

Casino Biohub

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LMS Energy Company Snapshot

Australia's largest and most successful landfill biogas company



66 biogas projects
across Australia,
NZ and the US



Power 250,000 people
per day with renewable
energy



Abates more than **5m**
tonnes of CO₂e a year



Equivalent to taking
1.6 million cars off
the road every year



Equivalent to
planting **68 million**
trees

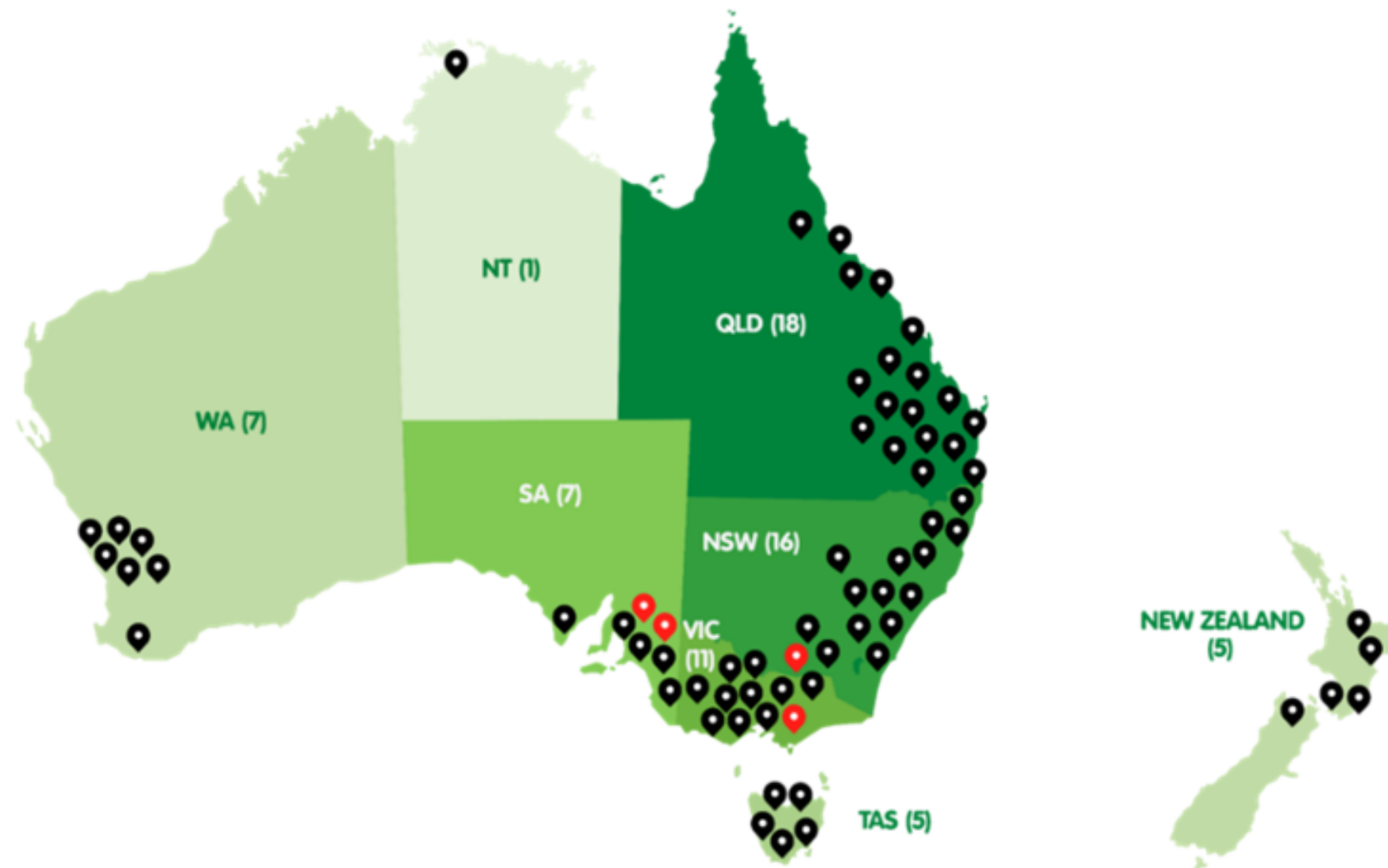


350 dedicated
biogas
employees

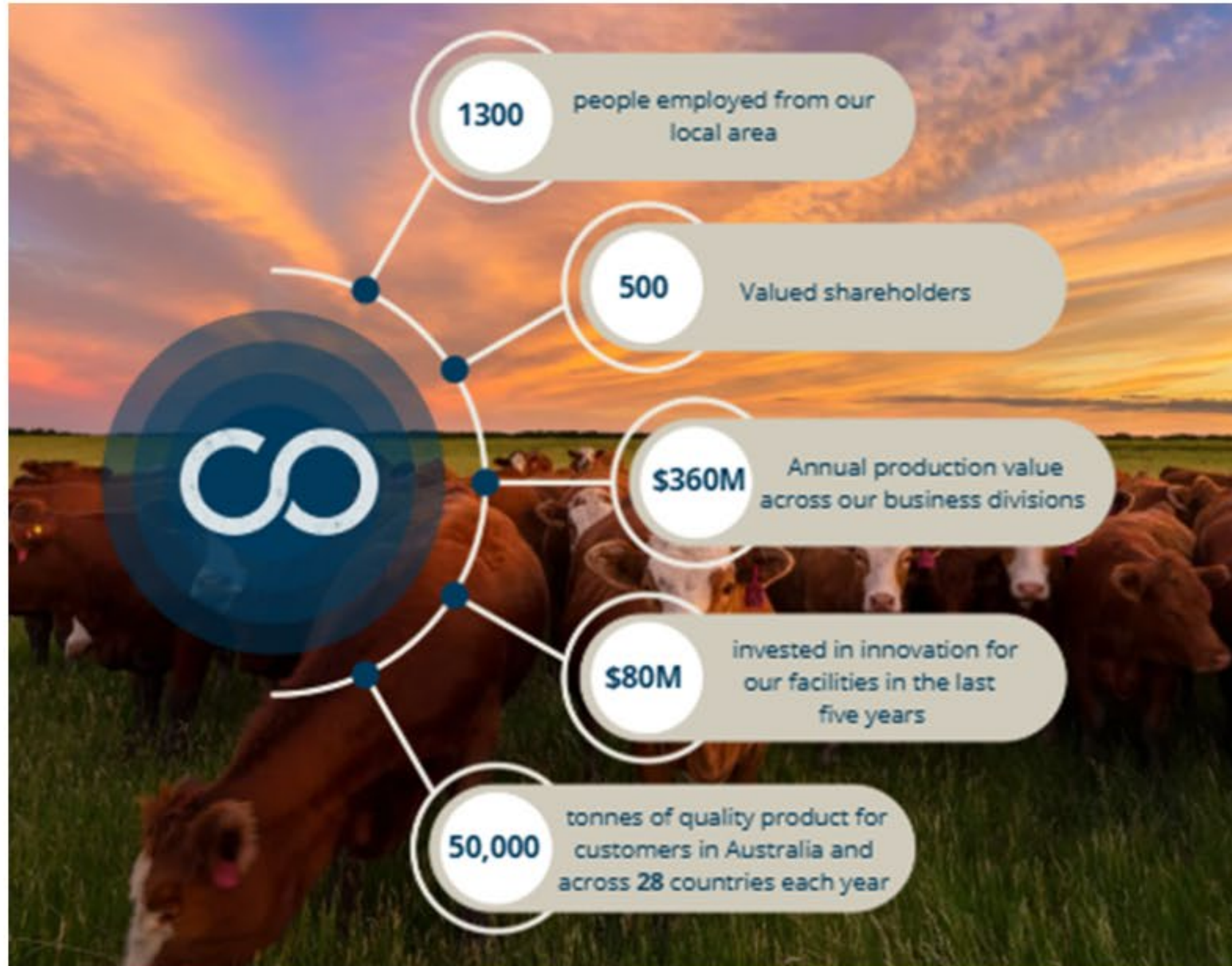


In-house **Australian**
manufacturing

36 BIOENERGY FACILITIES
4 SOLAR PROJECTS
30 FLARING PROJECTS
610,000 MWh GENERATED per annum
115,000 HOMES POWERED per annum



Casino Food Company (CFC)



- Established in 1933
- Provides a diverse offering of world-class, sustainable processing through its multiple facilities in the Northern Rivers of New South Wales, Australia.
- CFC prioritises sustainability across its four core processing operations:



Food Company

Our Casino facility provides customers with an efficient beef and veal processing facility, using our highly trained workforce and specialised equipment in order to service all major domestic and global markets.



Booyong Pork

Located at Booyong near Byron Bay, our pork processing facility specialises in the manufacture and distribution of the finest quality pork and value-added pork products to local and global markets.



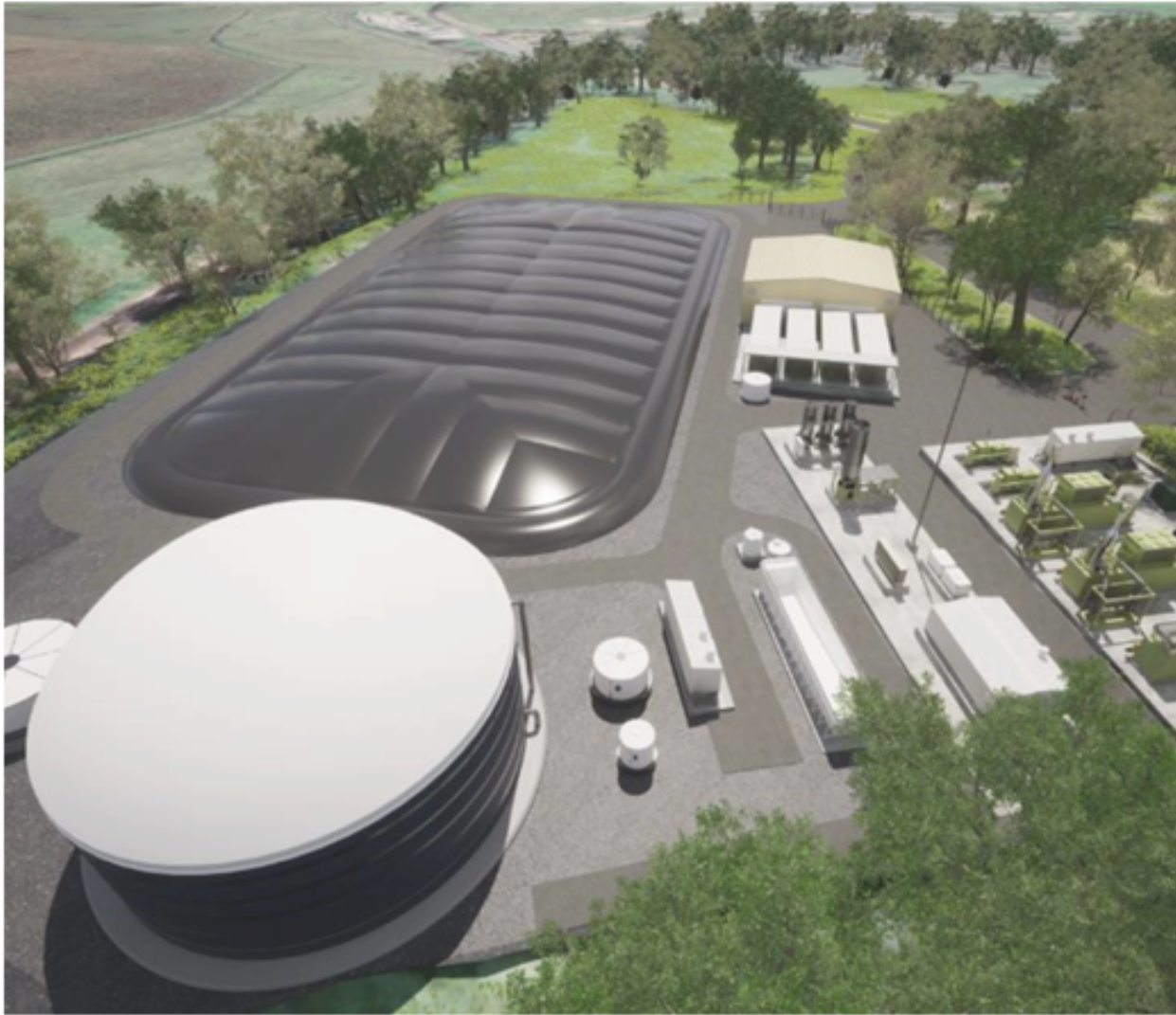
Northern Rivers Meats

NRM is an integrated beef and veal business, which has a highly experienced, expert & professional team providing marketing and processing services, to enable customers to begin the journey of supply chain integration.



Casino Hide Tanners (CHT) uses world-class technologies for processing and treatment of hides, providing a consistently high quality wet-blue leather that's sought after around the world.

Casino Biohub | Project Overview

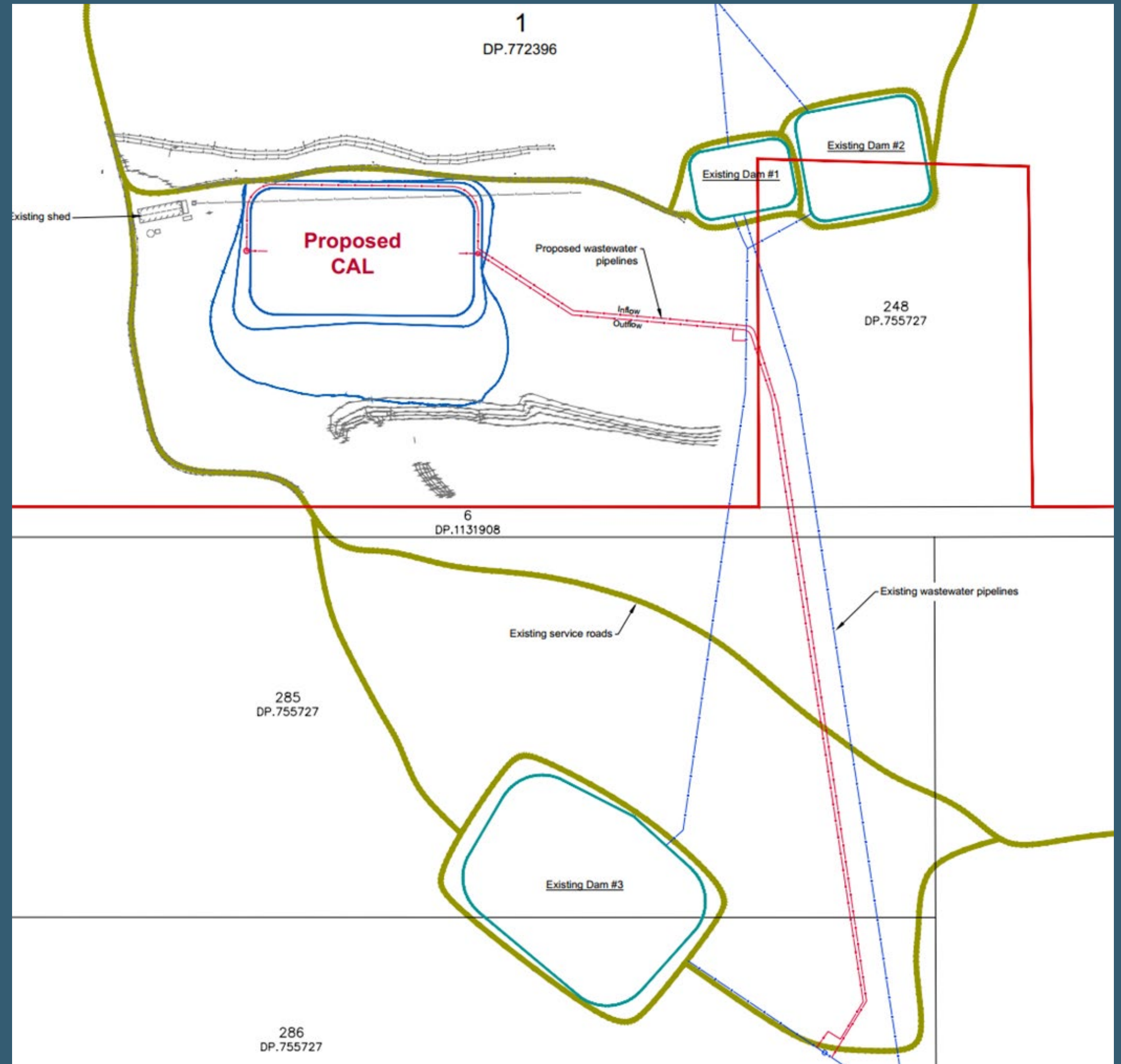


- **Partnership:** LMS Energy + Casino Food Company (formerly NCMC),
- **Location:** Casino, Northern Rivers, NSW
- **Scope:** Covered Anaerobic Lagoon (CAL), biogas flare, and associated pumps/piping/controls
- **Feedstock:** CFC wastewater currently treated in an open anaerobic lagoon
- **Process:** Anaerobic digestion captures methane-rich biogas; flare safely combusts to reduce GHG emissions
- **Scale:** Processes around ~800,000 kLpa of liquid effluent
- **Outcomes:** Reduces greenhouse gas emissions, improves odour/amenity, intercepts existing disposal pathways
- **Growth option:** Potential use of biogas to produce renewable energy
- **Status:** DA submitted July 2025; design in progress

Casino Biohub CAL

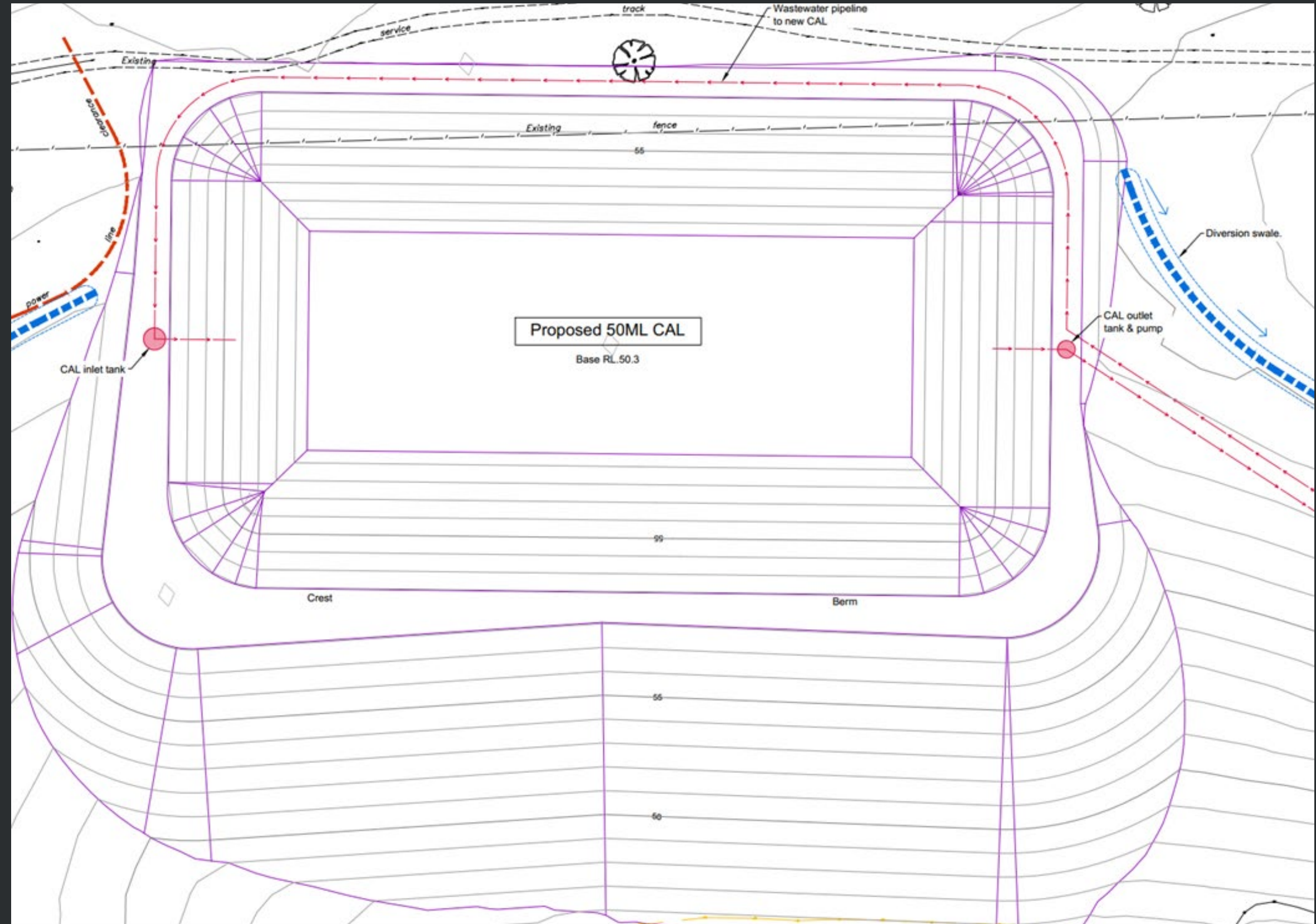
Australia's Largest Covered Anaerobic Lagoon

- 50 ML operating capacity + 8.7 ML freeboard
- Flagship sustainability and energy recovery project for CFC



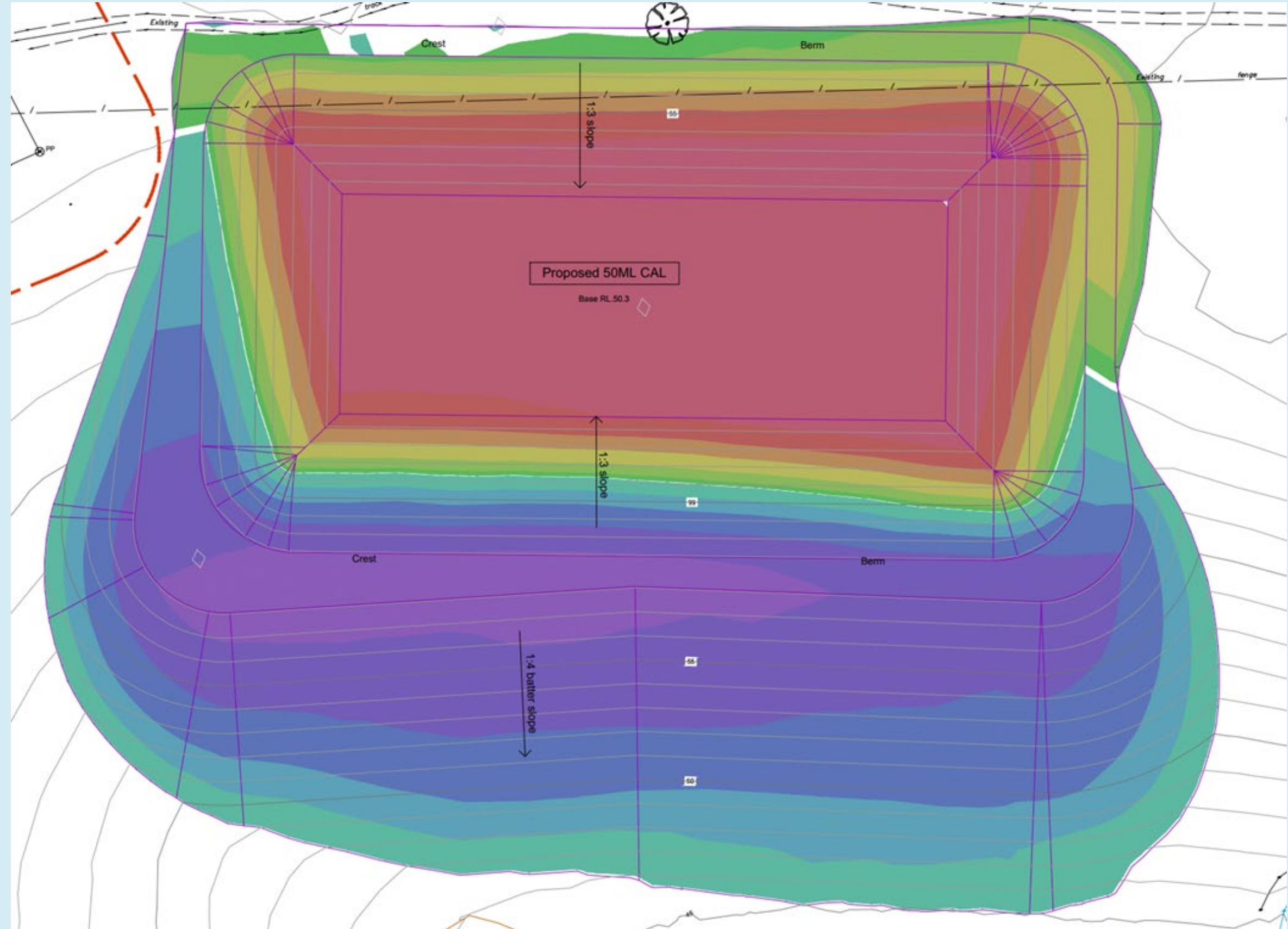
Scale & Significance

- Largest CAL to be constructed in Australia, setting a new national benchmark.
- 50 ML working volume with 8.7 ML freeboard for safety and operational resilience.
- Supports the red meat processing sector with world leading capacity for organic load management.
- Advances renewable energy generation and long-term environmental performance.



Engineering Innovation - Pumped Mixing System

- Designed for maximum treatment performance and energy recovery.
- Advanced pumped mixing system optimises internal hydraulics across the full 50 ML volume.
- Uniform distribution of solids, nutrients, and microorganisms;
- Minimises dead zones and stratification.
- Maintains ideal anaerobic conditions to maximise biogas yield and effluent stability.
- Engineered for reliability under a gas cover.



Feats of Innovation



Civils complexity

- Constructability by design 8 m deep lagoon with stability and settlement risks.
- Sandstone Rock excavation challenge.
- Using suitable Clay material to achieve a smooth CAL basin finish.

Massive operating volume

- Assured hydraulics 50 ML working capacity mixed uniformly using a control system.
- Energy density tuned to eliminate dead zones and maintain solids in suspension.

Large cover and liner

- Gas-tight, maintainable envelope HDPE liner/cover with welded HDPE penetrations.
- Cover rainwater removal and wind-uplift controls built in.

Biogas recovery

- Safe, high-yield energy pathway homogenous digestion conditions boost methane yield.
- Over-pressure/PRV protection.

Operations focus

- Reliable, low-touch lifecycle non-metallic internals for corrosion immunity.
- Modular spools allow future throughout upgrades.

Thank you

Leaders in methane abatement
and bioenergy
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