



AgFirst Waikato (2016) Ltd
26D Liverpool Street, PO Box 9078
Hamilton 3240, New Zealand
+64 7 839 2683
waikato@agfirst.co.nz | www.agfirst.co.nz

15 November 2020

Mr Warwick MacDonald
Greenhill properties Ltd

Please find attached my report regarding the impact of your rezoning a portion of your land from Rural to Business and the impacts on agricultural output.

If you have any questions or comments please do not hesitate to contact me.

Yours sincerely

A handwritten signature in blue ink, appearing to read "D. Miller".

Dave Miller
Farm Management Consultant
B Ag Sc MNZIPIM



Independent
Agriculture
& Horticulture
Consultant
Network

Proposed rezoning report

Prepared for: Greenhill Properties Ltd

Dave Miller
15 November 2020

TABLE OF CONTENTS

1.0	Purpose	3
2.0	Executive Summary	3
3.0	Background	4
4.0	Soil Type	4
5.0	Pasture	4
6.0	Carrying capacity	5
7.0	Maize production	6
8.0	Horticulture options	6

1.0 PURPOSE

The purpose of this report was to review the impacts of rezoning a 4.5 hectare site from Rural to Business. The proposed site is part of a larger 33.68 hectare lot.

The property is located at 133 Greenhill Road

The assumption being that if the rezoning is successful then the 4.5 hectares would be removed from the current farming operation.

2.0 EXECUTIVE SUMMARY

If the site is rezoned Business and removed from the farming estate the impact would be the loss of approximately 60 tDM of annual pasture production which currently supports approximately 13 dairy cows.

The area in question is at the furthest corner of the farm from the cowshed and results in a reasonably long 1.42 km walk one way for the cows. As a consequence the paddock is targeted for silage to reduce by 1 – 2 the number of walks to the paddock during the season.

13 cows is 3.7% of the current dairying operation. It could be compensated for on the remaining dairy platform by using an additional 50 kgN/ha to grow an additional 500 - 600 kgDM/ha across the remaining area.

There may be some challenges in doing this and meeting Regional Council plans for a sinking lid on N Leaching over time.

The soils are suitable for maize cropping and would contribute approximately 103 tDM/ha if the full 4.5 hectares was grown in maize.

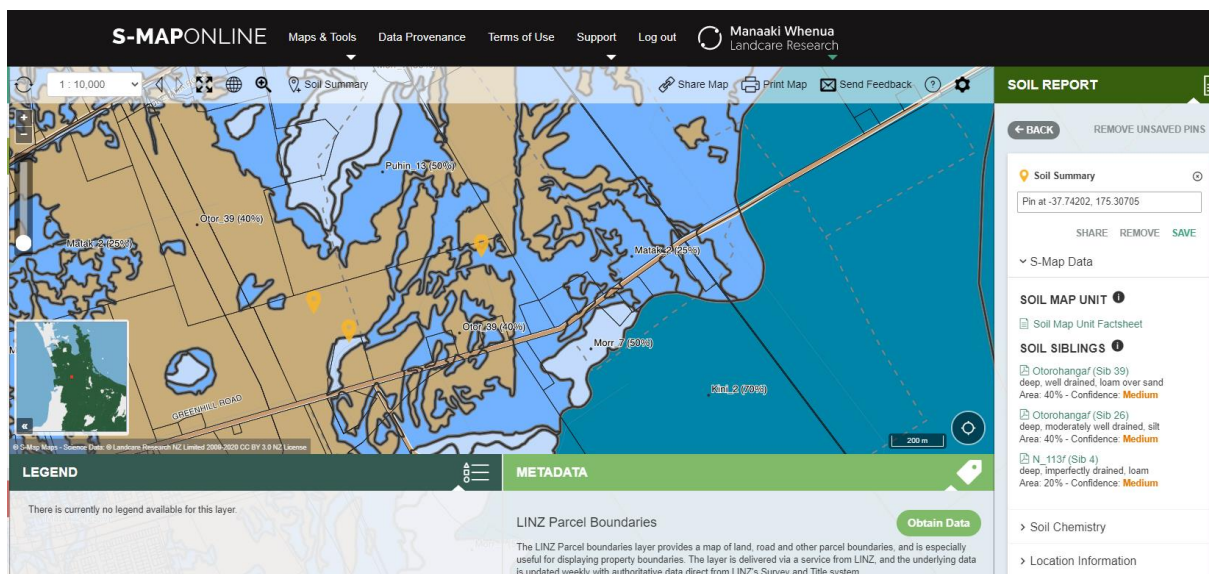
Horticulture is an option, however such close proximity to the Waikato expressway means the significant capital investment required may be tempered by some concerns of airborne pollutants affecting a food crop from what will be a very busy road.

3.0 BACKGROUND

Lot 3, DP 304594 is a 33.68 hectare lot on Greenhill Road. This lot is part of a larger dairy farming operation milking approximately 350 cows. The proposal is to rezone 4.5 hectares of Lot 3, DP 304594 as Business from its current Rural zoning.

4.0 SOIL TYPE

S maps indicates a complex mix of soils.



The predominant soils across the 4.4 hectare site are of the Otorohanga family and are classed as moderately to well-drained allophanic soils.

This would correspond with observations made during my site visit.

The soil is classified as LUC 2 w2 with limitations due to high water table and wetness.

Pastures were reasonable quality perennial ryegrass and white clover, typical under Waikato dairy conditions.

5.0 PASTURE

Pastures across the 4.5 hectare site are typical of pastures on ash soils under dairying. They were in reasonable condition. Photo 1 shows the pastures. The paddock had just been harvested for silage so difficult to get a typical grazing image.

Photo 1: Pastures



6.0 CARRYING CAPACITY

Lot 3, DP 304594 is part of a larger dairy farm milking approximately 350 cows. Pasture production is estimated at 13 tDM/ha.

The 4.5 hectares subject to the rezoning is the most distant paddock from the cowshed on the farm. Total walking distance from the midpoint of the paddock to the cow shed is 1.42 km. This long walking distance is a driver for the paddock being targeted for hay and silage to reduce the number of trips in a season the cows make to it.

This mixed grazing silage model is also the reason total DM production is estimated at 1 - 1.5 tDM/ha lower than that being achieved on paddocks closer to the cowshed.

Distance from the shed means the paddock is reliant on solid fertiliser as it is impractical to apply dairy effluent to it.

Carrying capacity is estimated at 1300 kg liveweight per hectare, or equivalent to 2.9 crossbred cows per hectare. In total the 4.5 hectares would be expected to provide sufficient drymatter for 13 dairy cows and contributes an estimated 58 - 60 tDM to the farm's total feed supply.

Dairying remains the most profitable pastoral use for the land.

7.0 MAIZE PRODUCTION

The site could be considered for maize production with an estimated yield potential of 22 - 24 tDM/ha, with total yield of approximately 103 tDM.

8.0 HORTICULTURE OPTIONS

Horticultural crops that could be considered include Kiwifruit and asparagus although neither are commonly grown in the area. The very close proximity of the expressway may deter the significant capital investment required given the potential for airborne contaminants on a food crop however low the risk is.

The nearby Zeelong tea crop operation, while only 4 km away, is on a different soil type that is clay based rather than ash based, as found on this site.

Contact

Dave Miller

Agribusiness Consultant
021 287 7070
dave.miller@agfirst.co.nz

AgFirst Waikato (2016) Ltd

26D Liverpool Street, PO Box 9078
Hamilton 3240, New Zealand
waikato@agfirst.co.nz
www.agfirst.co.nz

Disclaimer:

The content of this report is based upon current available information and is only intended for the use of the party named. All due care was exercised by AgFirst Waikato (2016) Ltd in the preparation of this report. Any action in reliance on the accuracy of the information contained in this report is the sole commercial decision of the user of the information and is taken at their own risk. Accordingly, AgFirst Waikato (2016) Ltd disclaims any liability whatsoever in respect of any losses or damages arising out of the use of this information or in respect of any actions taken in reliance upon the validity of the information contained within this report.