



HORSE MANAGEMENT PLAN

LOT 100 (NO.206) PINJAR ROAD, MARIGINIUP

CITY OF WANNEROO

JULY 2018

Issue 2



BURGESS | DESIGN
GROUP
TOWN PLANNING + URBAN DESIGN

Lot 100 (No.206) Pinjar Road, Mariginiup

City of Wanneroo

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Issue 2: July 2018

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TABLE OF CONTENTS

1.	INTRODUCTION	4
2.	SITE DESCRIPTION/DETAILS.....	4
2.1	SOIL TYPES	4
3.	NUMBER AND TYPE OF HORSES	5
3.1	BASE STOCKING RATE CALCULATION	5
4.	STABLING PRACTICES	7
4.1	HORSE TRAINING TRACK AND EXERCISE YARD SHELTER	7
5.	MANURE MANAGEMENT	7
6.	PASTURE MANAGEMENT	8
6.1	IRRIGATION	8
6.2	SHADING	8
7.	DUST CONTROL	9
8.	WEED CONTROL	9
9.	VERMIN CONTROL	9
10.	FLY MANAGEMENT	9
11.	CONCLUSION.....	10

1. INTRODUCTION

Burgess Design Group has been appointed by Land Group WA – Pinjar Road Pty Ltd to prepare a Horse Management Plan for Lot 100 (No.206) Pinjar Road, Mariginiup (“subject land” or “site”). The purpose of this report is to support the planning application for the development of a single house, stables, caretaker’s dwelling, equestrian activity and earthworks. This report describes the environmental characteristics of the site and how the property and horses will be managed.

2. SITE DESCRIPTION/DETAILS

The subject site comprises a total legal land area of 5.4370ha. The site is currently vacant, and cleared of all vegetation, with the exception of established trees that will be retained wherever possible.

The application proposes the development of the following structures:

- Homestead (which also includes verandah, carport and porch);
- Stables (8 stalls);
- Caretaker’s dwelling (which includes its own garage, verandah and courtyard);
- Equestrian exercise yard;
- Seven (7) fenced paddocks;
- Landscaping and access roadways;
- Training track around the property perimeter; and,
- New front and side fences.

2.1 SOIL TYPES

The subject site is mapped as Spearwood System (Gracetown Ridge System). This soils type is classified as ‘Stocking rate unit SR1: well drained yellow to brown sands’.

3. NUMBER AND TYPE OF HORSES

A maximum of 4 thoroughbred horses (light horses) are proposed to be kept on the subject site at any one time.

3.1 BASE STOCKING RATE CALCULATION

The base stocking rate is the number of horses *'that can consistently be kept on a piece of pasture all year round with minor additional feed and without causing environmental degradation.'*

The base stocking rate for the site has been calculated using the method in the *Stocking rate guidelines for rural small holdings, Swan Coastal Plain and Darling Scarp and surrounds, Western Australia* (the guidelines) prepared by the Department of Agriculture and Food. The base stocking rate is the number of Dry Sheep Equivalent (DSE) that would apply to the land with the lowest level of pasture management in an average year. A single light horse is equivalent to 10 DSE. The DSE for the area of the site has been calculated and provided in Table 1 below.

Table 1. Determination of Base Stocking Rates for the Site		
Lot number/Location	Lot 100 (No.206) Pinjar Road, Mariginiup	
Well licence allocation 31,240 kL/year	Sufficient water for: 2.083 ha (irrigated pastures require up to 15,000 kL/ha/year)	
Irrigated pasture	Area (hectares)	Stock allowed (DSE)
SR1 (well drained yellow to brown sands 20DSE/ha)	2.733ha	(2.733 x 20 DSE) 54.66 DSE
Total area of pasture and total DSE	2.733ha	54.66 DSE
Area of property boundary buffers, plus remnant vegetation wetlands and drains or areas of rock	-	No stock allowed
Building envelope, driveways etc.	2.704ha	No stock allowed
Total area of property	5.437ha	
Town planning conditions/restrictions		
N/A		
Environmental requirements		
<ul style="list-style-type: none"> ▪ The subject site is adjacent to Mariginiup Lake, a classified Conservation Category Wetland (CCW). The current edge of the mapped CCW provides for approximately 37- 		

45 metre buffer to Lot 100.

Conditions imposed

- The base stocking rate for the site is a maximum 54 Dry Sheep equivalent (DSE) or 5 light horses on irrigated pasture.

In this regard, the proposed 4 thoroughbred horses (light horses) are consistent with the base stocking rate for the site.

4. STABLING PRACTICES

All horses will be kept in stables at night, and released into paddocks to graze and exercise for short periods of time during the day. The time-period horses are released into paddocks will vary depending on the condition of the paddocks, and the training program for each horse.

A stable hand will be employed to handle the horses, prepare them for their daily routine, and attend to stable duties such as feeding, walking horses and mucking out the stalls.

Stables will be cleaned daily, with manure, refuse, soiled bedding and uneaten food collected and placed in covered bins. Fresh bedding will be provided daily.

4.1 HORSE TRAINING TRACK AND EXERCISE YARD SHELTER

A horse training track will be established around the perimeter of the site. A proposed sheltered exercise yard will also be constructed at the front of the site. Horses will be exercised along the track or within the exercise yard on a daily basis. This will reduce the amount of time each day horses spend grazing or sleeping in the paddocks, thereby reducing any potential land degradation.

5. MANURE MANAGEMENT

Manure will not be allowed to accumulate in stalls and yards. Manure will be regularly collected and stored in plastic bins lined with a bulk bag supplied by Moes Manure Pickup Service (refer Figure 1). The company will clear these bins at regular intervals to ensure that the manure does not attract flies or cause offensive odours. The manure will be removed off site, and the bulk bag will be replaced each time to ensure there is no residual manure in or on the bin. This method of disposal is known to be clean and effective.



Figure 1: Manure Storage Bins

6. PASTURE MANAGEMENT

All paddocks will be sown with Kikuyu grass and fully irrigated ensuring there is not only grass feed all year round but importantly grass coverage to minimize any dust issues. The total area of the irrigated paddocks is approximately 2.733ha.

A gardener/groundskeeper will be employed to regularly check and maintain the paddocks.

The landowners envisage having one (1) horse per paddock, except in the instance of young horse where it may be a more sensible approach to have them in pairs.

During the dry, summer months the pasture grasses may become stressed and growth could be minimal. If any of the paddocks need resting, horses will be stabled and exercised in the equestrian exercise yard or on the training track to allow the pasture time to grow and re-establish over bare areas. If required, horses will be rotated in different paddocks to ensure that enough pasture is available for horses to graze whilst not exposing the soil. Furthermore, horses will also be hand fed to ensure that they do not rely solely on the pasture for feed.

6.1 IRRIGATION

Water for irrigation will be sourced from a groundwater bore. Land Group WA – Pinjar Road Pty Ltd has a groundwater licence allocation of 31,240kL per year.

All paddocks will be irrigated to sustain the carrying capacity of the land for the proposed number of horses to be kept on site. Irrigation will not be necessary during rainy periods and therefore will not be required year-round. As such, there is sufficient water to irrigate the 2.733ha paddocks. Irrigation will only be used to ensure reasonable performance of the pastures to minimise the potential for run-off or leaching.

6.2 SHADING

Shading devices/canopies will be provided in each paddock. These shading canopies will be constructed of steel, concrete and “Askin” performance insulated roof panels (akin to cool room panels) for added sun protection. Additionally, the existing retained trees and the proposed London Plane trees on the paddocks boundaries will provide additional shading.

7. DUST CONTROL

It is unlikely that there will be any dust problems originating from this site given that there will be maintained pasture; landscaping on the perimeter; lawn areas; and hard wearing material areas around the stables, yards and exercises areas that will be maintained by the gardener/groundskeeper.

8. WEED CONTROL

Weed control will be carried out on the property by the employed gardener/groundskeeper. Control measures include regular inspections of paddocks to gauge the amount of type of weeds present; selective sprays to kill certain weeds; and a garage for landowners and employees to park their vehicles to reduce the spread of weeds.

9. VERMIN CONTROL

Equestrian facilities commonly attract vermin such as small rodents due to the availability of food and good breeding and nesting areas. Proper management can significantly reduce and eliminate vermin.

The following management measures will be implemented:

- Any area where fodder is kept will be sealed to ensure no vermin can gain access; and
- Trim weeds and plants around buildings to eliminate potentially places where rodents can hide/nest.

10. FLY MANAGEMENT

To prevent fly problems, appropriate manure management is essential. The regular collection of manure will eliminate the warm, moist conditions required by the larvae to hatch and grow and will significantly reduce the number of flies.

11. CONCLUSION

The purpose of this report is to support the planning application for the development of a single house, stables, caretaker's dwelling, equestrian activity and earthworks on Lot 100 (No.206) Pinjar Road, Mariginiup.

The subject site, with irrigation, has the capacity to permanently stock 5 light horses. To ensure that

regard, a total of 4 horses is proposed to be kept on the property. This report identifies stabling practices; manure, pasture, and fly management; dust, weed and vermin control measures to ensure appropriate measures are implemented to protect the environment and comply with the City of Wanneroo's and the Department of Agriculture and Food policies.