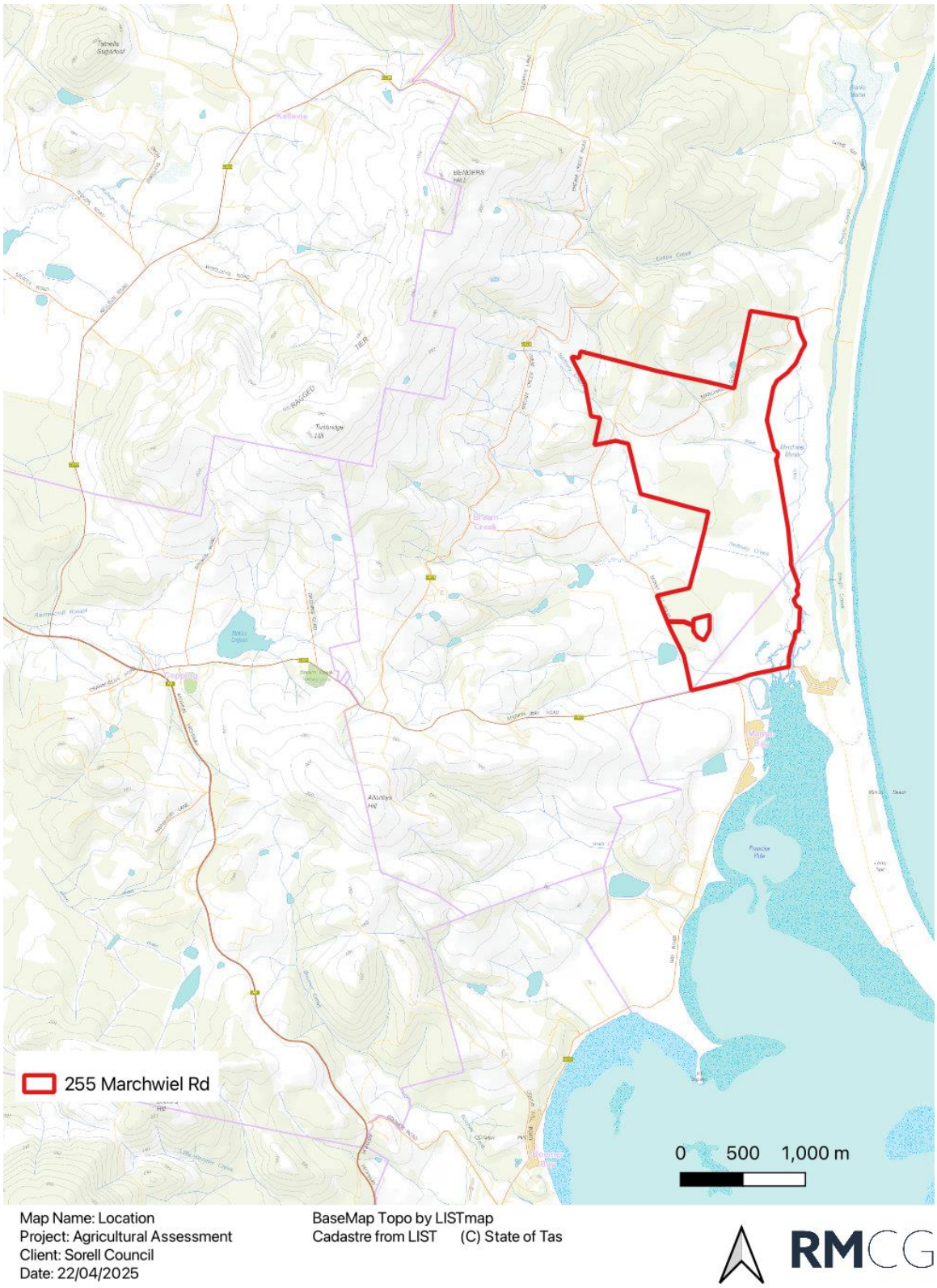


Figure A1-1: Location map

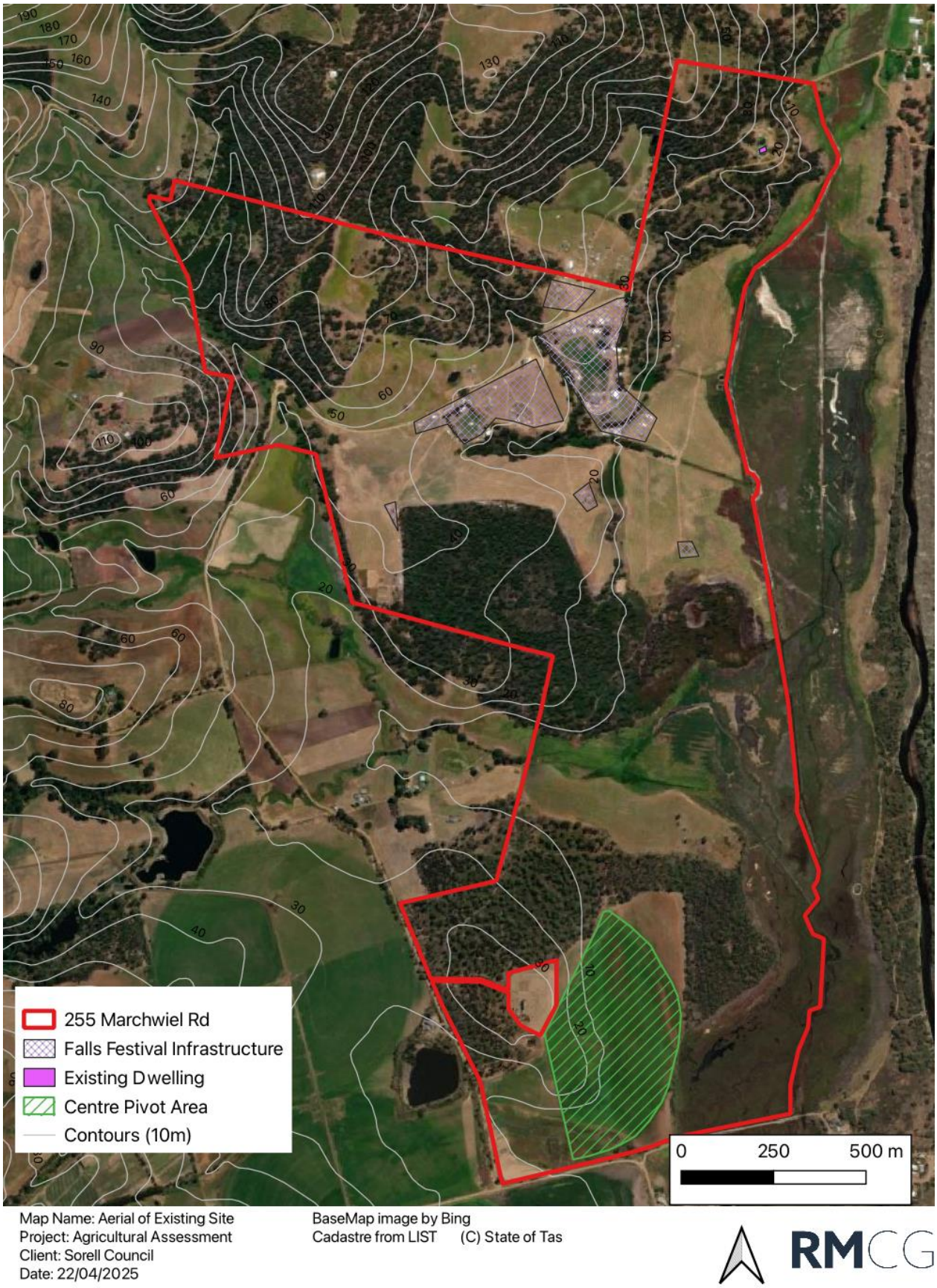


Figure A1-2: Aerial image

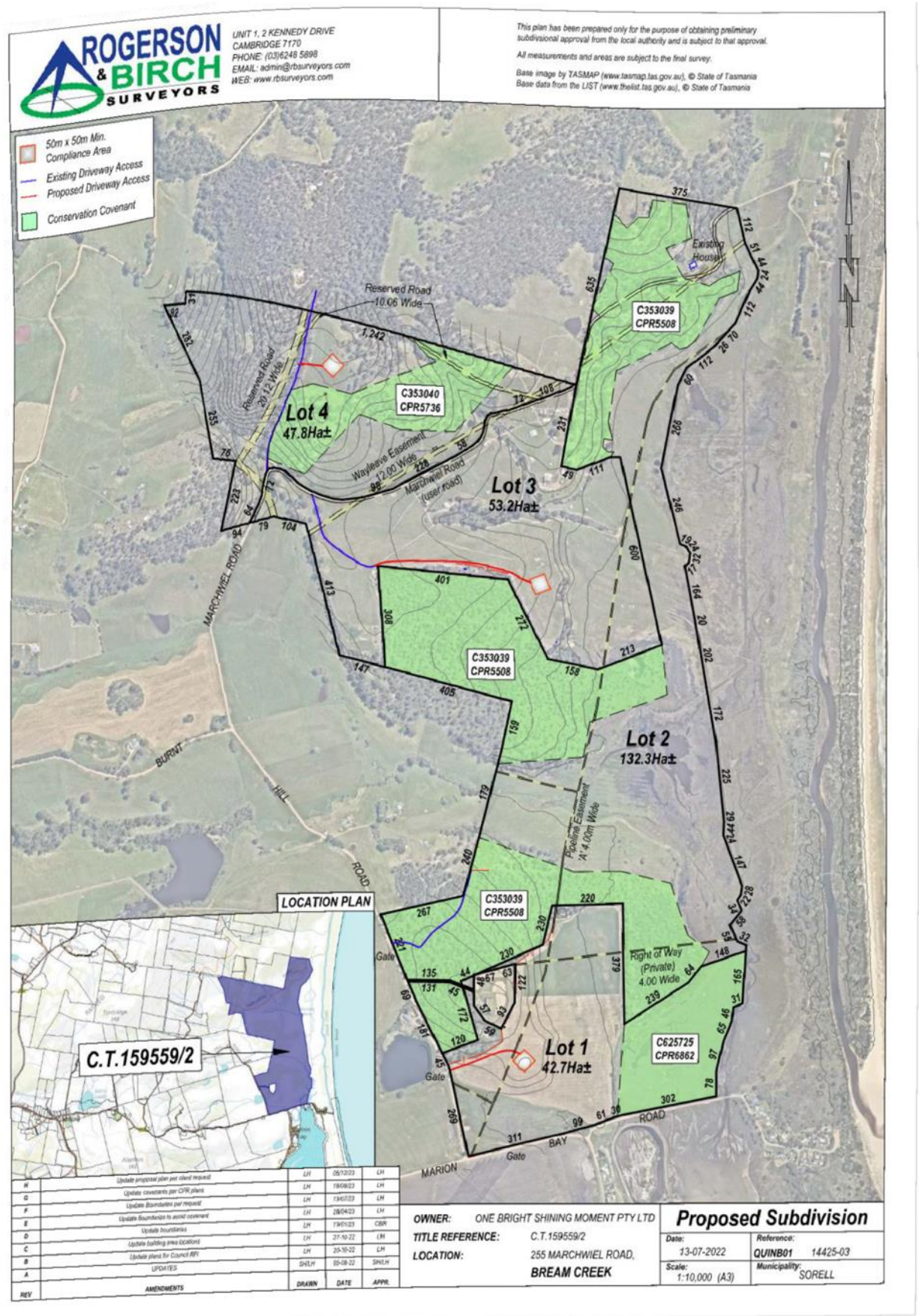


Figure A1-3: Site plan of proposed 4-lot subdivision. By Rogerson and Birch Surveyors

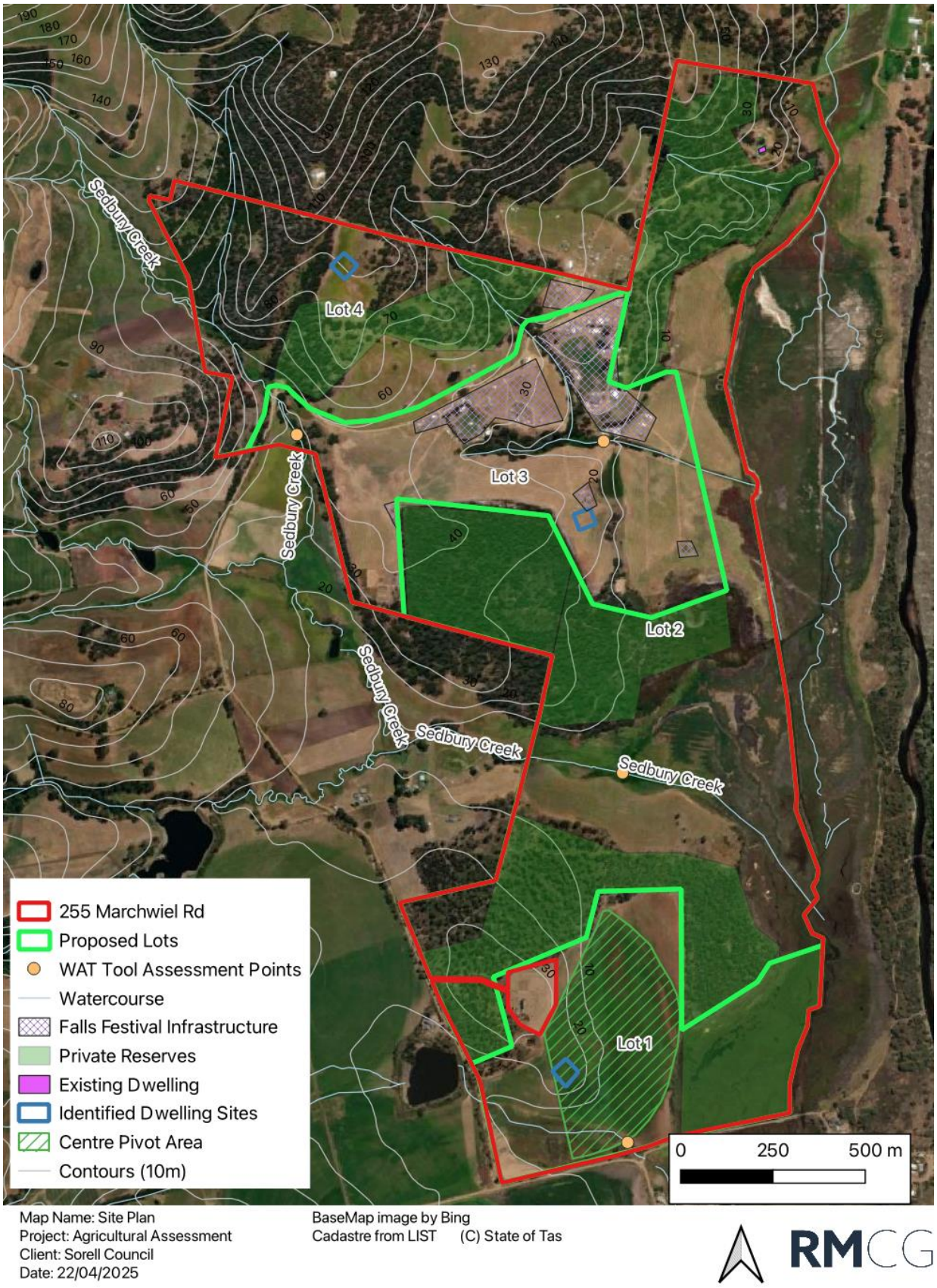


Figure A1-4: Site plan over aerial imagery identifying existing site infrastructure on the site. Locations where the WAT tool was run to identify the potential for irrigation water are also shown

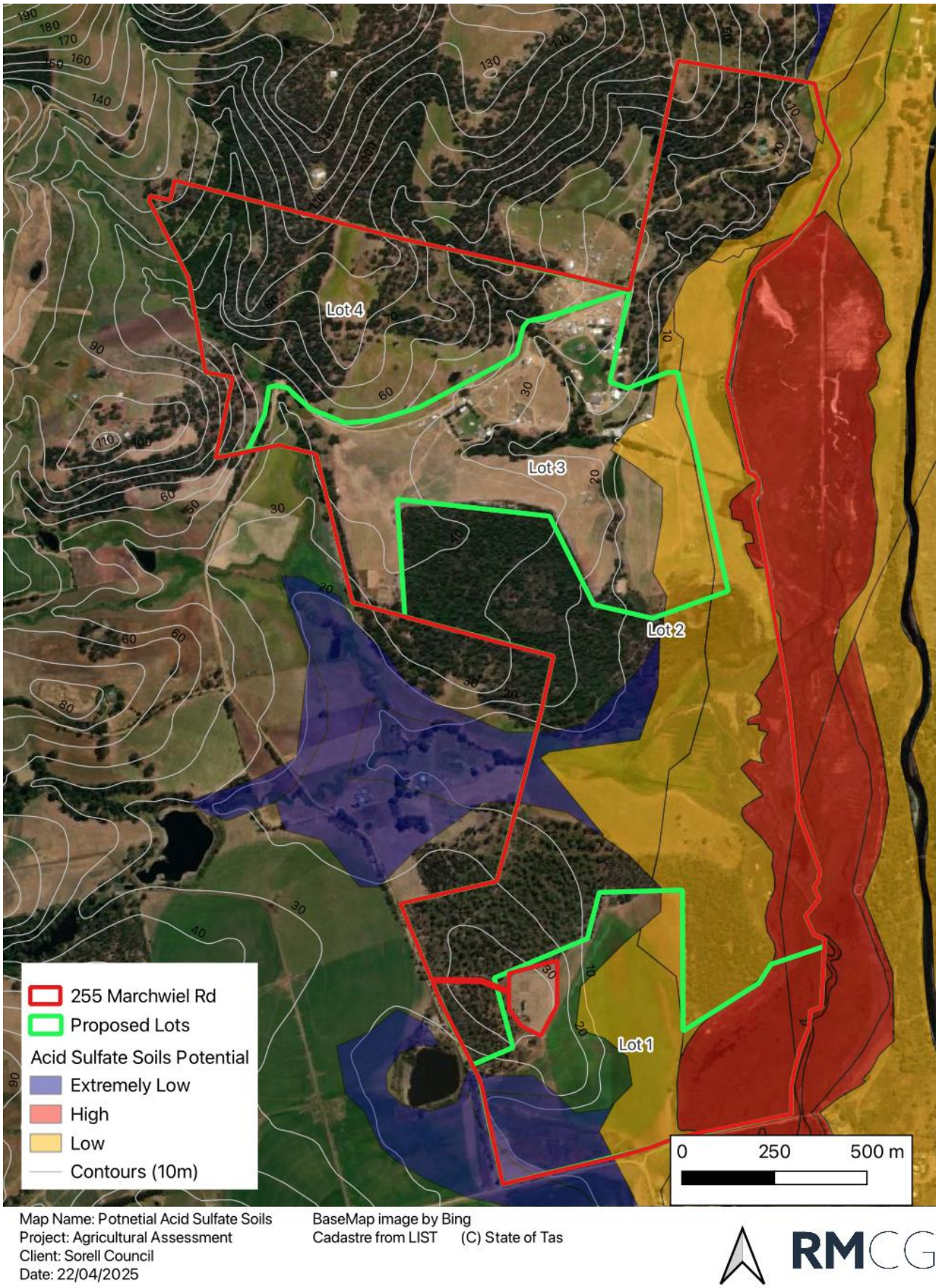


Figure A1-5: Mapped potential of acid sulfate soils on the subject site and immediate surrounds

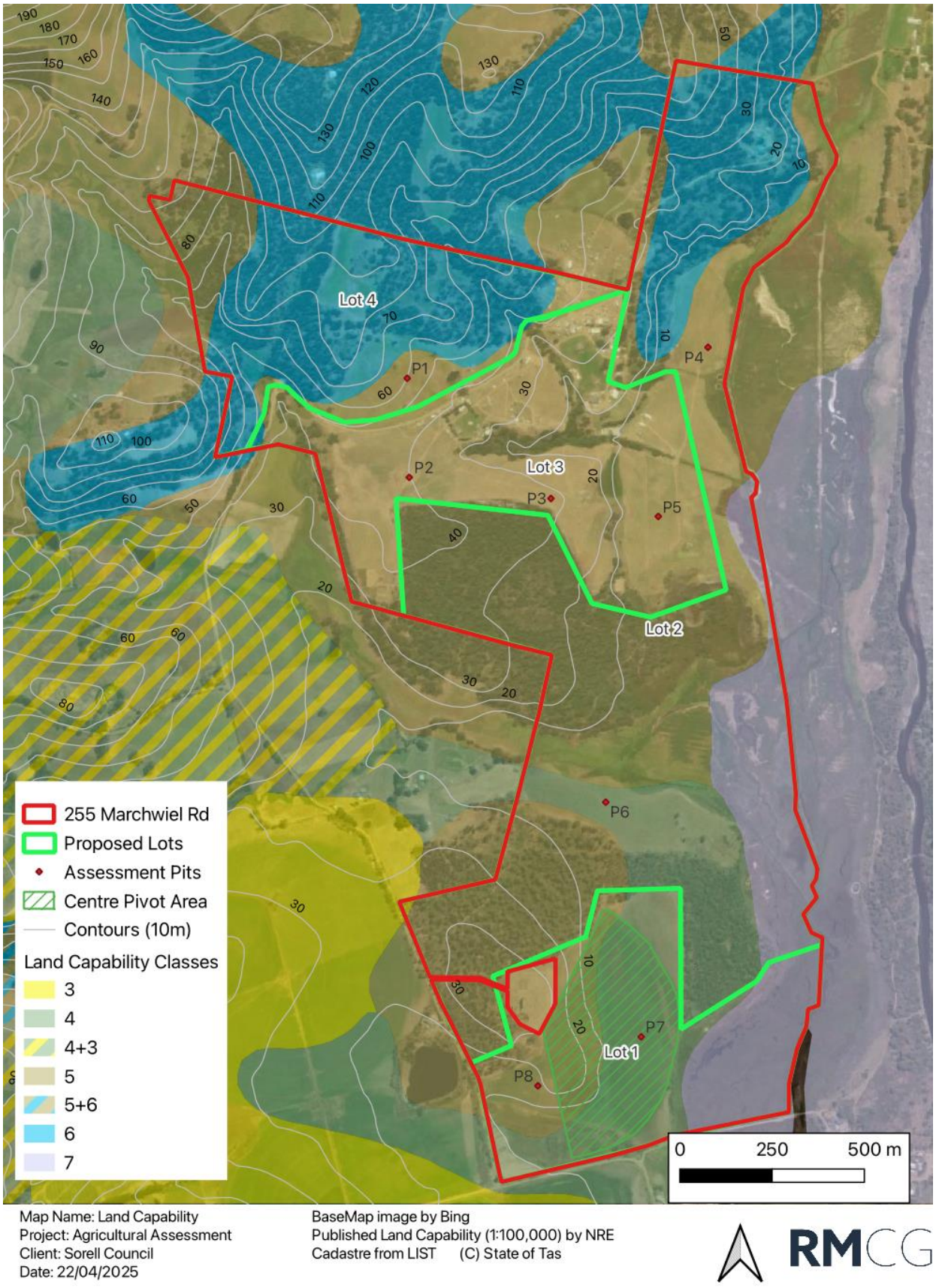


Figure A1-6: Published land capability (1:100,000) of the subject site and surrounding land. Note location of assessment pits where soils profiles were assessed (see Appendix 3)

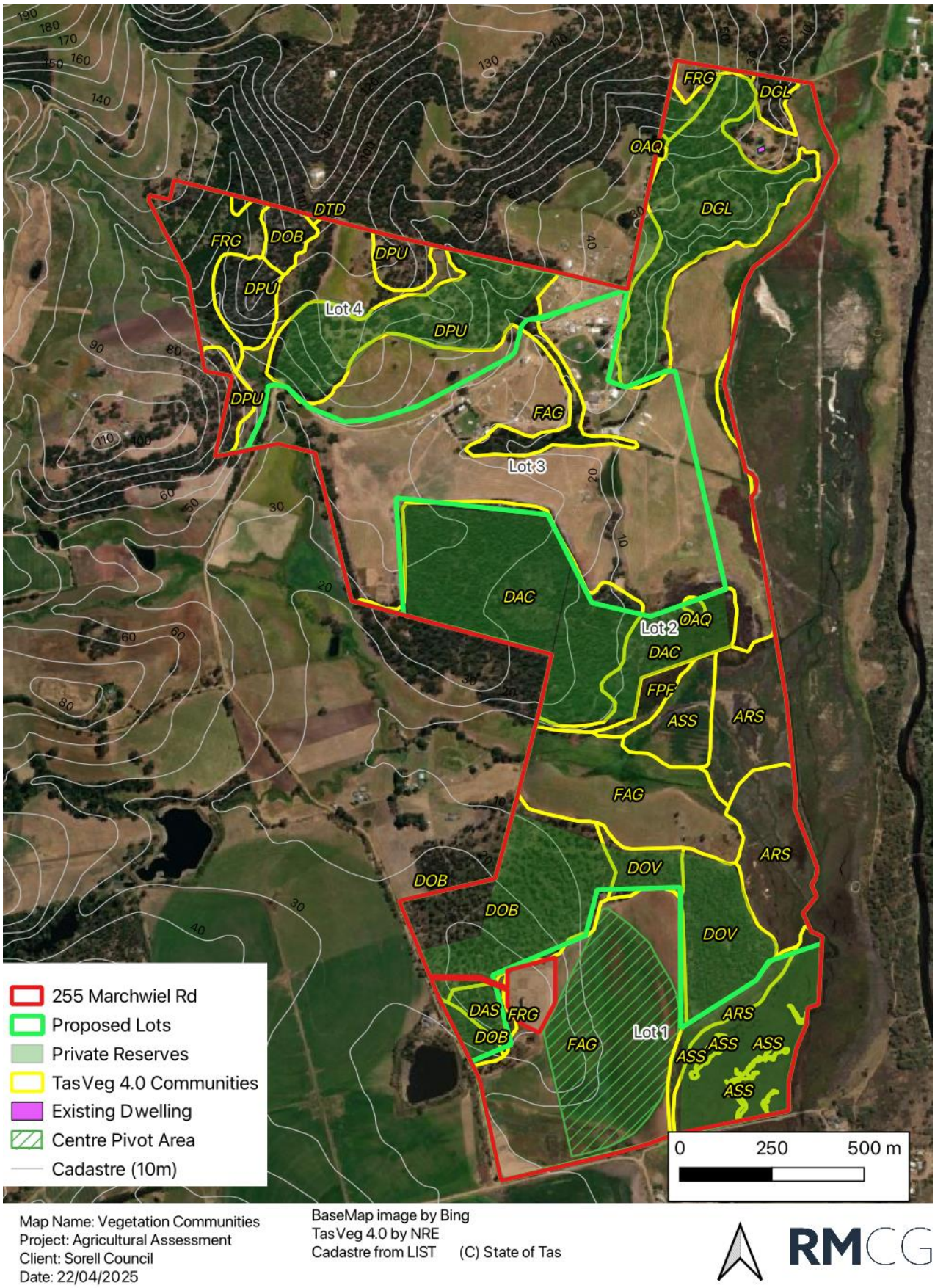


Figure A1-7: TasVeg 4.0 published vegetation communities for the subject site

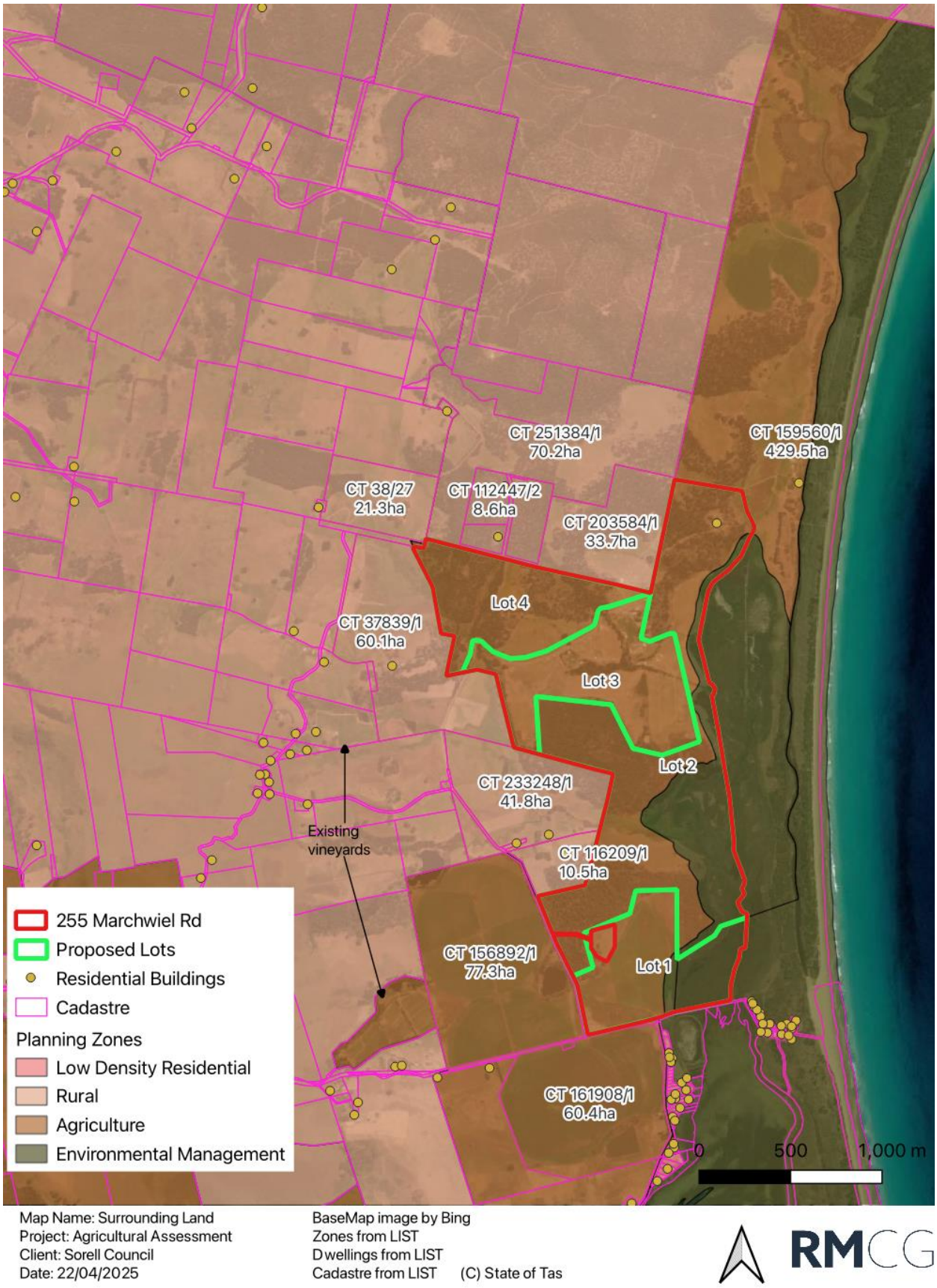


Figure A1-8: Surrounding titles and zoning

Appendix 2: Photos

Photos taken by Michael Tempest on 9 April 2025.

Figure A2-1: Evidence of pugging within Class 6 area on proposed lot 4

Figure A2-2: Unimproved pasture area on steeply sloped section on proposed Lot 4. Photo is looking south

Figure A2-3: View of pastured area on proposed Lot 3 looking east. Soils in this area are sandy and at risk of wind erosion

Figure A2-4: Example of pasture on eastern flats. Note some remnant Falls Festival infrastructure

Figure A2-5: Patch possibly affected by salinity. This patch was identified near Pit 4. Sea Barley grass was identified here

Figure A2-6: Mapped TasVeg community; saline sedgeland/rushland (ARS). Photo is taken near Pit 4 looking east. Fenceline is the subject property boundary

Figure A2-7: Pasture area in mapped Class 4 area on proposed lot 2. Pin rushes are indicator of drainage limitations. There was evidence of this area being recently grazed by cattle

Figure A2-8: Sedbury creek and surrounds on proposed Lot 2

Figure A2-9: Cattle present on irrigated pasture within proposed Lot 1

Figure A2-10: Existing centre pivot irrigator on proposed Lot 4

Appendix 3: Land capability definitions from Grose (1999)

Prime agricultural land as described in the Protection of Agricultural Land Policy 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 Protection of Agricultural Land Policy 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 4: 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 A4-1: 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	400ha	300m	20ha	Confirmation of published land capability mapping
1:25 000	25ha	75m	1.25ha	Assessments of farms, fettering or alienation of Prime Agricultural Land
1:10 000	4ha	30m	2 000m^2	Area assessments of less than 15ha
1:5 000	1ha	15m	500m^2	Site specific assessments for houses and areas less than 4ha
1:1 000	0.04ha	3m	20m^2	Shown for comparison purposes

Based on 0.25 observations per square cm of map, minimum width of mapping units is 3mm 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 600m 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 mapping at 1:100 000 scale shows the land to be a mix of Class 4 land (37.5ha), Class 5 land (156.9ha), Class 6 land (54.2ha) and Class 7 land (27.8ha). See Figure A1-6.

The land is not classed as Prime Agricultural Land under the *Protection of Agricultural Land Policy 2009* (PAL Policy). However, it is noted that there is a very small corner (0.1ha) of the title that is mapped as Class 3 land, which is considered Prime Agricultural Land under the PAL Policy. However, this is a small corner of a larger mapped area of Class 3 land that extends to the north and west. The 0.1ha area on the subject site is covered in native vegetation and is within one of the Conservation Covenant areas, hence it is not available for agricultural use and based on existing vegetation cover and land use it has been considered as part of the adjacent Class 5 on the subject site.

While onsite a Land Capability Assessment was conducted across the site at a scale of 1:25,000. This included augering 8 soils pits where soil profiles were assessed. From the assessment it was determined that the published mapping is generally correct. There would be scope to slightly realign the boundaries of the land capability classes, but not to a point that changes the over land capability of the site.

The soils profiles showed limiting factors such as weak soil structure which increases erosion risk, as well as soil drainage limitation. The Class 4 areas display imperfectly drained soils as the key limitation. For the Class 5 areas, there are a mix of limitations. In the central northern section there a sandy soils with weak structure which are at high risk of wind erosion or landslip if vegetation cover is removed, other class 5 areas display

poor drainage characteristics which included common and distinct mottling in soil profiles, evidence of pugging and abundant pin rushes which like wet soils. The Class 5 area associated with Sedbury Creek appears to be associated with the creek's floodplain. Evidence of salinity was identified near Pit 4.

Assessment pits are described below in Table A3-2 and two example pits are also shown.

Table A4-2: Land capability assessment summary table for assessment pits

PIT NO	SOIL	COMMENTS	TEXTURE	COLOUR	STRUCTURE (E)	COARSE FRAGMENT SIZE (G)		SOIL DRAINAGE (D)	SURFACE STONE (R)	SLOPE (E)	EROSION RISK€		FLOOD RISK	LAND CAPABILITY
	DEPTH (CM)					TYPE, MM	%	MOTTLE SEVERITY	PRESENCE	%	WATER	WIND		
1	0-10	Auger refusal at 50cm	Clay loam	Very dark brown	Moderate	2-60	20-35			18-28	Moderate -high	Low	Low	5de
	10-30		Medium clay	Very dark brown	Strong			Few / distinct						
	30-50		Heavy clay	Olive brown	Massive			Common / distinct						
2	0-40		Sandy loam	Very dark grey	Weak					0-5	Moderate	High	Low	5e
	40-60		Light clay to medium clay	Dark brown	Strong			Common / distinct						
3	0-50		Loamy sand	Black	Loose					0-5	Moderate	high	Low	5e
	30-50		Light clay	Dark brown	Moderate	2-60	35-50	Common / distinct						
4	0-10	Thatching layer top 2cm. Salinity indicator species identified nearby	Clay loam	Very dark grey brown	Moderate					0-5	Very low	Low	Moderate (just outside future coastal inundation area	5d
	10-60		Medium clay to heavy clay at depth	Olive brown	Massive			Common / distinct						
5	0-20		Clay loam	Very dark grey brown	Moderate					0-5	Very low	Low	Moderate (just outside future coastal inundation area	5d
	20-60		Sandy clay	Olive brown	Strong			Common / distinct						
6	0-60	Gradational profile	Clay loam to heavy clay	Brown	Strong			Common/faint from 20cm increasing to common/distinct from 55cm		0-5	Very low	Low	Moderate	4d

PIT NO	SOIL	COMMENTS	TEXTURE	COLOUR	STRUCTURE (E)	COARSE FRAGMENT SIZE (G)		SOIL DRAINAGE (D)	SURFACE STONE (R)	SLOPE (E)	EROSION RISK€		FLOOD RISK	LAND CAPABILITY
	DEPTH (CM)					TYPE, MM	%	MOTTLE SEVERITY	PRESENCE	%	WATER	WIND		
7	0-10		Clay loam	Very dark brown	Strong					0-5	Very low	Low	Low	4d, approaching 5d
	5-10		Light clay	Very dark brown	Strong			Common / faint						
	30-60		Medium clay	Dark olive brown	Strong			Common / faint, increasing to common/distinct from 40cm						
8	0-10	Broken auger, so full soil profile not feasible	Clay loam	Very dark brown	Moderate					12-18	Low	Low	Low	Unable to confirm. Mapped as Class 5

Site: 255 Marchwiel Rd

Date: 9th April 2025

Pit: 2

Flood Risk: Low

Slope: 0-5%

Morphology: vacant land

Surface condition: Unimproved Pasture.

Figure A4-1: Pit 2

Table A4-3: Profile description

DEPTH (CM)		MUNSELL COLOUR		STRUCTURE	TEXTURE	GRAVEL	MOTTLE	COMMENTS
0	40	10YR	3/1	W	SL	-	-	
40	60	10YR	3/3	S	LC to MC		5	

Duplex profile with weakly to strongly structured soils with a sandy loam at the surface over a light clay to medium clay at depth (form 40cm). The sandy loam is at high risk of wind erosion if left bare, this dictates a land capability class of 5. The common and faint mottling in the subsoils indicates the soils are imperfectly drained.

Site: 255 Marchwiel Rd

Date: 9th April 2025

Pit: 7

Flood Risk: Low

Slope: 0-5%

Morphology: vacant land

Surface condition: Unimproved Pasture.

Figure A4-2: Pit 7

Table A4-4: Profile description

DEPTH (CM)		MUNSELL COLOUR		STRUCTURE	TEXTURE	GRAVEL	MOTTLE	COMMENTS
0	10	10YR	2/2	S	CL	-	-	
10	30	10YR	2/2	S	LC	-	4	
30	60	2.5Y	3/3	S	MC	-	5	

Duplex profile with strongly structured soils with a clay loam at the surface over a light clay to medium clay at depth. Common and faint mottling was identified within the light clay layer, this increases to common and distinct mottling in the medium clay from 30cm. Mottling in the subsoils indicates the soils are imperfectly drained and dictated a land capability class of 4. This soil profile is verging on Class 5.

Appendix 5: Farm business scale characteristics

Table A5-1 summarises a number of key characteristics associated with each scale. No single characteristics is considered definitive and there will be overlap and anomalies. Table A5-1 can be used to determine the scale of the existing farm business and/or the potential scale based on the characteristics.

Table A5-1: Farm business scale characteristics

INDICATIVE CHARACTERISTICS	COMMERCIAL SCALE	SMALL SCALE PRODUCER	HOBBY SCALE	LIFESTYLE SCALE
Relevance for primary production	Dominant activity associated with the farm business is primary production. Likely to be viable. Capacity to produce sufficient profit for a family and full-time employment of one person.	Dominant activity associated with the farm business is primary production. Likely to be viable in time, potentially through cooperative arrangements, higher value products, downstream processing, complementary food, recreation, hospitality, tourism or value adding. If running livestock, then current carrying capacity is at least average DSE/ha for their area.	Land used for some primary production. Occupant/family needs to be supported by non-primary production income and/or off-farm income.	Little or no relevance for primary production.
Producer aspirations	Shows commercial intent in primary production. Have a marketing strategy. Business focused with production decisions made on economic principles.	Shows commercial intent in primary production. Have a marketing strategy. Business focused with production decisions made on economic principles. Work with other small scale producers to share marketing and resources.	Profitability is not a high priority in primary production decisions and viability cannot be demonstrated.	Profitability has very low relevance. Lifestyle is the dominant motivation for any primary production activity.
Labour (FTE) for the primary production	At least 1 FTE	Likely to be at least 0.5 FTE	Likely to be less than 0.5 FTE	
Indicative Gross Income from Primary Production	Greater than $300 000 from the farm business with additional income derived from value adding or off-farm generally comprising less than 50% of total household income.	Generally, between $40 000 and $300 000 from the farm business. Total household income is generally derived from several income streams of which primary production is one. Primary production income often comprises less than 50% of total household income.	Generally, between $10 000 - $40 000 from the farm business with additional household income comprising more than 50% of total household income.	<$10 000 from the farm business.

INDICATIVE CHARACTERISTICS	COMMERCIAL SCALE	SMALL SCALE PRODUCER	HOBBY SCALE	LIFESTYLE SCALE
Land and Water resources (general characteristics)	Total land area for mixed farming is likely to be 200ha-500ha or more, depending on Land Capability, water resources and farm business activity mix. Land area for vineyards, orchards or berries is likely to be at least 10ha-20ha and likely more. Land area generally comprising of a number of titles farmed together. Irrigation is generally necessary for smaller land areas to be viable and/or for higher value products.	For livestock producers generally 40-80ha in one or two titles. Generally, 8-40 ha in area and a single title for other ventures. Water for irrigation likely, but it depends on the farm business activity. The land and/or water resources associated with the farm business may have the capacity to contribute to a 'commercial scale' farm business depending on the degree of constraint.	Generally, 8-40 ha in area and a single title. Water for irrigation less likely, but possible, depending on location and cost of supply. The land and/or water resources associated with the title may have the capacity to contribute to a 'commercial scale' farm business depending on the degree of constraint.	Generally, 1-8 ha in area. Land Capability variable. Water for irrigation highly unlikely. No capacity to contribute to a commercial scale farm business due to constraining factors.
Connectivity	Few constraints likely. Likely to be well connected to other unconstrained titles, Expansion and/or intensification feasible.	Some constraints likely. Residences on majority of adjacent titles. Low connectivity to unconstrained titles.	Some constraints likely. Residences on majority of adjacent titles. Low connectivity to unconstrained titles.	Moderate to significant constraints likely. Residences on majority of adjacent titles. Little or no connectivity to unconstrained titles.
Registrations	Are recognised by ATO as Primary Producer. Livestock producers will have a PIC and be registered for NLIS and LPA. All producers are likely to be registered for GST. Would be part of QA schemes, depending on products and markets.	Are recognised by ATO as a Primary Producer. Livestock producers will have a PIC and be registered for NLIS and LPA. All producers are likely to be registered for GST. Would be part of QA schemes, depending on products and markets.	May or may not be recognised by ATO as primary producer. Livestock producers will have a PIC and be registered for NLIS and LPA; may be registered for GST and may be part of any QA schemes.	Are not recognised by ATO as primary producer. May not have a PIC or be registered for NLIS; are not registered for GST and unlikely to be part of any QA schemes.
Role of a dwelling	Dwelling is subservient to the primary production.	Dwelling is convenient/preferred to facilitate improved productivity. Dwelling assists with security.	Dwelling is convenient/preferred for lifestyle reasons.	Dwelling is the dominant activity on the title.

Appendix 6: Characteristics of a commercial scale farm business activity

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 4ha of cherries is likely to need additional farming activities to be viable.

Table A6-1: Resource requirements for various land uses

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	10–15ha min	5–10ha min	10ha min	10ha min	2–4ha	2–5ha	2–4ha min	10–20ha 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.				4–10ha	10–30ha	5–10ha	TBC
Irrigation water	Not essential	Not essential	Preferable 4–6ML/ha.	Not necessary	Mostly necessary, 2–3 ML/ha	Necessary, 2–6ML/ha	Necessary, 2–6ML/ha	Necessary, 1–3ML/ha	Necessary, 2–3ML/ha	Necessary, small quantity	Not required

RESOURCE	LIVESTOCK			BROAD ACRE CROPS		VEGETABLES		BERRIES	ORCHARD FRUITS & VINES	NURSERIES & CUT FLOWERS	FORESTRY PLANTATIONS
	SHEEP	CATTLE	DAIRY	CEREALS	OTHERS	PROCESSED	FRESH MARKET				
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

RESOURCE	LIVESTOCK			BROAD ACRE CROPS		VEGETABLES		BERRIES	ORCHARD FRUITS & VINES	NURSERIES & CUT FLOWERS	FORESTRY PLANTATIONS
	SHEEP	CATTLE	DAIRY	CEREALS	OTHERS	PROCESSED	FRESH MARKET				
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 333ha for a livestock farm business activity, 40ha for dairy, 133ha for cereals and other broadacre crops, 25ha for processed and fresh market vegetable, 10ha 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 100ha as the minimum farm area for livestock
3. Kynetec (March 2021) Farm Intel Information brochure uses 75ha as the minimum farm area for dairy.

This report has been prepared by:

RM Consulting Group Pty Ltd trading RMCG

Level 2, 102-104 Cameron Street, Launceston Tasmania 7250

rmcg.com.au — ABN 73 613 135 247

Offices in Victoria, Tasmania and NSW

Key contact

Michael Tempest

0467 452 155 — michaelt@rmcg.com.au

Document review and authorisation

Project Number: #2686

Doc Version	Final/Draft	Date	Author	Project Director review	BST QA review	Release approved by	Issued to
1.0	Final	29/04/25	M. Tempest	D. Poole	L. McKenzie	D. Poole	Sorell Council

RMCG

#2686

29 April 2025

Shane Wells
Manager Planning
Sorell Council
Via email: Shane.Wells@sorell.tas.gov.au

Dear Shane

Peer review of a Land Capability Assessment for a Four Lot Subdivision

We are writing in response to your request to conduct a peer review of a Land Capability Assessment Report ("the Report") of 255 Marchwiel Rd, Bream Creek (CT 159559/2). The Report supports a four-lot subdivision of a 276.7 ha title in the Agriculture Zone and Environmental Management Zone.

We have reviewed the Report by GES dated September 2024. It is our understanding this is the most recent version of the Report and was updated in response to a Request for Further Information (RFI) from Sorell Council dated 21 August 2024. We have also reviewed relevant sections of the associated Development Planning Report (the Planning Report), dated May 2024 by MC Planners and associated further information provided in relevant RFIs. This was to better inform ourselves as to what is exactly proposed on the site. It is also noted that RMCG conducted its own site visit and Land Capability Assessment on the 9th of April 2025.

The intention is for this peer review to be read in conjunction with the existing Report.

We have summarised key points at the end. If you would like to discuss any of the points identified in this review, please do not hesitate to contact me.

Kind regards,

Michael Tempest
SENIOR CONSULTANT

BACKGROUND

The proponents of the development, Secret Sounds Group Pty Ltd, are proposing to subdivide the existing title at 255 Marchwiel Rd into four lots. The title is currently 276.7 ha in area and is predominately in the Agriculture Zone, with areas also in the Environmental Management Zone. The proposed site plan identified four lots at the following sizes:

- Lot 1 – 42.7 ha
- Lot 2 – 132.3 ha
- Lot 3 – 53.2 ha
- Lot 4 – 47.8 ha

PEER REVIEW OF AGRICULTURAL ASSESSMENT REPORT

We have undertaken a peer review of the Land Capability Assessment Report ("the Report") of 255 Marchwiel Rd, Bream Creek, by following the structure of the Report in the following sections and providing comment where relevant.

EXECUTIVE SUMMARY

Lot 1 only is mentioned as being Class 4 land. However, there is also identified Class 4 land on Lot 2 which is confirmed as such in Section 3.1 of the Report.

It is stated that the "*capability of the land is suited for continued agricultural use, mainly grazing and occasional cropping. This providing suitable land management techniques are utilised to maintain the soil resource*". In the next paragraph the report states "*the creation of smaller more management titles will allow for further investment in agriculture on each title. In particular the small titles have areas suitable to vineyard development, similar in scale to existing vineyards in the local area*". These statements appear to contradict each other as to the ideal agricultural use on the site.

FOUNDING STATEMENT

No comment.

SECTION 1 - AGRICULTURAL REPORT SUMMARY

1.1 INTRODUCTION

No comment.

1.2 PLANNING SCHEME – AGRICULTURE ZONE

Agreed that the proposed development does not comply with the Acceptable Solutions of Clause 25.1 of the Tasmanian Planning Scheme – Sorell (the Planning Scheme). When reviewing the associated Performance Criteria, P1 is the correct one that this proposal in its current form needs to demonstrate compliance with.

The comments against the relevant Performance Criteria do not adequately address each aspect of P1. However, it is noted that there is further justification provided in Section 5, hence further comments are considered in a later section of this review. It is noted that it is stated that there is no irrigation infrastructure on the site, however, there is a 18ha quarter centre pivot irrigator located in the southern section of the subject title (see Appendix 1).

SECTION 2 – AGRICULTURAL ASSESSMENT

2.1 SITE INFORMATION

It is stated that soils profile were assessed, however no soil profiles are provided throughout the report. There is an existing dwelling in the most north eastern section of the title, which is not mentioned in the Report. There is also remaining infrastructure, including stages in the northern half of the title from when the site was utilised for Falls Festival, some of this is shown in Figure 10.

2.2 TOPOGRAPHY

Agree with topographic description. No further comments.

2.3 CLIMATE

Agree with climate description. No further comments.

2.4 GEOLOGY

Agree with geology description. No further comments.

SECTION 3 – LAND CAPABILITY CLASSES ASSESSMENT

Agree with description of the Tasmanian land capability system, as well as the description of each land capability class.

In the third paragraph it is stated that the site classifies as Class 5 and Class 6, however there is clearly an area of Class 4 shown on Figure 16. A Description of Class 4 is given in the next paragraph, and Lots 1 and 2 are described as Class 4 in in Section 3.1. Hence, this is assumed to be an omission only.

Figure 16 identifies proposed new driveways and proposed dwellings on the three proposed lots that do not have an existing dwelling. This suggests there is an intention for dwelling approvals to be sought for each lot that does not have an existing dwelling. It would have been helpful if this map also showed the existing dwelling in the northern section of proposed Lot 2. The proposed dwelling site on Lot 1 is within the footprint of the existing centre pivot (see Appendix 1 of this report).

This section appears to be solely based off the published land capability assessment. This suggests that as part of the site visit a land capability assessment was not conducted. It is also noted that the report states that published land capability was modelled, however as per the survey method described in the relevant report (Nugent report – Land Capability Survey Tasmania), field assessments were also conducted.

It is noted that RMCG conducted a land capability assessment when on site and concluded that the published land capability is generally correct at a scale of 1:25,000 (see RMCG Report).

3.1 AGRICULTURAL USE

Agree that there are land capability limitations across the site. We also agree that there is no 'prime agricultural land' associated with property as per the Protection of Agricultural land Policy 2009 (PAL Policy) definition[1]. However, in the first paragraph it again states that the land capability of the site is class 5 and 6, however later in the section it identified class 4 land. It is stated that "*the agricultural potential of the site and surroundings is therefore limited*". However, it is noted that there is a section on the property that is actively irrigated, there is also mapped Class 3 land (prime ag land) adjacent to the west, and the adjacent property to the west and northeast are both irrigated, with a very small part of the subject title (0.1ha) also mapped as Class 3. The

[1] Prime agricultural land is land that has a land capability class of 1-3.

report then states "*the cleared areas of the properties are therefore only suited for pastoral use (i.e. grazing) however there is still moderate to high limitations to this land use'*. It is assumed that "properties" is meant to be "property", as the adjacent Class 3 land is likely to be suited to more intensive activities, as are all adjacent irrigated areas with careful management. For the subject site, we agree that pastoral use generally appears to be the most suitable land use for the site. The 0.1ha Class 3 area on the subject site is covered in native vegetation and is within one of the Conservation Covenant areas, hence it is not available for agricultural use and based on existing vegetation cover and land use we have considered it as part of the adjacent Class 5 land on the subject site.

'*The north side of the proposed subdivision is identified as Class 6 land*'. It is assumed this is Lot 4 and the northern section of Lot 2 as per the mapping. It is noted that there are small sections of Lot 4 that are mapped as Class 5 land, however in general the lot could be considered Class 6 land. We don't completely agree with the report's assertion that "*these areas are not suited for agriculture due to steep slopes and the existing native vegetation to protect the soil resource*". There are areas of pasture within the Class 6 area where there is evidence of grazing occurring, albeit this needs to be managed with low stocking rates and at targeted times as part of a wider rotational regime. The report then goes on to state '*the property therefore has only limited agricultural potential (limited grazing only) and the low carrying capacity of the land coupled with limited land area means that a viable agricultural enterprise cannot be sustained on this site*". We agree that the property on its own would not support a viable[2] agricultural enterprise. In our opinion this land is best farmed in conjunction with adjacent land as part of a grazing enterprise.

It is stated that "*lots 1 & 3 have proposed developments within Class 5 land*". We assume this is referring to the identified house sites on the subdivision site plan and Figure 16 of the Report. Our understanding is that proposed dwellings did not form part of the Development Application, however it does raise questions as to the future intention of the site. We agree that the Class 5 sites where the development sites are located are unsuited to cropping due to limitations of slope and erosion hazard. We agree that the slope "*limits the suitability for grazing with low grazing pressure and soil conservation measures required to maintain vegetative cover*". It is then stated that "*currently this land only receives limited management as it can only handle lower stock pressure either requiring smaller stock mob size or intensive pasture monitoring to minimise overgrazing*". Given that part of the Class 5 land on Lot 1 is within an existing centre pivot area which was observed to be well stocked during the site visit, it is assumed that intensive pasture monitoring is occurring in this area. There is a question mark as to whether this paragraph was actually meant to be discussing lots 3 and 4 rather than lots 1 and 3.

Class 4 land is identified within the southern portion of the site on Lots 1 & 2. This area is leased to the adjacent agricultural enterprise for grazing and fodder crop production. The report states "the land is limited by a lack of significant water storage and lack of any irrigation rights". While this is correct, the Report makes no mention of the existing centre pivot on the site. It's assumed this pivot is operated by the adjacent agricultural enterprise and utilises irrigation water they have available on their property. This demonstrates a strong link between the two sites. We agree the underlying soils quality of the Class 4 areas supports ongoing grazing and fodder cropping.

There is also no mention of the pipeline that traverses the property (as shown on the site plan) which provides the adjacent property to the south west access to irrigation water located to the north of the subject title that they have rights to.

Agreed that the saltmarsh wetland that is mapped as Class 7 land is not suitable for agricultural use.

[2] RMCG's definition of a 'viable' enterprise is an enterprise that can support at least one full time equivalent employee. In our opinion it is questionable as to whether an enterprise with a gross income of less than $350k could be considered 'viable'. The subject report does not provide a definition of 'viable' for RMCG to consider.

SECTION 4 – AGRICULTURAL MANAGEMENT PLAN

Generally, agree with the discussion in this section. The key comment here is “provided irrigation water is available”. The only irrigation water currently available appears to be for the centre pivot irrigator and water is sourced from the adjacent farm.

Through review of available water from NRE’s Water Assessment Tool, there appears to be winter-take surface water available from Sedbury Creek and a northern drainage line which could potentially service Lots 2, 3 and 4 under the currently proposal. This would require sufficient approvals and construction of storage dams for irrigation during the summer period. There does not appear to be any water of significant volume available for Lot 1 associated with site. Refer to the RMCG Agriculture report for further details around water availability. It is noted that the Report did not investigate whether there is any water available.

4.1 CURRENT ISSUE IDENTIFICATION

Generally, we agree with identified limits and priorities. However, the entire eastern flats of the site are mapped on LISTmap as having very low to high acid sulfate soil potential as well as moderate to high salinity potential. We do not agree with the comments around irrigation management. There is an existing centre pivot irrigator onsite, which is utilising water from the neighbouring property as there are no water rights associated with the subject site[3].

4.2 SOIL MANAGEMENT ACTIONS

Soils management actions are all logical and will assist with improving the site’s productivity.

4.2.1 MAINTAIN/IMPROVE SOIL STRUCTURE AND SOIL ORGANIC MATTER LEVELS

Agree with management actions. No comments

4.2.2 AVOID THE RISK OF EROSION

Agree with management actions. No comments

4.2.3 AVOID THE RISK IN SALINITY

Agree with management actions. No comments

4.2.4 MAINTAIN OR IMPROVE DRAINAGE

Agree with management actions. No comments

4.2.5 MANAGE NUTRIENT INPUTS

Agree with management actions. No comments

COMMENT

We agree with all management actions, as they will all assist in improving the agricultural productivity of the site. However, in our opinion they do not provide justification to support the proposed subdivision, rather provide excellent advice for improving the productivity of the site in its current state.

[3] Based on mapped water licences available at: https://maps.thelist.tas.gov.au, accessed 15 April 2025

SECTION 5 – PLANNING CONTEXT FOR FUTURE AGRICULTURAL MANAGEMENT OF THE PROPOSED LOTS

We do not agree that the agricultural assessment has demonstrated that each of the proposed lots can support a viable agricultural use in the future, even with adequate management and soil conservation measures. The identified management controls and soil conversion measures will assist with increasing the productivity of the entire existing title, however it will not facilitate viability of individual lots. As identified in Section 4 the optimal agricultural enterprise for this site is mixed grazing with possible occasional cropping in some select areas. For such an enterprise to be viable, larger land areas are required. Given the constraints on areas of this title, where stock need to be excluded during wet periods, or where vegetation cover needs to be maintained to avoid soil erosion, a larger area is preferable to enable adequate stock rotation.

The Report also states '*the assignment of lot boundaries plus the size and shape of the lots allows for future productive agricultural use on each of the lots*". However, in Section 3.1 the report states:

"*The north side of the proposed subdivision is classified as land Class 6. These areas are not suited for agriculture due steep slope and as a result the majority of the site is covered in native forest vegetation to protect the soil resource. The property therefore has only limited agricultural potential (limited grazing only) and the low carrying capacity of the land coupled with limited land area means that a viable agricultural enterprise cannot be sustained on this site*".

Given almost all of Lot 4 is mapped as Class 6 land, we do not believe this lot could be utilised for a viable agricultural enterprise on its own.

When looking at existing pasture on each lot there appears to be:

- Lot 1 – 28ha
- Lot 2 – 32ha
- Lot 3 – 50ha (including 6.6ha with falls festival infrastructure)
- Lot 4 – 20ha.

This amount of pasture on each lot is based on TasVeg 4.0 mapping and is not sufficient for an individual viable grazing enterprise, hence the need to invest in higher value enterprises if the subdivision was to occur. Splitting the existing pastured areas will diminish the existing agricultural potential of the site significantly. It is also noted that the proposed lot alignment splits two existing paddocks between Lots 2 and 3.

CLAUSE 25.1.P1

i - Not materially diminishing the agricultural productivity of the of the land

It is stated that the subdivision will not diminish the inherent agricultural capability of the land. However, as each lot is sold to individual owners it will limit the ability for the land to continue to be farmed as a grazing enterprise, which the land is suited to. The lot layout also separates the mapped Class 4 land onto two lots, which is inherently splitting up the most productive land on the title. Given that maps show proposed future dwellings, there is a risk that the proposed subdivision will facilitate more dwellings being constructed, even with the Agriculture Zone provisions still being in place.

The Report discusses the potential for investment in higher value agricultural enterprises such as vineyards, small fruits, and specialist goat/sheep diary. It also mentions that there are two nearby vineyards where such investment has occurred. There are two key differences between the two nearby vineyards and this site:

1. access to irrigation water, and
2. land capability.

Based on water licence information available on LISTmap, Bream Creek Vineyard has access to 20ML of irrigation water, this irrigates approximately 4.5 ha of vines. Cape Bernier Vineyard has 10ML of irrigation water available to irrigate 3.9 ha of vines. The report provides no information as to how the subject site could access irrigation water to assist with establishing a horticultural enterprise that will require irrigation water. Furthermore, the two vineyards are located on mapped Class 3 land or Class 4+3 land, hence they are on located much more productive land.

A goat/sheep dairy enterprise would also require access to irrigation water to ensure adequate pasture growth for milk production. To be viable it is also likely that a high stocking rate would be required, this has the potential to impact on the sites soil limitations and contradicts recommendations in Section 4 of the Report.

Hence, in our opinion the report does not adequately demonstrate the agricultural productivity will not be diminished. There is reliance on future lot owners investing heavily in alternative agricultural enterprises without adequate demonstration that such ventures are feasible and have the required resources to be established. There is no reason why capital investment in higher value agricultural enterprises (if water is available) could not occur without the subdivision and be farmed in conjunction with the predominately suited land use (grazing).

ii – The capacity of the new lots for productive agricultural use

The report states that "*each of the lots will allow for future productive agricultural use*". However, given Lot 4 is predominately mapped as Class 6 land, it is questionable how a productive agricultural use could be established on this lot in isolation. The establishment of higher value agricultural uses on each lot is reliant on the availability on future lot owners' capital investment as well as sourcing irrigation water and being able to construct adequate water storage.

The proposed subdivision does provide an avenue for Lot 1 to be purchased by the adjacent dairy farm which has established a centre pivot on the site. However, it also splits off the dryland grazing areas of the site that are also utilised by the dairy farm.

iii – any topographical constraints to agricultural use; and

Agree with assessment. East and northern slopes appear to have scope for vines if there is sufficient irrigation water. However, the subdivision is not required for such an enterprise to be established. Advice would also be required from a specialist viticulturalist to confirm the viability of such a proposal given soil limitations.

iv – current irrigation practices and the potential for irrigation

The Report incorrectly states there is no irrigation infrastructure on the site. There is an 18ha quarter centre pivot in the southern section of the site. It appears that this pivot utilises water from the adjacent dairy farm that leases this area, as well as the other grazing areas. There is also a pipeline that traverses the site providing the adjacent dairy farm access to an irrigation water resource to the north of the subject property that they have rights to.

The report indicates there are potential dam sites on all lots for expansion of dams, however this is not discussed before in the report and there is no locations identified for these dams. There is also no evidence around availability of water resource to fill dams to support irrigation.

SECTION 6 – CONCLUSION

Rather than addressing the points made in this section we have summarised our key points below.

KEY POINTS

- The Report classifies land capability based on available mapping. There are inconsistencies across the Report describing land capability classes associated with the site as well as individual proposed lots.
- The Agricultural Management Plan section provides excellent advice for managing the site, but does not appear to provide specific advice as to how the subdivision aligns with the identified best use (mixed grazing and occasional cropping).
- The Report suggests that the subdivision will facilitate investment in higher value agricultural enterprises such as vineyards. However, it does not detail the potential for accessing and storing irrigation water on the site, which would be integral for the development of such higher value agricultural enterprises. It's also relying on future lot owners to invest in such ventures.
- Lot 4 appears to have negligible agricultural potential as an individual lot.
- There is no mention of the existing dwelling on the site.
- The existing centre pivot irrigator and pipeline is not mentioned in the report and it is stated that there is not existing irrigation infrastructure which is incorrect.

APPENDIX 1 – SITE MAP

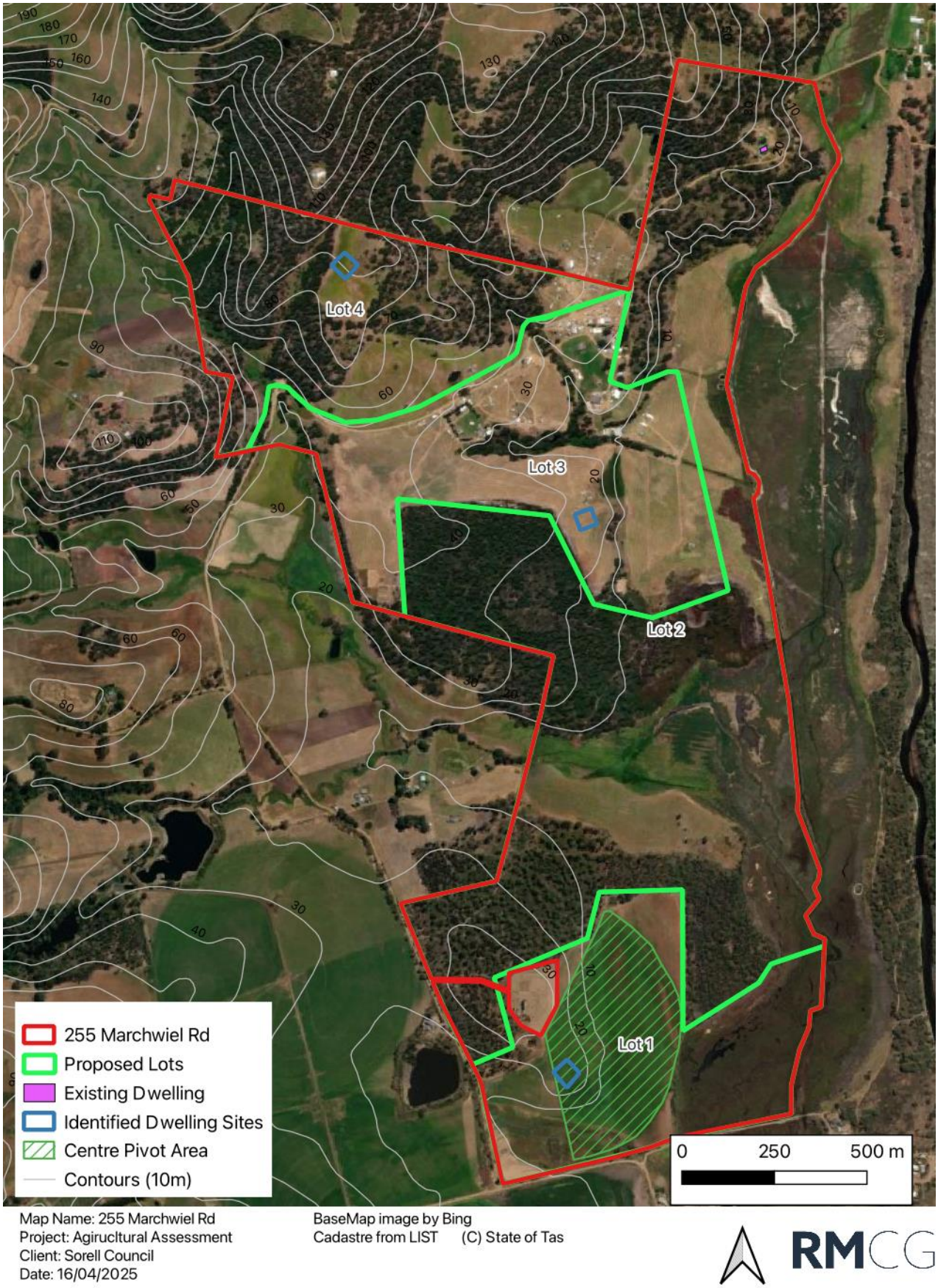


Figure A1-1: Site map

This report has been prepared by:

RM Consulting Group Pty Ltd trading as RMCG

Level 2, 102-104 Cameron Street, Launceston Tasmania 7250

(03) 6334 1033 — rmcg.com.au — ABN 73 613 135 247

Offices in Victoria, Tasmania and NSW

Key RMCG contact

Michael Tempest

0467 452 155 — michaelt@rmcg.com.au

Document review and authorisation

Project Number: #2686

Doc Version	Final/Draft	Date	Author	PD Review	BST Review	Release approved by	Issued to
1.0	Final	29/4/2025	M. Tempest	D. Poole	L. McKenzie	D. Poole	Sorell Council