## FARM MANAGEMENT PLAN



Lot 1 Hughs Road, Wangoom 3279
Council Property Number: 501651
Lot/Plan -Lot 1 LP81545
Zones and overlays: Farming Zone (FZ)
Area: approx 19.2 Hectares

Date: April 2024, revised June 2024
Prepared by:
Co owner/operator of property
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## OVERVIEW

The farm management plan has been prepared to provide an assessment of current and future intended use of land to support the planning application for a proposed dwelling on Lot 1 Hughs Road. The plan will support the requirement of a dwelling on the property to effectively operate a calf rearing business and for greater surveillance and adequate management of our current Angus beef breeders. A dwelling will benefit the agricultural use of the property and is required to allow us to meet the functional needs of the business.

## BACKGROUND

$\square$ and I have owned the property since 2017 and have made significant improvements and investments in infrastructure, improving our property's agricultural productivity and success.

- We have been breeding Angus cattle on the property for the past 6 years. We are both experienced with cattle and farming and have been involved in agriculture for the most part of our lives. We both grew up on dairy farms where we were actively involved in a number of farming duties. I am currently involved in the management of stud Angus beef with my parents, who own and operate a successful beef farming enterprise on a large land holding within Wangoom. $\quad$ road has been in my family for more than 50 years and historically has a long-standing connection to both family and the Wangoom community.
- The proposed development will allow for future family succession. As my parents look to retire it is expected and I will become the successors of the family beef farming business, located approximately 900 meters from our property. A dwelling would not only benefit our farm business but put us in a great position for the future succession of the family farm. The close proximity of the two properties would greatly improve our ability to appropriately manage, improve and sustain the whole farming enterprise.
- The property has a PIC (property identification code- 3MYSP493) registered with Agriculture Victoria. We carry registration with Livestock Production Assurance (LPA). A small number of registered beehives are kept on the property, registered with Agriculture Victoria (registration number 0295). The hives are kept within our establishing native vegetation shelter belts.
- The calf rearing business will support surrounding agricultural activities, servicing the dairy industry with the purchase of excess/unwanted dairy beef calves.
- We harvest a number of small square pasture hay bales each year, which we predominately sell to thoroughbred racing stables as fodder. We own and operate all our harvesting equipment.
- There is not a suitable sized and affordable property available within the district in order for us to meet the needs of the property and business.
- We intend to construct an environmentally sustainable, modest sized home using a carbon negative building material called Hempcrete. We are passionate about the proposed dwelling having minimal impact on the agricultural land and surrounding environment.


## PROPOSED DEVELOPMENT

A dwelling is required on the property to support the establishment of a seasonal calf rearing business and for better surveillance of our Angus breeding cattle and sustainable management of the land. Our aim is to hand rear dairy beef calves to a weaning stage, from weaning they will be sold or moved off property and grazed on pasture. Calf rearing use, alongside our current beef breeding use, is a great option to increase the agricultural productivity and viability of our farm. Given the property's small acreage and carrying capacity, continuing use of the land for breeding purposes alone will provide us with only a small amount of income.

Breeding of cattle on the property has been challenging without permanent on site occupancy to effectively monitor our breeding cattle and carry out general farm duties. It has required a lot of traveling and commitment to time on site to effectively carry out cattle observations to ensure animal welfare standards are met.

We have been breeding AA Aberdeen Stud Angus Beef for the past 6 years. Pure bred angus attracts premium prices at market and is highly sought after. We carry 16-20 breeding units (breeding unit=1 cow with calf at foot) yearly, this annual stocking number must be flexible to work with seasons and ensure sustainable grazing management and retention of pasture quality. We have breeding cows with calves at foot for approximately 10/12 months of the year, from February to December. Calves are then weaned and either sold or re-located to a family farm property to continue growth and weight gain. The property's stock carrying capacity has been consistent over the past 6 years due to improvements to pasture quality, rational grazing methods, weed control, fertilizer applications and over sowing annual and perennial grasses seasonally.

During the calving down period our beef cattle require frequent monitoring. At least 3 welfare assessments occur daily, monitoring of laboring cows occurs every hour for signs of progression and to provide timely intervention when signs of complication arise. Permanent on-site occupancy is essential to appropriately manage breeding practices and minimize risk to the welfare of our cattle, ensuring positive outcomes for our herd.

Calf rearing will require a dwelling on the property, with permanent occupancy to adequately manage the rearing of calves and ensure duty of care can be maintained on a permanent basis. Calves require close attention, regular monitoring in the first 12 weeks of their life is crucial in maintaining preventative calf health care management. The ability to respond early to any risks or illnesses will ensure calf survival and positive future health and well-being for the calves.

Beef cross calves will be purchased directly from neighboring dairy farms bi-annually. We aim to purchase in Autumn and Spring, in line with dairy farms calving patterns. Calves will be collected from farms at 3-4 days old, after adequate colostrum intake, in small groups of 5-7 at the one time. Once safely transported to our property they will be placed in the calf rearing shed in their farm group. The shed will have 5 individual pens measuring 2 meters by 9 meters, giving each pen an area of 18 square meters. This pen size will comfortably accommodate up to 7 calves in each pen, giving each calf 2 square meters of space to adequately walk around, stretch out and lie down comfortably. The shed pens are able to house up to a total of 35 calves at one time. Calves will be monitored closely during their time in our care, any calf showing early signs of illness will be removed, isolated from the group and placed in an allocated sick pen for early assessment and treatment.

Calves will be fed CMR (complete milk replacer) twice a day, morning and evening until 3 weeks old, when CMR feeds will be reduced to once daily. From 3-4 weeks they will be grouped on size and age to reduce competition and relocated from the shed pens in to small turnout paddocks with calf hutches for shelter. The
time calves are moved out from the shed and fed once daily will be guided by calf growth, hard feed (calf pellet) intake and weather conditions. Calves will remain in these small turnout paddocks until 6-8 weeks old when they will be vaccinated, drenched and if required, bulls castrated. They will then be grouped in to mobs of 10-15 and put into larger paddocks for pasture foraging opportunities. Hard feed and hay will be increased with demand. Weaning form CMR will gradually take place from 9-10 weeks. Calves will be successfully weaned around 11-12 weeks when a target hard feed calf pellet intake exceeds 1 kg per day, per calf. Following successful weaning, calves will continue on pasture, calf pellets and hay until they are moved off the property, around 12-13 weeks old, either sold on or relocated to a family farm for further growth.

On-site presence is essential to ensure calf welfare and care is of a high standard throughout the calf's time on our property, at least 4-6 hours a day would be required to successfully achieve efficient feeding, routine hygiene practices, general health care and monitoring duties. Succeeding at farming requires on site commitment to achieve and excel at the responsibilities that come with extensive animal husbandry.

A dwelling would provide greater continual surveillance of the property, calves and breeding cattle, preventing theft of valuable animals, farm equipment and machinery.

## Farm Operational Plan

Below is a table outlining daily, monthly, yearly activities required for successful beef breeding and calf rearing. A dwelling is required for successful agricultural production. Farm duties are continuous, the provision of animal husbandry as well as property and cattle management is a 24 hour around the clock responsibility. Permanent on site occupancy allows for the sustainable and practical management of cattle breeding and calf rearing operations, as well as general day to day farm duties.

| Farm Tasks | Timing |
| :---: | :---: |
| Cattle health inspections, condition scoring | Daily. |
| Calving down inspections | 1-4 hourly (3 months of the year) |
| Calf health inspections (hand reared) | 2-4 times daily. Dependent on age |
| Calf feeding with CMR | Twice daily |
| Calf feed station inspections- clean out and replace (grain, hay, water) | Twice daily |
| Calf shed pen manure removal and bedding top up | Daily |
| Calf shed pen total clean out | Weekly. Total clean out and anti-bacterial spray of calf pen following each group. |
| Rotation/relocation of calf hutches | Every 5-7 days |
| Rotation of calf groups (pen, turnout, paddock) | Every 3-4 weeks |
| Fence inspection \& management | Daily |
| Windmill, bore \& water trough inspections \& maintenance | Daily |
| Pasture condition \& rotational grazing | Monitor daily, shift cattle every 2-4 weeks |


| Farm Tasks | Timing |
| :--- | :--- | :--- |
| Pasture sowing | April \& May, August \& September |
| Fertilizer application | May \& June, September \& October |
| Equipment maintenace | Daily |
| Weed control | Monthly |
| Vaccinations and drenching | Monthly (except for Jan, Feb, March \& Aug) |
| Calf marking | Twice year (in calving down period) |
| Feeding out of supplementary hay/siliage/minerals | Monitor daily. Feeding out usually takes place <br> daily over Autumn and Winter period. |
| Bull joining | Three months of the year |
| Cattle sales | Throughout the year |
| Cattle transport | As required |
| Hay/silage harvesting | Oct, Nov, Dec. |
| Pregnancy testing | Yearly. Usually Oct/Nov |
| Record keeping (monitor calf growth, health status, <br> vaccination/worming records, breeding records, | Ongoing throughout a year |
| pasture inputs) |  |

The number of daily tasks required is significant, on site management is critical to carry out tasks and effectively maintain animal welfare and industry standards.

## Livestock Numbers

Stock carrying capability is maintained due to a range of factors including good climate and rainfall, good soil fertility, appropriate pasture species and grazing management, weed identification and control and our current infrastructure and management of the property. Continuing good sustainable land management practices will enable the property to continue with current beef breeders livestock numbers with the added capability of carrying the future hand reared calves on only a small portion of the property.

## 1. Current livestock numbers:

- Breeders 20, calves at foot 20

2. Proposed livestock numbers annually:

- Breeders 20, calves at foot 20, 1 bull $3 / 12$ months of year
- Hand reared calves 80-100 (40-50 per half-year cycle)

3. Total stock annually

- 121-141

Below is a table outlining the proposed cattle numbers for each month of a year.

| Month | Breeding Cows | Calves at foot | Hand reared calves | Total Stock |
| :---: | :---: | :---: | :---: | :---: |
| Jan | 20 | 0 | 0 | 20 |
| Feb | 20 | 0 | 0 | 20 |
| March | 20 | Calving has commenced. Approx 7 calves at foot this month | - Group one $\sim 15-20$ in calf shed | 42-47 |
| April | 20 | Approx 14 calves at foot | Group one $\sim 15-20$ calves in turnout paddocks Group two $\sim 15-20$ calves in calf shed | 64-74 |
| May | 20 | 20 calves at foot, calving down will be completed this month | - Group one ~15-20 calves in large paddock <br> - Group two ~15-20 calves in turnout paddocks <br> - Group three $\sim 10-15$ in calf shed | * 80-95 |
| June | 21. Bull will be brought on to property to join cows. | 20 | Group one ~ 15-20 calves weaned and left property (12-13 weeks old) Group two ~ 15-20 calves in large paddock <br> Group three ~ 10-15 calves in turnout paddocks | 66-76 |
| July | 21 | 20 calves | - Group two ~ 15-20 calves weaned and left property (12-13 weeks old) <br> - Group three ~ 10-15 calves in large paddock | 51-56 |
| Aug | 21 | 20 calves | Group three ~ 10-15 calves weaned and left property (12-13 weeks) | 41 |
| Sep | 20. Bull will have departed property. | 20 calves | - Group four ~20-25 in calf shed | 60-65 |
| Oct | 20 | 20 calves | Group four ~20-25 calves in turnout paddocks Group five ~ 20-25 calves in calf shed | * 80-90 |
| Nov | 20 | 20 calves | - Group four ~20-25 in large paddocks <br> Group five ~ 20-25 calves in turnout paddocks | * 80-90 |
| Dec | 20 | 20 calves. Calves will leave property end of this month. | Group four ~ 20-25 calves weaned and left property (12-13 weeks old) <br> Group five ~ 20-25 calves remain in large paddocks until end of this month when they will be weaned and leaving property (12-13 weeks old) | 60-65 |

* note highest rate of stock on property at any one time $=80-95$.

There will be no hand reared calves stocked on the calf paddocks in the months January, February, most of March, August and most of September. Majority of these months coincide with normal seasonal conditions that result in a decrease in pasture growth and quality. Calf paddocks will be well rested in these times, or grazed by breeding cattle if required.

Through appropriate calf stocking rates, rotations of calves through paddocks and effective management of pasture annually, the land is capable of use for calf rearing.

## FARMING FACTORS

## Site Description

The property is located in the Farming Zone, Council Property Number 501651, Lot/Plan -Lot 1 LP81545 and is approximately 19.2 hectares. The property at Hugh's road is undulating, with some elevated points having small amounts of scattered in ground rock. These areas can prove difficult for pasture re-sowing and harvesting, we have utilized these challenging sites to locate shedding, native vegetation shelter belts and cattle yards. The intended site for the proposed dwelling is sparsely populated with in ground rock, the proposed dwelling will not take away from the prime farming land use that is available on the remainder of the property.

The soil is predominantly well structured fertile soil over heavy clay, classed as Black Chromosol and characterized by dark brown clay loam with hard setting surface and a strong blocky structure. Soil pH is 6 to 7.5 and well suited to pasture growth. Some small areas on the property are prone to water logging with prolonged winter rain, no major drainage issues have been identified. Soil tests will be carried out as required.

Pastures are in good condition. Pasture make up is well suited for grazing and consists of a variety of species, including perennial ryegrass, red and white clover, with some phalaris and tall fescue. Common weed species such as Docks, Cape Weed and some Creeping Bent Grass have been identified on the property. With good pasture coverage, selective grazing and controlled spraying practices these weed species are currently being eradicated or greatly reduced across the property.


Left image of property locality.
Land use surrounding the property is rich in agricultural production, mainly consisting of cattle grazing, cattle breeding and dairy farming. Some small properties within the area are used for rural lifestyle.

## Property Layout

The property layout is well suited for the proposed use. The proposed calf rearing shed is appropriately located to oversee the welfare requirements of the livestock on the property. A number small paddocks, to be used for calf rearing, either surround or are within a suitable distance to the associated infrastructure.

There are 3 main paddocks used for the rotational grazing of our Angus beef breeders, this totals approximately 17.2 hectares. Paddocks 1, 2 and 3 are used to rotate our breeding cattle, with paddock 1 being larger we intend to divide this paddock in half with a permanent wire fence to achieve a 4 paddock rotation system.

Paddock 6, 7 and 8 are appropriate to use as turnout paddocks when 3-4 week old calves first leave the calf shed. Paddocks 4 and 5 are an appropriate size for calves to move in to in their larger groups for foraging opportunities and gradual weaning. The total area of paddock and turnout paddocks that will be used for calf rearing is approximately 2 acres or .8 hectares.

The total area required for the proposed dwelling, including driveway, garage, septic area and garden will be approximately 3371 square meters or .3371 hectares. The proposed dwelling site is well suited, being an appropriate distance to the calf rearing shed, other farm infrastructure and with views across the property for visual monitoring of the beef breeders.

## Site plan/property layout

The image below shows the property layout with proposed dwelling site, proposed septic site, proposed exclusion fencing around dwelling and septic area, and proposed native vegetation.

The shed suitable for calf rearing is noted. Paddock 1, 2 and 3 are used for rotational grazing of beef breeders. Paddocks 4, 5, 6, 7 and 8 will be used for calf rearing.


HUGHS RD

## Water Supply

The property has a windmill run bore filling tanks that total $35,000 \mathrm{~L}$, currently this services six troughs. There are three tanks that collect rain water from the existing farm sheds, totaling approximately $68,000 \mathrm{~L}$. This is currently used to irrigate the establishing native vegetation and supplies hand and equipment washing facilities in the sheds. There is a sufficient amount of water available to cater for calf rearing use on the property.

## Weeds and Pests

There are currently no major weed or pest problems. The property is subject to common pasture weeds such as dock, cape weed and bent grass, where routine management practices are carried out when applicable.

## FARM INFRASTRUCTURE AND MANAGEMENT

Continued investment in and maintenance of high quality facilities, including shedding, calf pens and feeding equipment will be required to ensure long term use for calf rearing. Regular upgrades and maintenance of farm equipment is essential to ensure safety and efficiency in farm operations for sustained use.

## Shedding

We have made significant investments already to ensure our agricultural enterprise is a success. The property currently has two farm sheds (permit numbers BS-L39966-20170124-0 and CBS-L 57205/3515008326173) which are used to store hay, farm equipment, machinery and tools and house orphaned beef calves when required.

Most of the required infrastructure for calf rearing use has been constructed, this includes an appropriate shedding facility. The $18 \times 9$ meter shed that exists on the property will appropriately accommodate calf rearing pens and is well suited for this use on the property. The area in the shed allocated for calf pens is 90 square meters, leaving 72 square meters for hay, calf feed and equipment storage. The shed is open fronted to the eastern aspect to provide adequate ventilation as well as protection from the prevailing north westerly and south westerly winds.

## Power Supply

We have installed a complete 4.05 kW off grid solar system. This currently supplies consistent and reliable electric fencing for the property, water pumps, shed lighting and power outlets, refrigeration for cattle medications, as well as power requirements for tools. The system's inverter and battery bank have the potential to increase capacity up to 13 kW , which would comfortably provide enough power to the proposed dwelling as well as the property's current and future infrastructure. The off grid solar system would therefore not require the property to connect to the public electricity grid in the future, which has been a challenging factor in the area without major impact to neighboring farms and roadsides.

## Fencing

Fences are in good condition. We have improved much of the fencing over the past years of owning the property, replacing old and damaged fences and dividing the land into suitably sized and manageable paddocks. We have fenced native vegetation areas along boundaries and provided shelter-belts within the farm. There are areas of fencing on the property that require upgrades and this will be addressed over the next year. We intend to divide paddock 1 in half with a permanent fence, this will ensure we have a permanent 4 paddock rotation and all paddocks for rotational grazing will be of similar size. We currently use portable electric tape fencing in this large paddock to achieve this, a permanent fence will be more effective.

We have adequate fencing in both the turnout paddocks and large paddocks for calf rearing use. These fences are post and heavy duty galvanized wire mesh, making the areas secure and safe for calf use.

## Machinery

We have, and have access to, all the machinery and equipment required to run a sustainable farm business. Below is a table of listed machinery, it does not include all the equipment and tools we also have to run the property on a daily basis (ie. fencing tools, electric fence tester and tools for water trough and machinery repairs).

Machinery schedule

| ITEM | ITEM |
| :---: | :---: |
| X 160 hp Ford Tractor | X 1 New holland small square baler |
| X 1 23hp Ferguson Tractor | X 1 New holland roller bar hay rake |
| X 1 Quadbike and $\mathrm{X} 16 \times 4 \mathrm{ft}$ quadbike trailer | X 1 New holland hay elevator/loader |
| X 1 6ft Slasher | X 1 Truline roll king round bale feeder |
| X 1 8ft KC.Errey Smudger | X 1 rear hay forks |
| X 1 Cromac post hole digger | X 1 ripper with poly pipe layer |
| X1 5ft Grader blade | X $114 \times 6 \mathrm{ft}$ Tandem trailer with cattle crate |
| X 13 Furrow Disc Plough | X 1 14x6ft flat top farm trailer (hay trailer) |
| ACCESS TO THE FOLLOWING EQUIPMENT |  |
| X 1 85hp Massey Ferguson Tractor with front end loader |  |
| X1 10ft Teag seed drill |  |
| X 1 Boom sprayer |  |
| X 1 super spreader |  |
| X 1 triple k cultivator |  |
| X 1 Truline post driver |  |
| X 1 John Deer round baler |  |
| X 1 Khun hay mower |  |

## Calf Rearing Equipment

We have a suitable amount of calf rearing equipment to adequately manage and build on our calf rearing business. This equipment has been acquired from our retired dairy farming family business. We have also purchased equipment over the last 6 years as at times we have hand reared orphaned calves from our Angus breeders. Below is a table outlining our current calf rearing equipment.

| ITEM |  |
| :---: | :---: |
| X 8 portable fence panels of various sizes | X 2 single fence milk feeder |
| X 5 Calf-tel Pro 2 calf hutches | $X 7$ five teet fence milk feeders |
| X 3 sets calf bales | X 1 stomach tube bottle feeder |
| X 1 portable calf shelter with inbuilt feed trough | X 2 grain troughs |
| X 2 adjustable flow bottle feeders |  |

## Future investment

We intend to purchase further calf rearing equipment to reflect the number of calves reared at one time. Future investment for the business equipment would include a mobile milk feeder, all weather paddock grain feeders, more portable calf hutches and a 2-3 tonne silo to store bulk calf pellets.

## Cattle Yards

We have recently installed a new cattle yard facility. The improved yards and cattle crush area, along with the nearly completed truck and trailer cattle loading ramps, allows for safer handling, treatment and transport of our cattle. This updated facility allows for better stock management and improvements to animal welfare, providing positive outcomes for our farm.

## Feed Supply

The main food source for the breeding angus is through rational and well managed grazing practices. Supplementary hay and silage is provided when required, usually during months of decreased pasture production in autumn and winter. Hay is currently harvested on the property.

Calves will receive a premium calf milk replacer for approximately 12 weeks. Supplementary feed in the from of age appropriate calf pellets will be available to support their diet and achieve optimum growth and development throughout the $4-5$ month period. These supplementary foods will need to be brought in. Good quality pasture hay will also be available early on to support calf rumen development, this is harvested on the property.

## Soil and Pasture Management

We currently use, and will continue to use, a rotational grazing system where paddocks are rotated and rested between grazing periods. With a 4 paddock rotation system cattle graze on one paddock for around 10-14 days then moved on to the next paddock. A minimum 4-5 week spell for each paddock allows for pasture recovery, prevention of weeds and to maintain ground-cover. Ground-cover maintenance over 80\% will maintain soil health, slow rainfall run off and help retain soil moisture for pasture growth and productivity.

The duration of grazing and rest periods must be flexible and is determined by pasture growth. A number of variables affect pasture performance including temperatures and rainfall. Adjusting grazing management to seasonal pressures is important to maintain pasture quality and sustainable use, this will include:

- adapting a shorter grazing time in a wet winter to avoid pugging and damage to establishing autumn sown grasses.
- When pasture cover across farm is below 3.5 cm (1500kg dm/Ha) adjust stock numbers and introduce supplementary hay/silage, maintaining adequate ground-cover for longer.
- in extremely dry seasons sacrificing 1 paddock and supplementary feeding cattle, avoiding grubbing out the whole property and damaging soil and pasture.

Sustainable pasture management requires ongoing surveillance and is a constant balancing act of providing cattle with adequate feed while maintaining pasture quality and groundcover. We aim to keep pasture between 3.5 cm and 12 cm , this equates to $1500 \mathrm{~kg} \mathrm{DM} / \mathrm{Ha}$ (dry matter-per hectare) to $2500 \mathrm{~kg} \mathrm{DM} / \mathrm{Ha}$ which is the preferred range for optimum productivity for both cattle and pasture.

With advice of appropriate personnel, we currently fertilize regularly, re-sow pasture when required and carry out smudging practices to avoid pugging and to distribute composting manure. We will continue to practice sustainable pasture regeneration and management to prevent soil degradation. Through these sustainable practices we effectively manage our soil quality, pasture production and stock carrying capabilities.

Calves will be offered hard feed in the form of age appropriate calf pellets and hay, therefore do not rely solely on pasture for nutrition until post weaning (from 13 weeks old). Given the proposed stocking rates, calf rotations and resting time between calves in paddocks $4,5,6,7$ and 8 there will be no detrimental effects of compaction or overgrazing in the calf rearing paddocks. A minimum of 3-4 weeks rest between calf groups for both turnout paddocks $(6,7,8)$ and large paddocks $(4,5)$ will be achieved. Continued surveillance of pasture conditions will be required throughout the year in the calf paddocks. Adequate ground-cover of at least $80 \%$ will be maintained, weeds identified and controlled, seasonal smudging to disperse manure and over sowing new pasture when required will enable the sustained agricultural use of the land.

Current and proposed shelter-belts will, when established, reduce wind speed and therefore reduce moisture loss from the soil, increasing pasture yield. The shelter-belts will also lead to other soil and environmental benefits such as loss of topsoil from wind erosion.

## Calf Rotation

The following table demonstrates how calf groups will be rotated through the weeks on the property. The group numbers will range from 10-25 calves per group. This table represents the Autumn influx of calves. The Spring influx will be similar but with only two groups of calves in higher volumes (ie. two groups of 20-25). Flexibility is required with calf rearing, adjustments to calf numbers at any stage may need to be made throughout the season. These adjustments can be influenced by calf availability, climate and seasonal pressures, finances, market values.

| Week | GROUP 1 | GROUP 2 | GROUP 3 |
| :---: | :---: | :---: | :---: |
| 1 | Shed |  |  |
| 2 | Shed |  |  |
| 3 | Shed |  |  |
| 4 | Turnout Paddock 6 \& 8 | Shed |  |
| 5 | Turnout Paddock 6 \& 8 | Shed |  |
| 6 | Turnout Paddock 6 \& 8 | Shed |  |
| 7 | Turnout Paddock 6 \& 8 | Turnout Paddock 7 |  |
| 8 | Paddock 4 | Turnout Paddock 7 | Shed |
| 9 | Paddock 4 | Turnout Paddock 7 | Shed |
| 10 | Paddock4 | Turnout Paddock 7 | Shed |
| 11 | Paddock 4 | Paddock 5 | Shed |
| 12 | Paddock 4 | Paddock 5 | Turnout Paddock 6 \& 8 |
| 13 | Off farm | Paddock 5 | Turnout Paddock 6 \& 8 |
| 14 |  | Paddock 5 | Turnout Paddock 6 \& 7 |
| 15 |  | Paddock 5 | Turnout Paddock 6 \& 7 |
| 16 |  | Off farm | Paddock 4 |
| 17 |  |  | Paddock 4 |
| 18 |  |  | Paddock 4 |
| 19 |  |  | Paddock 4 |
| 20 |  |  | Off farm |
|  |  |  |  |

## Staffing

The property will be operated by and myself. I will be running the calf rearing business, I have the required knowledge and experience to encompass all aspects of calf rearing, ensuring healthy development and growth of the calves. I have completed the course Animal Welfare for Cattle and I also hold a certificate of accreditation with the LPA. If planning permission for a dwelling is granted I will consider enrolling in a calf rearing/health course to further improve my knowledge and skills for best calf outcomes. I have made contact with a specialist calf rearing expert who will be my mentor looking into the future.

## Timeline

Farming is constantly evolving and flexibility is required when development goals are set out. Below is a simple intended timeline for the development of the agricultural use of the property over five years.

Year 1

- House construction begins.
- Complete fencing of paddock 1 division.
- Plant and fence native vegetation along property boundary and internal paddocks.
- Continue fertilizer program in Autumn \& Spring
- Over-sow pastures as required (eg. cold tolerant ryegrass in Autumn for improved winter pasture growth)
- Continue monthly weed management
- Harvesting hay/silage Oct, Nov-Dec


## Year 2

- House construction complete, establish natives around house.
- First hand reared calves in to shed. Aiming for total 40-50 calves reared this year (20-25 half yearly).
- Continue fertilizer applications, pasture over-sowing, weed management and hay harvesting.

Year 3

- Calf numbers increase to 60-80 total reared for the year (30-40 half yearly)
- Continue fertilizer applications, pasture over-sowing, weed management and harvesting.

Year 4

- Calf numbers increase to 80-100 total reared for the year (40-50 half yearly). This will be the target number of hand reared calves from year 4 onwards
- Continue fertilizer applications, pasture over-sowing, weed management and harvesting.

Year 5 and beyond

- 80-100 calves reared
- Continue fertilizer applications, pasture over-sowing, weed management and harvesting.


## FINANCIAL PROJECTIONS

## Investment in Property Infrastructure

Dwelling approx. \$350,000-\$400,000.
Calf feeding equipment, including mobile milk feeder and all weather paddock grain feeders, approx \$3000\$4000. Pellet silo \$3500-5000. Total: \$6500-\$9000.

BREEDING CATTLE AND GENERAL FARM MAINTENANCE

|  | Year 1 | Year 2 | Year 3 | Year 4 |
| :--- | :--- | :--- | :--- | :--- |
| Number of stock | 20 breeding units (1 cow <br> with calf) | 20 breeding units | 20 breeding units | 20 breeding <br> units |

## cost

| Pasture improvements | \$2,000.0 | \$3,500.0 | \$2,000.0 | \$3,500.0 |
| :---: | :---: | :---: | :---: | :---: |
| Farm maintenance | \$2,000.0 | \$1,000.0 | \$2,000.0 | \$1,000.0 |
| Harvesting cost | \$500.0 | \$500.0 | \$500.0 | \$500.0 |
| Cattle yards (loading race only) | \$1,000.0 |  |  |  |
| Bull lease | \$250.0 | \$250.0 | \$250.0 | \$250.0 |
| Cydectin drench whole herd | \$450.0 | \$450.0 | \$450.0 | \$450.0 |
| Ultra vac 5 in 1 vaccination for calves | \$130.0 | \$130.0 | \$130.0 | \$130.0 |
| Total cost | \$6,330.0 | \$5,830.0 | \$5,330.0 | \$5,830.0 |

INCOME

| Small square hay sales | \$6,000.0 | \$6,000.0 | \$6,000.0 | \$6,000.0 |
| :---: | :---: | :---: | :---: | :---: |
| Calf sales | \$22,000.0 | \$22,000.0 | \$22,000.0 | \$22,000.0 |
| Total income | \$28,000.0 | \$28,000.0 | \$28,000.0 | \$28,000.0 |
| Total revenue | \$21,670.0 | \$22,179.0 | \$22,670.0 | \$22,179.0 |

Note: this table is a guide only to costs and revenues. Prices of cost items are current. Calf sales are based on the past years average market value.

## CALF REARING

|  | Year 1 |  | Year 2 | Year3 | Year 4 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Yearly volume |  | 50 | 80 | 100 | 100 |
| Purchase of calves |  | \$2,500.0 | \$3,800.0 | \$5,000.0 | \$5,000.0 |
| Bedding material |  | \$150.0 | \$240.0 | \$300.0 | \$300.0 |
| Premium CMR (calf milk replacer) |  | \$4,500.0 | \$7,200.0 | \$9,000.0 | \$9,000.0 |
| Hard feed supplement |  | \$3,500.0 | \$5,600.0 | \$7,000.0 | \$7,000.0 |
| Bio-booste probiotic paste (given on arrival) |  | \$80.0 | \$128.0 | \$160.0 | \$160.0 |
| Electrolytes (potential periods of unwell) |  | \$60.0 | \$96.0 | \$120.0 | \$120.0 |
| Ultra vac 7 in 1 vaccination |  | \$320.0 | \$512.0 | \$640.0 | \$640.0 |
| Cydectin drench |  | \$175.0 | \$280.0 | \$350.0 | \$350.0 |
| Total cost |  | \$11,285.0 | \$17,856.0 | \$22,570.0 | \$22,570.0 |
| Income from sales |  | \$25,000.0 | \$40,000.0 | \$50,000.0 | \$50,000.0 |
| Total revenue |  | \$13,715.0 | \$22,144.0 | \$27,430.0 | \$27,430.0 |

Note: this table is a guide only to costs and revenues. Prices of cost items are current. Calf sales are based on the past years average market value.

## FARMING CONSIDERATIONS

## Environmental Management

## Fauna and Flora

The site has no environmental overlays. There is no evidence of threatened fauna on the land. Since taking ownership of the property we have removed an extensive amount of exotic species Cyprus macrocarpa. We have planted hundreds of indigenous trees and shrubs along the property's boundaries and within newly fenced shelter-belts. This vegetation, when established, will provide important shelter for cattle from the elements, improving their welfare and performance. We understand appropriate indigenous native vegetation will also enhance the local environment, providing diversity and essential habitat for wildlife. We have noticed a considerable improvement in wildlife populations, especially native birds, within our native plantings.

## Adverse Neighboring Land Impacts

We believe there would be little to no impact from the calf rearing use on surrounding dwellings or properties. The property is directly neighbored (shared boundary) by small acreage farm lots, these are typically used for grazing cattle. There a number of dwellings within a 1000 meter radius to the property, the closest and most significant being approximately 50 meters from the farm's southern boundary. The proposed site for the dwelling is approximately 200 meters from the closest neighboring dwelling. The calf rearing shed is approximately 250 meters from the closest neighboring dwelling. Native plantations are present around the calf rearing shed, we will continue to plant native plantations around the entire property boundary, thus providing a visual barrier for neighboring properties.

## Amenity Risk and Management

Due to the small amount of calves on the property and low density stocking rates in both the calf shed pens and outside paddocks at any one time, minimal impacts of odour and noise will arise from the calf rearing use. Any odour or noise increases will be short term and contained within the property boundary. There is a considerable amount of native vegetation planted out along Hugh's rd boundary and within the property, this vegetation will help buffer both noise and odour from the calf rearing use. Regular communication with neighbours will be required to address any concerns from calf rearing use.

## Odour:

The calf rearing shed is appropriately located, set back from the road and is a considerable distance from neighboring dwellings. The shed opens to the east direction and faces inwards to the property. Wind direction predominately comes from the south to south westerly direction and therefore odour, if any, will travel across the middle of the property and should be contained within the property boundary.

Good on-site management of the facility will ensure the minimization of negative impacts of odour. Management will include:

- Maintain calf stocking rates at an appropriate number to avoid overstocking and manure build up
- Use woodshavings as bedding in calf shed pens as they are highly absorbent and allow for easy manure movement
- Carry out daily removal of manure from pen bedding. Carry out weekly complete pen clean out and bedding replacement, more often if strong odour is present.
- Use calftel housing hutches in calf paddocks for shelter. Hutches are transportable and therefore frequent relocation will take place to prevent manure and urine build up and decrease the risk of odour. Hutches are also easily accessible for cleaning.
- Move hay and grain feed troughs regularly to avoid manure and mud build up around areas, regular movement will encourage manure dispersal in paddocks.
- Use aerobic composting of spent calf bedding, therefore reducing bulk and moisture content and will result in less odour.
- Plant trees and shrubs between neighboring residences, vegetation can cause disturbance in wind pattern and force odour upwards and away from residences.


## Noise:

There will be minimal noise arising from the calf rearing use, the area is densely agricultural with cattle breeding and dairy farm properties scattered all throughout the area. Calf noise is already present in the area, although minimal.

Calves use sound to communicate, this includes:

- Raising an alarm of potential danger to their herd
- Expressing pain
- Feeling stressed
- Hungry
- Weaning

A dwelling is required for calves to be well managed and their husbandry needs met. With on-site occupancy we will be able to immediately address a calf/calves in distress and provide appropriate action to remedy an increase in noise. We will adopt a gradual weaning process, as abrupt weaning can cause great distress for calves. Weaning will take place over a 2-3 week period, where CMR will be reduced slowly and there is a gradual change from supplementary milk to an increased intake of hard calf pellet feed, hay and pasture.

Noise from machinery, such as quad bike and tractor use, is consistent with the agricultural machinery use in the area.

## Chemical use:

The use of chemical sprays on the farm is minimal but at times necessary, during these periods careful consideration is, and will continue to be, taken into account for neighboring properties. Some native shelter belts line the neighboring boundaries which effectively help with spray drift from spraying pastures. Current boundary fence lines with no vegetation will be planted out with native vegetation to assist with potential spray drift.

## Fire Management

The land is in a designated bushfire prone area. Fire management plans will be created for the property, although it will not be at any greater fire risk than regular farmland. Appropriate water supply tanks will be provided, if required, for fire management services.

## WASTE MANAGEMENT

The main waste product from calf rearing is spent bedding containing manure and urine. We will carry out a composting process of all manure and spent bedding. To maintain good hygienic conditions manure and pen bedding must be removed regularly. Manure handling and the composting process will be an ongoing part of seasonal calf rearing management. Manure will be cleaned from pen bedding daily using a shovel and a wheelbarrow. A weekly total calf pen bedding clean out will be carried out with a small tractor and bucket attachment.

An area within close proximity to the calf rearing shed will be allocated to carry out composting of manure and spent bedding. Two piles will need to be made to coincide with the two periods of seasonal calf rearing. The site has sufficient area, a permeable base and good drainage. The proposed compost area site is a significant distance from the property's existing watercourse and is 70-75 meters away from the on site bore, therefore will pose no risk of groundwater contamination. The area will be fenced and therefore not accessible by calves or cattle.

Stockpiling and composting manure and spent bedding will reduce its bulk and moisture content. Compost will be turned regularly (weekly) to encourage the microbial activity and breakdown making it more friable, stabilize nutrients and decrease odour release. Compost will be stored for 8-12 months and spread over pasture, used on the establishing natives or on the garden surrounding the proposed dwelling.

Below is the proposed site for the proposed composting area. The site is well sited, close to calf rearing shed and a considerable distance from the windmill bore.


Other waste generated from calf rearing:

1. Feed waste- this waste will be collected and composted.
2. General waste from feed packaging, medications/vaccinations- waste bins will be provided to store, waste will be disposed of appropriately in compliance with local regulations.

## PLANNING CONSIDERATIONS - AGRICULTURAL

## Farming Zone

The property lies within the Farming Zone.
The purpose of the Farming Zone is to:

- To provide the use of land for agriculture
- To encourage the retention of productive agricultural land
- To ensure that non-agricultural uses, including dwellings, do not adversely affect the use of the land for agriculture
- To encourage the retention of employment and population to support rural communities
- To encourage use and development of land based on comprehensive and sustainable land management practices and infrastructure provision

Comment- the proposed development satisfies all these purposes. The requirement of a dwelling to support the proposed agricultural use outlined in this farm management plan is consistent with the planning considerations for the Farming Zone.

## Conclusion:

The proposal has been well considered against relevant planning policies and complies with all various requirements. The siting of a dwelling will support the addition of calf rearing use as an agriculturally based enterprise that will improve agricultural productivity of the property and allow for optimum utilization of small acreage.

A dwelling is critical in successfully managing our current and future agricultural productivities, with permanent on site occupancy to ensure excellent animal welfare standards. The property can sustainably accommodate the proposed agricultural activities and is well suited to calf rearing, along with the continued use of cattle breeding. The property layout is appropriate and much of the required infrastructure is already in place. The development of a dwelling will ensure sustainable land management practices are carried out effectively and efficiently on the property.

Breeding Angus cattle and calf rearing supports agriculture within the area and is an asset to the community. Providing a service to the dairy industry and supporting agricultural businesses and employment. Neighboring farmers, rural stores, fertilizer services, pasture consultations, contracting services, cattle transport, stock agents, veterinary services and many others will benefit from the proposed agricultural use.

A dwelling will not negatively impact the agricultural use of the land or surrounding agricultural uses but support agricultural production by providing on site occupancy to ensure we have the ability to improve, manage and sustain the proposed use.

Experience of having successfully run our beef breeders the past 6 years, our investments in infrastructure and pasture improvements and experience of rearing calves gives confidence in the proposed agricultural use being well thought out, well managed and successful.

