



Edward J O'Grady Pty Ltd

Rural Lands in Camden LGA

Scoping report

June 2020

Table of contents

1.	Introduction.....	1
1.1	The land	1
2.	Land use and economic returns.....	4
2.1	Rainfall	4
2.2	Economic return	5
2.3	Alternative agricultural land use options	7
3.	Primary industries in Camden LGA and the Sydney Basin	10
3.1	Value of agricultural production	10
3.2	Agricultural Employment.....	12
4.	The planning context.....	14
4.1	Camden Local Environmental Plan 2010	14
4.2	Camden Council Rural Lands Strategy	16
4.3	Relevant NSW legislation and policies	17
5.	Analysis of key policies	20
6.	Conclusion.....	25
7.	Scope and limitations	25
8.	Appendix 1: Beef cattle gross margin	26

Table index

Table 1	Land area	1
Table 2	Rainfall totals at Camden.....	5
Table 3	Alternative RU1 land use options	8
Table 4	Rural land use in the Sydney Basin.....	11
Table 5	Gross value of agricultural production Camden LGA (2005-06 to 2015-16)	12
Table 6	Employees by industry of occupation (2001-2016)	13
Table 7	Zone RU1 Primary production – Camden LEP 2010.....	14
Table 8	Camden Rural Lands Strategy: guiding criteria for rezonings on rural land.....	16
Table 9	Analysis against the objectives of the Camden RU1 Primary Production Zone	20
Table 10	Analysis against the aims of the Primary Production and Rural Development SEPP	21
Table 11	Analysis against the key planning principles: Camden Rural Lands Strategy.....	23

Figure index

Figure 1	Location	1
Figure 2	Development around the location	2
Figure 3	Environment/Landscape Analysis.....	3
Figure 4	Agricultural Land Classification.....	4
Figure 5	Farm financial performance indicators.....	6
Figure 6	Farm performance by size: beef farms, Southern region 2016-17 to 2018-19.....	6

1. Introduction

This is a scoping report of the “Tidapa” property, 220-360 Chittick Lane, Cobbitty NSW with reference to its RU1 Primary Production Zoning in the Camden Local Government Area (LGA) and, more specifically, the land’s opportunities for current or potential productive and sustainable economic activities within the objectives of the RU1 Zone. In addition, preliminary exploration of the potential suitability of rezoning the land to enable alternative uses is discussed.

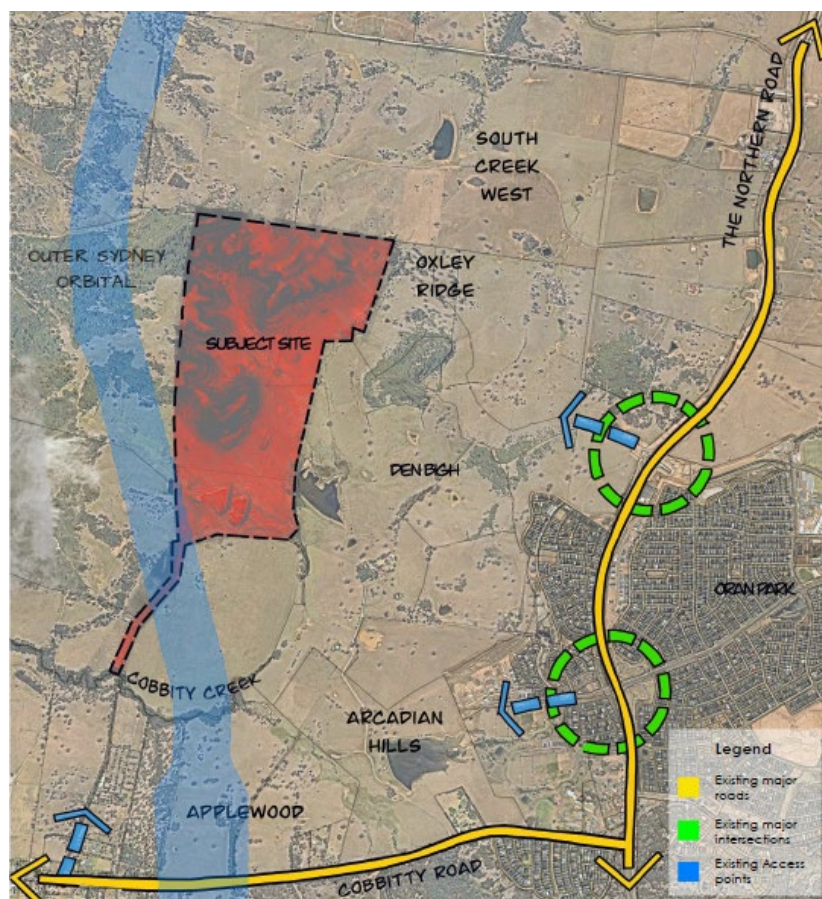
1.1 The land

The land comprises four lots totalling approximately 147 hectares (see Table 1) which is operated as a single holding, although each holding has separate ownership by different family entities. “Tidapa” is located to the north of Camden and west of Oran Park (see Figure 1).

Table 1 Land area

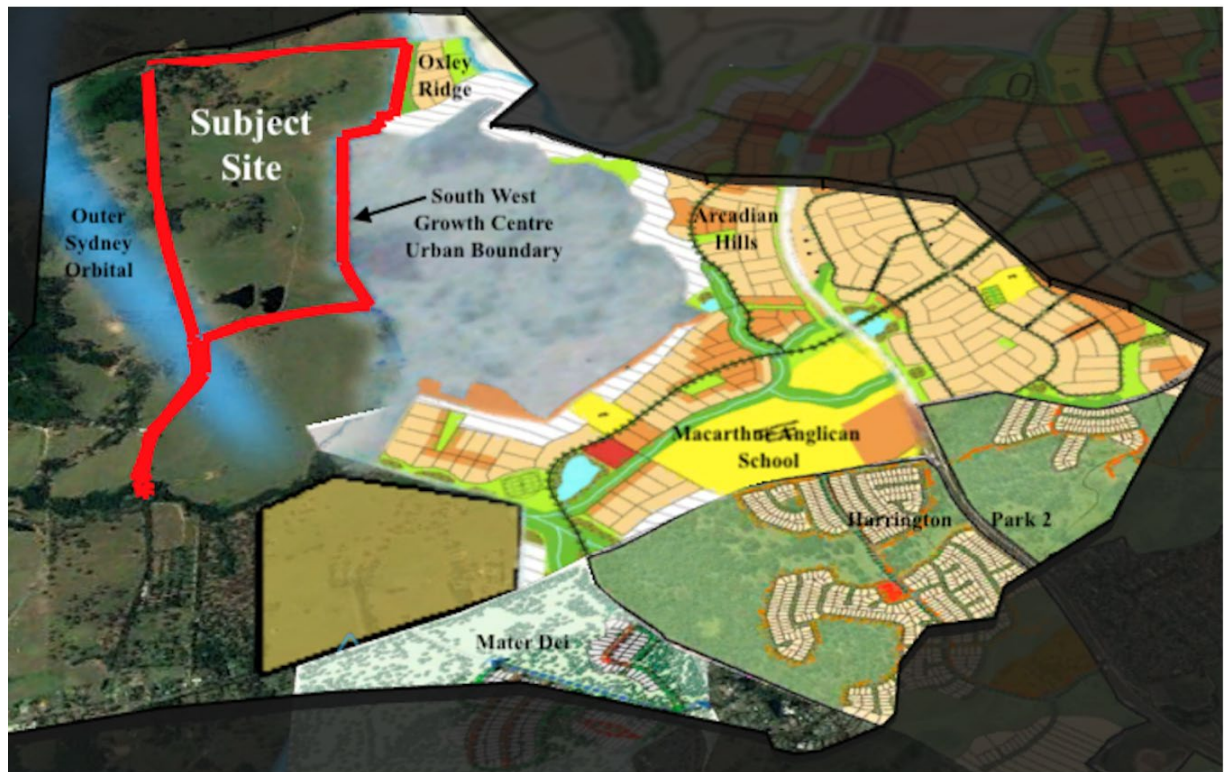
Lot	Area (Ha)
Lot 2 DP 239612	25.56
Lot 3 DP 239612	38.41
Lot 4 DP 239612	51.52
Lot 5 DP 239612	31.95
Total	147.44

Figure 1 Location



Recent developments have resulted in changes of land use around the site. Figure 2 shows the South West Growth Centre Urban Boundary to the east and the Outer Sydney Orbital road corridor to the west. These developments limit the ability for the owners to purchase additional RU1 land if there was an intention to benefit from economies of scale for the current beef cattle enterprise. This is discussed more fully later in this report.

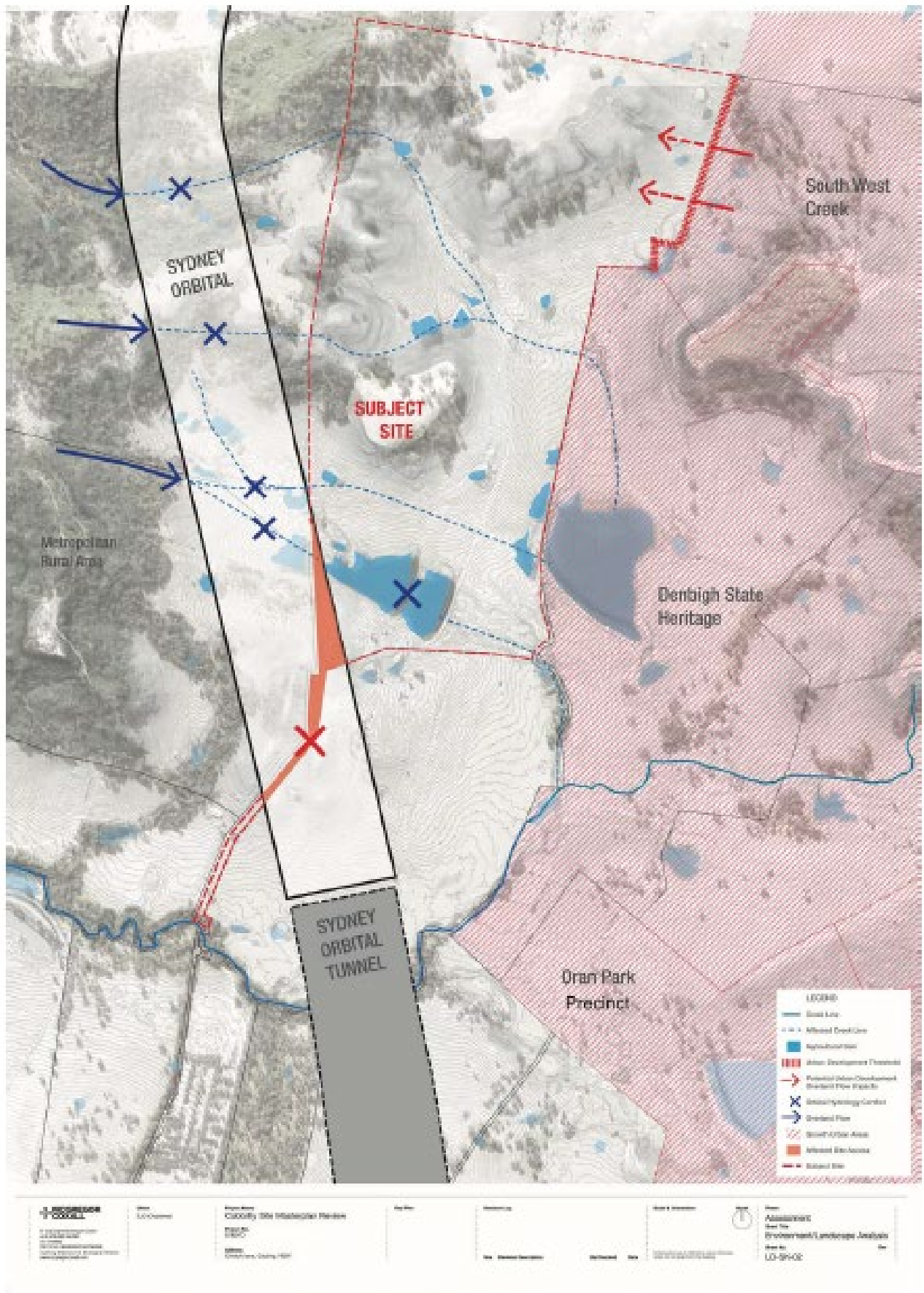
Figure 2 Development around the location



In addition, both the South West Growth Centre Urban expansion and the Outer Sydney Orbital road corridor potentially impact on agricultural production potential on "Tidapa". Figure 3 shows the orbital road disrupts the water flow from the west (blue crosses) which would potentially reduce livestock drinking water supplies. In addition, the possibility of intensification of agriculture which would be dependent on a reliable water supply could be compromised.

Residential development to the east (Figure 3 pink arrows and cross-hatching) could cause land use conflicts with future agricultural production. This would especially be the case if some form of intensive animal or plant agriculture was proposed in future in an effort to improve the financial viability of the agricultural land.

Figure 3 Environment/Landscape Analysis



1.1.1 Land use classification

Under the NSW Agricultural Land Classification system, the property is included as predominantly Class 3 with smaller areas of Class 4 and 5 (see Figure 4). Class 3 is defined as: *Grazing land or land well suited to pasture improvement. It may be cultivated or cropped in rotation with sown pasture. The overall production level is moderate because of edaphic (soil) or environmental constraints. Erosion hazard, soil structural breakdown or other factors, including climate, may limit the capacity for cultivation and soil conservation or drainage works may be required.* Note that the classification system is a 5-class system with Class 1 being most suitable for intensive cultivation and Class 5 as mainly unsuitable for agriculture.

Figure 4 Agricultural Land Classification



2. Land use and economic returns

“Tidapa” was purchased in 1972 and since that time it has operated as a Charolais cattle breeding stud. The effective grazing area is estimated as 115 hectares with the remaining areas not suitable for grazing (i.e. dwellings, infrastructure, heavily vegetated). The owners regularly seek advice from experts in relation to pasture and livestock management and it appears that productivity and profitability of the beef cattle stud enterprise has been at or near potential for the location in the past. More recently, drought and climate change risk has resulted in lower cattle numbers. These issues are discussed more fully below.

2.1 Rainfall

The cattle enterprise relies on rainfed pasture production and is thus subject to variabilities in climate conditions. The average annual rainfall at Camden is 782 mm, however the location has suffered severe shortfalls in recent years. The 2019 rainfall of 304 mm was the lowest on record (see Table 2).

Table 2 Rainfall totals at Camden

Year	Rainfall mm
2015	814
2016	921
2017	599
2018	562
2019	304
Average 1943 to 2019	782

Source: Bureau of Meteorology: Camden Airport AWS (bom.gov.au)

The long term livestock carrying capacity has been estimated as approximately one cow with followers per two hectares, implying a maximum carrying capacity of 56 breeding cows. While my calculations confirm that this is a reasonable historical estimate (see box below), reduction in rainfall in recent years has severely impacted the carrying capacity which has now been reduced to 40 breeding cows.

GHD long term average stocking rate calculation

Stocking rate of improved pasture: 10 Dry Sheep Equivalent (DSE) per hectare
 Feed requirements of a beef cow and followers: 20 DSEs
 Total cows (115ha X 10 DSE/ha ÷ 20 DSE/cow): 57.5 cows

2.1.1 Climate change

Pasture growth and resulting livestock carrying capacity is likely to be less predictable in future and be subject to increasing variability as a result of climate change. A snapshot from Sydney climate models predicts the following:

- While the region currently experiences considerable rainfall variability, from season-to-season and from year-to-year, autumn rainfall will increase in the near future and the far future, spring rainfall will decrease in the near future, but this change is less clear in the far future.
- Maximum temperatures are projected to increase by 0.7°C in the near future and up to 1.9°C in the far future. Increased maximum temperatures are known to increase the number of heatwave events.

(Source: *The Metropolitan Sydney Climate change snapshot*, NSW Office of Environment and Heritage).

The increase in climate variability imposes additional uncertainty and risk on the ability of livestock enterprises to consistently deliver acceptable and predictable economic returns on investments.

2.2 Economic return

“Tidapa” provided summaries of Profit and Loss Statements for the past 10 years and these have consistently shown a loss, with the losses varying between \$19,000 and \$68,000 per year. This indicates the beef cattle enterprise is not a sustainable economic activity and that household income would need to be supplemented by non-farm income to be viable.

The NSW DPI gross margin budget for beef cattle in 2019 is \$355 per cow (income \$568 less variable costs \$213 per cow, Appendix 1: Beef cattle gross margin) which equates to

approximately \$14,200 for 40 cows. A gross margin calculates income and deducts variable costs (animal health, pasture maintenance, selling costs) but does not consider labour or other overhead and financing costs. Deduction of such overhead costs would likely be the reason for the negative returns shown in the “Tidapa” Profit and Loss Statements.

The negative farm business profit for small beef cattle enterprises is demonstrated by farm survey results produced by the Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) as shown in Figure 5 and Figure 6. Figure 5 describes the major financial performance indicators that are used to assess economic viability. Of interest in this study is the calculation of farm business profit which considers cash receipts and cash costs to calculate farm cash income, with deduction of depreciation and imputed labour costs (i.e. owner operator costs) resulting in farm business profit.

Figure 5 Farm financial performance indicators

Box 2 Major financial performance indicators

Total cash receipts: total revenues received by the business during the financial year

Total cash costs: payments made by the business for materials and services and for permanent and casual hired labour (excluding owner-manager, partner and family labour)

Farm cash income: *total cash receipts – total cash costs*

Farm business profit:

farm cash income + change in trading stocks – depreciation – imputed labour costs

Profit at full equity: return produced by all the resources used in the business

farm business profit + rent + interest + finance lease payments – depreciation on leased items

Rate of return to total capital used: efficiency of businesses in generating returns from all resources used (*profit at full equity/total opening capital*) x 100

Rate of return to owner equity: efficiency of businesses in generating profit from capital invested by owners (*farm business profit/farm business equity*) x 100

Source: Australian farm survey results 2016-17 to 2018-19, ABARES, April 2020

Figure 6 shows farm business profit by size decile ranked from smallest to largest according to total farm receipts.

Figure 6 Farm performance by size: beef farms, Southern region 2016-17 to 2018-19

Size Decile	Output share (%)	Cash receipts (\$)	Cash costs (\$)	Farm business profit (\$)	Capital (\$)	Net capital additions (\$)	Rate of return (%)	Equity ratio (%)
1	1.9	37,428	47,220	-44,578	1,518,494	4,159	-1.7	98.6
2	2.2	51,191	73,162	-85,597	1,421,835	8,178	-4.0	99.7
3	2.5	64,521	40,222	-34,079	2,390,953	1,481	-1.4	99.4
4	3.3	81,596	61,221	-30,044	1,963,651	278	1.6	97.9
5	4.3	99,466	73,832	-58,931	2,096,183	9,244	0.9	97.6
6	5.2	122,123	85,457	-14,503	4,212,307	-9,014	0.6	96.8
7	6.8	163,837	136,177	-45,533	3,432,564	-26,189	0.7	98.1
8	10.8	241,741	171,748	-7,095	3,948,126	23,924	3.8	95.8
9	15.3	375,041	308,052	-59,702	6,205,504	115,251	1.6	93.2
10	47.7	1,117,624	848,297	127,514	13,012,400	233,938	4.5	88.5

Note: Per farm averages for each size decile

Source: ABARES Australian Agricultural and Grazing Industries Survey

“Tidapa” cash receipts of approximately \$22,700 per year (\$568/cow for 40 cows) place it within size decile 1, with the ABARES data indicating that beef farms of this size have farm business

losses of about \$45,000 per year. This is in line with the Profit and Loss performances provided for “Tidapa”.

It can be concluded that beef cattle farms of the size of “Tidapa” are not economically viable as standalone enterprises, although such losses may be justified if they can be offset by other economic considerations including increases in the capital value of the land.

At a minimum, farm cash income would need to increase to \$82,000 (\$37,428 + \$44,578) to reach breakeven (i.e. farm business profit of zero). Based on a gross income of \$568 per breeding cow, a herd size of approximately 144 cows ($\$82,000 \div \$568/\text{cow}$) would be required to reach breakeven.

Based on a stocking rate of one cow requiring two hectares, 144 cows would require a minimum of 288 hectares, or almost double the currently available grazing area of 150 hectares. As stated above, the proximity of the South West Growth Centre Urban Boundary to the east and the Outer Sydney Orbital road corridor to the west make it unlikely that additional RU1 land could be purchased in the vicinity to reach the 288 hectare farm size required.

2.3 Alternative agricultural land use options

A land owner faced with continuing farm business losses has a number of options available assuming that the status quo of continuing losses is not acceptable. The success of alternative options will depend on a range of variables with uncertain outcomes and these are also influenced by the managerial capacity of the owners. Following in Table 3 is a list of alternatives that could be considered for “Tidapa” given the assumption that the RU1 zoning is retained. Note that this is not an exhaustive list but includes example of possible options.

The implications of these options in relation to the various planning principles adopted by the government are addressed in section 3 below.

Table 3 Alternative RU1 land use options

Option	Explanation	Considerations for economically viable land use
1. Expand beef production by purchasing additional land.	Provides the ability to capture economies of scale thereby reducing the negative impact that overhead costs have on gross margins.	<p>The availability of sufficient land valued for its agricultural worth is constrained, especially given the proximity of the South West Growth Centre Urban Boundary to the east and the Outer Sydney Orbital road corridor to the west. The value of land suitable for beef cattle production within reasonable proximity to “Tidapa” is likely to include a speculative element that will increase land prices beyond their agricultural worth and thus increase the difficulty of achieving a positive return on investment from an agricultural enterprise.</p> <p>A herd size of 144 breeding cows is required to reach a breakeven farm business profit (i.e. an additional 100 cows compared to the current stocking rate). Assuming one cow requires two hectares this would be equivalent to an additional 200 hectares. The breakeven farm business profit calculation does not include any financing costs for the purchase of additional land (i.e. interest and capital repayments).</p> <p>The financial burden of purchasing additional land plus the uncertainty of productivity levels as a result of climate change mean that expansion of the cattle enterprise has considerable risk.</p>
2. Intensify beef production on the current land – e.g. irrigated pastures and/or opportunity feedlot.	Provides an increase in the productivity of the cattle enterprise through an increase in potential stocking rate and faster turn-off of higher quality livestock.	<p>The majority of the site is Class 3 (DPI Agricultural Land Classification system) and as such “the overall production level is moderate because of edaphic (soil) or environmental constraints”. The remaining land is of poorer quality (Classes 4 and 5). It is unlikely that the land is of sufficient quality to enable the intensity of production required. In addition, climate change is a risk factor to be considered.</p> <p>The supply of suitably priced irrigation water is required but its availability is unknown.</p> <p>Intensive livestock agriculture requires Council consent and a development application for a feedlot may not be successful due to odour and run-off issues.</p> <p>Additional capital would be required for irrigation and feedlot infrastructure. Careful assessment of return on investment of additional capital would be required to ensure that such agricultural investment is superior to other investment options.</p>

Option	Explanation	Considerations for economically viable land use
3. Develop an intensive poultry enterprise.	Shedded poultry production is likely to achieve increased returns per hectare.	<p>High capital cost to construct sheds.</p> <p>Intensive livestock agriculture requires consent and a development application may not be successful due to odour, noise, transport and run-off issues.</p> <p>The risks of achieving returns on investment are high because of the need for investment capital as well as a requirement for the owner to learn new management skills.</p> <p>There is evidence that current intensive poultry businesses are relocating outside of the Sydney Basin because of declines in the operating environment.</p> <p>Biosecurity risks need to be managed by having suitable buffer distances which may be difficult to arrange.</p>
4. Establish market gardens.	Demand for locally produced “leafy green” vegetables is growing, although competition from cheaper-priced imports is ever-present.	<p>The site is predominantly Class 3 based on the DPI Agricultural Land Classification system and as such is marginal in quality to enable year round production.</p> <p>Availability of a secure and reasonably priced water resource is uncertain.</p> <p>Intensive plant agriculture requires consent and a development application may not be successful.</p> <p>The risks of achieving returns on investment are high because of the need for investment capital as well as a requirement for the owner to learn new management skills.</p>
5. Establish “protected” horticulture (glasshouse) complex	<p>Protected horticulture businesses are increasing in Australia because of their ability to meet demand for year-round supply of produce.</p> <p>Productivity is enhanced by reduced reliance on seasonal climate influences and improved crop husbandry technology options.</p>	<p>Availability of a secure and reasonably priced water resource is uncertain.</p> <p>Intensive plant agriculture requires consent and a development application may not be successful.</p> <p>The risks of achieving returns on investment are high because of the need for investment capital as well as a requirement for the owner to learn new management skills.</p>

Note that the above list is not exhaustive but the options enable discussion of the obstacles that need to be considered for alternative potential land uses at “Tidapa” that could be expected to achieve economically viable outcomes within the context of the RU1 zone in the Camden LGA. This planning context is discussed in the following section.

3. Primary industries in Camden LGA and the Sydney Basin

There is a complexity of rural land uses in the Sydney Basin that includes viable production agriculture (e.g. market gardens, glasshouses), enterprising businesses (e.g. horse training and agistment, farm-gate sales, agri-tourism) and social interests (hobby farms, community gardens). Table 4 on the following page provides a typology of the various form of “urban” agriculture and outlines the value and benefits that these provide.

Generally in the Sydney Basin, the lots used for extensive agricultural enterprises (e.g. livestock grazing) are generally too small to enable standalone economically viable businesses and therefore off-farm income is required to supplement family household income.

Intensive industries such as egg and chicken production, or vegetable, floriculture or other horticultural production appear to have been economically viable in the past, although there is evidence that some businesses are exiting the Sydney Basin. For example, in a report on ABC Rural dated 9 November 2016, Ingham's chicken company stated that it was cutting costs by reducing its emphasis in Sydney but expanding in South Australia and Queensland, with the Queensland investment including: contracts with more growers in south-east Queensland and northern NSW; and expanding processing in northern NSW.

3.1 Value of agricultural production

It is not possible to access to up-to-date statistics on the value of agricultural production in the Camden LGA. The most recent Australian Bureau of Statistics (ABS) data is for the 2015-2016 year and Table 5 provides the gross value of agricultural production for that year compared to 2005-06. Because the data are quite dated, care must be taken when drawing inferences of present day production. For example, the data does not reflect the below average rainfall in each of 2017, 2018 and 2019 (see Table 2) which will have reduced production.

Reservations about the dated ABS data aside, Table 5 shows there was an increase in the gross value of agricultural production in the Camden LGA between 2005-06 and 2015-16 of \$11.5 million (32% increase). The majority of the increase was in the intensive agricultural industries, including poultry slaughtering (120% increase), eggs (19% increase) and nurseries/turf (18% increase), although the value of vegetables and fruit declined by 43%.

The value of agricultural production from extensive grazing land (cattle and sheep slaughtering, and wool production) declined from \$1.59 million in 2006-06 to \$1.33 million in 2015-16, a decline of 16%.

Data sourced from other ABS reports have shown the following trends in the Camden LGA:

- A decline in the number of poultry businesses from 13 in 2005-06 to 4 in 2015-16
- A decline in the number of head of dairy cattle from 782 in 2005-06 to 477 in 2015-16
- Over the same period, the total number of head of beef cattle declined from 3,443 to 1,980.

3.1.1 Marketing of beef cattle

The decline in cattle numbers has resulted in less numbers for sale at the Camden saleyards. To ensure better competition for cattle, many owners prefer to sell cattle at the Southern Regional Livestock Exchange at Moss Vale although the additional transport cost increases the costs of production. This is likely to be exacerbated in future after the closure of Leppington Pastoral Company's dairy farms in Camden LGA for residential development. The closure will accelerate the decline in agriculture production within the LGA and will have a negative flow on effect to the supporting rural industries.

Table 4 Rural land use in the Sydney Basin

	Forms of Urban Agriculture	Values/Benefits
SOCIAL	Backyard	Recreation, human health on all dimensions, seed banks, supplementary food supply
	Community and Communal Gardens	Social cohesion through cooperative endeavour, education, food access, food equity, productive use of communal land
	Rooftop	Corporate involvement, worker wellbeing, efficient use of space
	School/Agriculture Plots	Education, connection with farming practices and culture
	Historical	Heritage, conservation and collection of artefacts, repository, education, research
ENTERPRISING	Lifestyle/Hobby	Environmental management, recreation, diversity of lifestyle, supplemental incomes, niche production, small scale production
	Boutique/Cottage/Niche	Diversity, rural open space, small business, specialty production
	Farm Gate	\$\$ remain locally; 80% profit from 20% of farm sales, reconnecting with community, visitor experiences, education, alternative distribution channel, new markets.
	Agritourism	Income diversification; inter-industry leverage – hospitality, tourism, agriculture; home/farm based value added agribusiness; producer/consumer relationship benefits.
	Equine - Recreation - Studs/Training	Recreation; landscape visual aesthetics; bloodstock industry; horse culture and history \$ multiplier for support industries.
PRODUCTION	Flood Plain - Market Gardens - Dairy - Turf - Orchards - Fodder Crops	Intergeneration equity; food security; greatest inherent sustainability – soils and soil cycles, water access, landform, biodiversity (riparian, wetlands); water effluent and green recyclables. Hydrological system, micro and macro climate effects, sequestration of urban wastes, green belts, aesthetic contribution to rural commons
	Flood Free - Market Gardens - Dairy - Orchards - Fodder Crops/Agro-Forestry	Retention of a natural resource to meet future and perhaps yet unknown needs and considerations (e.g. as a result of global warming) and technologies such as nanotechnology; sustainable urban agriculture as a NRM instrument particularly when land use is matched to agricultural suitability; community cultural diversity – people of culturally and linguistically diverse (CALD) backgrounds; carbon credits.
	Controlled Environment/High-Tech - Greenhouse Horticulture - Nurseries - Poultry - Fixed Pad Dairies - Mushrooms - Protected Cropping	\$ Multiplier for support industries, e.g. mushrooms >5; fresh perishable foods grown close to market; reduced emissions due to less transport distances, high productivity and efficiency, controlled waste, pesticide, water and energy systems

Source: Mason and Docking (2005) *Agriculture in Urbanising Landscapes – A Creative Planning Opportunity*

Table 5 Gross value of agricultural production Camden LGA (2005-06 to 2015-16)

Commodity	2005 - 06 (\$m)	2015 - 16 (\$m)
Pasture, cereal and other crops cut for hay - total value	\$0.17	\$0.50
Nurseries, cut flowers and cultivated turf - total value	\$3.8	\$4.5
Vegetables - total value	\$11.0	\$6.4
Fruit – total value	\$0.35	\$0.07
Livestock slaughterings		
Poultry	\$11.94	\$26.30
Cattle and calves	\$1.59	\$1.26
Sheep and lambs	\$0.00	\$0.01
Pigs	\$0.15	\$0.33
Livestock products		
Wool	\$0.00	\$0.06
Milk	\$0.74	\$0.78
Eggs	\$5.62	\$6.69
Total	\$35.5 (\$m)	\$47.0 (\$m)

Source: ABS (2018) Value of Agricultural Commodities Produced–New South Wales and Local Government Areas–2015-16, Cat. No. 7503.0 (Table 2), Statistics for Camden (A). Cat. NO 7125.0 Small Area Data 2005-06

3.2 Agricultural Employment

Table 6 below analyses employment for the Camden LGA over a fifteen year period between 2001 and 2016. Total employment in the LGA increased by 13,140 (116%) over the period with employment in the agriculture, forestry and fishing sector decreasing by 14%. With the exception of two industries (one being agriculture, forestry and fishing) every sector experienced significant increases in employment. Total numbers of people employed in agriculture, forestry and fishing declined by 68 people over this period.

Based on the changes in the value of agricultural production in the Camden LGA over the last 10 years (as described in section 3.1 above), it is likely that the while there has been a general decline in employment in the agriculture, forestry and fishing sector, there would have been relatively stable or increasing levels of employment in the intensive agricultural industries (e.g. poultry slaughterings). As a consequence, most of the decrease in employment in the agriculture, forestry and fishing sector would have been in the extensive agricultural industries.

Within the ABS statistical area of “Cobbitty State Suburb” only 51 people were employed in the agriculture, forestry and fishing industry (ABS Census 2016).

Table 6 Employees by industry of occupation (2001-2016)

Industry	Total Numbers 2001	% of total	Total Numbers 2016	% of total	Change 2001 - 2016	% change 2001 to 2016
Agriculture, Forestry and Fishing	480	4%	412	2%	-68	-14%
Mining	24	0%	101	0%	77	321%
Manufacturing	966	9%	1,523	6%	557	58%
Electricity, Gas, Water and Waste Services	32	0%	253	1%	221	691%
Construction	1,092	10%	3,867	16%	2,775	254%
Wholesale Trade	646	6%	774	3%	128	20%
Retail Trade	2,419	21%	3,239	13%	820	34%
Accommodation and Food Services	570	5%	1,806	7%	1,236	217%
Transport, Postal and Warehousing	662	6%	1,355	6%	693	105%
Information Media and Telecommunications	112	1%	144	1%	32	29%
Financial and Insurance Services	224	2%	441	2%	217	97%
Rental, Hiring and Real Estate Services	839	7%	525	2%	-314	-37%
Professional, Scientific and Technical Services			1,133	5%	1,133	
Administrative and Support Services	250	2%	600	2%	350	140%
Public Administration and Safety			838	3%	838	
Education and Training	1,137	10%	2,238	9%	1,101	97%
Health Care and Social Assistance	1,014	9%	2,429	10%	1,415	140%
Arts and Recreation Services	269	2%	349	1%	80	30%
Other Services	460	4%	1,079	4%	619	135%
Inadequately described/Not stated	108	1%	1,343	5%	1,235	1144%
Total	11,304	100%	24,444	100%	13,140	116%

Source: Australian Bureau of Statistics (2016) 2016 Census of Population and Housing.
Camden (A) (LGA11450) 201 sq Kms; 2001 Census of Population and Housing

4. The planning context

Following are several key strategies, policies and plans that apply to the current and future land use development on “Tidapa”. Most of the policies refer to the need to retain agriculture citing the importance of agriculture to the local economy. However, as discussed above in section 3, there has been a decline in agricultural employment over the last 10 years, while the value of extensive agricultural production has declined by 16%.

4.1 Camden Local Environmental Plan 2010

“Tidapa” is located in the Camden LGA and is zoned as RU1 Primary Production within the Camden LEP 2010. The objectives and land uses relevant for the RU1 zone are shown below (Table 7). Note also that the Minimum Lot Size for subdivision for residential purposes is 40 hectares.

Table 7 Zone RU1 Primary production – Camden LEP 2010

Zone RU1 Primary Production	
1 Objectives of zone	<p>To encourage sustainable primary industry production by maintaining and enhancing the natural resource base.</p> <p>To encourage diversity in primary industry enterprises and systems appropriate for the area.</p> <p>To minimise the fragmentation and alienation of resource lands.</p> <p>To minimise conflict between land uses within this zone and land uses within adjoining zones.</p> <p>To permit non-agricultural uses which support the primary production purposes of the zone.</p> <p>To maintain the rural landscape character of the land.</p>
2 Permitted without consent	Extensive agriculture; Forestry; Home occupations
3 Permitted with consent	Bed and breakfast accommodation; Cellar door premises; Dual occupancies (attached); Dwelling houses; Environmental protection works; Extractive industries; Farm buildings; Farm stay accommodation; Garden centres; Home-based child care; Home businesses; Home industries; Intensive livestock agriculture; Intensive plant agriculture; Open cut mining; Roads; Roadside stalls; Rural industries; Rural supplies; Rural workers' dwellings; Secondary dwellings; Any other development not specified in item 2 or 4
4 Prohibited	Amusement centres; Car parks; Commercial premises; Correctional centres; Eco-tourist facilities; Entertainment facilities; Exhibition homes; Freight transport facilities; Function centres; Health services facilities; Heavy industrial storage establishments; Home occupations (sex services); Industrial retail outlets; Industries; Information and education facilities; Port facilities; Public administration buildings; Recreation facilities (indoor); Recreation facilities (major); Residential accommodation; Restricted premises; Service stations; Sex services premises; Storage premises; Tourist and visitor accommodation; Transport depots; Vehicle body repair

Zone RU1 Primary Production

workshops; Vehicle repair stations; Warehouse or distribution centres; Wharf or boating facilities; Wholesale supplies

If the owners were to seek to rezone the property, it is expected that they would be subject to local planning directions under Section 117 of the NSW *Environmental Planning and Assessment Act 1979* with respect to two components:

1. Subsection 1.2 Rural Zones. The objective of this direction is to protect the agricultural production value of rural land; and
2. Subsection 1.5 Rural Lands. The objectives of this direction are to:
 - a) protect the agricultural production value of rural land; and
 - b) facilitate the orderly and economic development of rural lands for rural and related purposes.

The direction requires that a planning proposal must not rezone land except where the relevant planning authority (Camden Shire Council) can satisfy the Director-General of the Department of Planning that the proposal is:

- a) justified by a strategy which:
 - i. gives consideration to the objective of this direction, and
 - ii. identifies the land which is the subject of the planning proposal (if the planning proposal relates to a particular site or sites), and
 - iii. is approved by the Director-General of the Department of Planning, or
- b) justified by a study (prepared in support of the planning proposal) which gives consideration to the objective of this direction, or
- c) in accordance with the relevant Regional Strategy or Sub-Regional Strategy prepared by the Department of Planning which gives consideration to the objective of this direction, or
- d) of minor significance.

4.1.1 Primary Production and Rural Development SEPP

In addition to the above, a planning proposal which is subject to the above Directions must be consistent with the aims of the *State Environmental Planning Policy (Primary Production and Rural Development)* 2019. The aims of this Policy are as follows:

- a. to facilitate the orderly economic use and development of lands for primary production,
- b. to reduce land use conflict and sterilisation of rural land by balancing primary production, residential development and the protection of native vegetation, biodiversity and water resources,
- c. to identify State significant agricultural land for the purpose of ensuring the ongoing viability of agriculture on that land, having regard to social, economic and environmental considerations,
- d. to simplify the regulatory process for smaller-scale low risk artificial waterbodies, and routine maintenance of artificial water supply or drainage, in irrigation areas and districts, and for routine and emergency work in irrigation areas and districts,
- e. to encourage sustainable agriculture, including sustainable aquaculture,
- f. to require consideration of the effects of all proposed development in the State on oyster aquaculture,

- g. to identify aquaculture that is to be treated as designated development using a well-defined and concise development assessment regime based on environment risks associated with site and operational factors.

4.2 Camden Council Rural Lands Strategy

Camden Council adopted its Rural Lands Strategy in November 2018. The Strategy includes the following key planning principles:

1. Protect Camden's remaining rural lands
2. Retain Camden's valued scenic and cultural landscapes
3. Provide certainty and avoid rural land fragmentation
4. Minimise and manage rural land use conflict
5. Enhance Camden's rural economy
6. Minimise unplanned non-agricultural development
7. Maximise opportunities for relocation of rural enterprises.

The Strategy includes a set of guiding criteria to assist in the assessment of planning proposals for rezonings on rural land (Table 8).

Table 8 Camden Rural Lands Strategy: guiding criteria for rezonings on rural land

Assessment Criteria	Key considerations (Pre-Gateway)
Proposals must be consistent with state and local strategic plans	<ul style="list-style-type: none"> Improvement / ongoing maintenance of biodiversity, ecological, scenic and productive values. Agricultural land production value. Rural economic benefit. Net community benefit.
Proposals must not adversely impact on the operation of existing rural enterprises.	<ul style="list-style-type: none"> Existing intensive agricultural land uses. Land use conflict – utilisation of the Land Use Conflict Risk Assessment (LUCRA) tool developed by the NSW Department of Primary Industries.
Proposals must be a logical extension to existing urban areas.	<ul style="list-style-type: none"> Proximity to public transport and other community services. Essential services availability (including cost of extending services or upgrading roads and other infrastructure).
Proposals must not reduce the quality of scenic landscapes, vistas, ridgelines, or heritage values.	<ul style="list-style-type: none"> Siting and design impacts. Natural and physical constraints and opportunity of rural land, including high value vegetation, bushfire and flooding.

4.3 Relevant NSW legislation and policies

4.3.1 Legislation

The *Environmental Planning and Assessment (EP&A) Act 1979* provides the legislative framework overseeing the assessment and determination of development proposals and for rural planning and development control in New South Wales. The Section 117 Directions with regard to 1.2 Rural Zones and 1.5 Rural Lands as described in section 4.1 are within the purview of this Act.

NSW DPI advises consent authorities about the agricultural impacts of a proposal, including:

- rules established by the planning system for the locality
- impact on the long-term sustainability of agriculture in the locality
- potential for conflict between residential and farming neighbours
- impact on land and water resources used for agriculture.

Other legislation impacting on farming activities include:

- *Protection of Environment Operations Act 1997*
- *Native Vegetation Act 2003*
- *Pesticides Act 1999*
- *Soil Conservation Act 1938*
- *Contaminated Land Management Act 1997*
- *Water Management Act 2000*
- *Noxious Weeds Act 1993*
- *Rural Lands Protection Act 1998*

4.3.2 State Environmental Planning Policy (Primary Production and Rural Development) 2019

The aims of the SEPP were listed in section 4.1.1 above.

1.4 Greater Sydney Commission –Western City District Plan

The Western City District Plan released by the Greater Sydney Commission in March 2018 is a 20-year plan to manage growth in the context of economic, social and environmental matters to achieve the 40-year vision for Greater Sydney. This plan is a guide to implementing the Greater Sydney Regional Plan, A Metropolis of Three Cities, at a district level and is a bridge between regional and local planning.

The Western City District Plan explores the future productivity of the region and outlines a vision for the area to leverage industry opportunities from the Western Sydney Airport and Badgerys Creek Aerotropolis. In particular, the plan outlines how the Western City District will grow over the next twenty years with demand for an additional 184,500 dwellings. The plan notes that these dwellings will be provided in land release areas and urban renewal close to existing centres.

The Plan also has a priority to maintain or enhance the values of Sydney's Metropolitan Rural Area (MRA) and to protect the scenic and cultural landscapes. The project study area falls within the MRA however, as noted, the Plan is a district representation and respective Councils should retain control of local planning matters as provisioned in the Camden Council Rural Lands Strategy. In addition, it is considered likely that the MRA and strategic framework will continue to be refined in consideration of city-shaping transport corridors such as the Outer Sydney Orbital which has an investigation area along the western boundary of "Tidapa".

Given the residential development to the east of “Tidapa” it could be argued that the Outer Sydney Orbital and could provide a logical boundary for the MRA in the future.

4.3.3 A Plan for Growing Sydney

The Plan for Growing Sydney was developed from the draft Metropolitan Strategy for Sydney – Vision for Sydney in 2031 – describes a series of actions which are designed - in close cooperation with communities, business and local government – to achieve the vision for Sydney as a strong global city and liveable local city in 2031.

The Plan includes a description of Sydney’s Metropolitan Rural Area and Action 4.1.2 references the preparation of a strategic framework for the Metropolitan Rural Area to enhance and protect its broad range of environmental, economic and social assets. The framework will assist decision making by establishing a range of criteria, including to minimise the adverse economic impacts on existing primary industry and productive agriculture.

4.3.4 NSW right to farm policy

The NSW Government has developed a comprehensive, State-wide approach to deal with the issue of 'right to farm'.

The concept of 'right to farm' has multiple facets but the common interpretation – and the one used in this policy - relates to a desire by farmers to undertake lawful agricultural practices without conflict or interference arising from complaints from neighbours and other land users.

This policy brings together a suite of responses including:

- Reinforcing rights and responsibilities
- Establishing a baseline and ongoing monitoring and evaluation of land use conflicts
- Strengthening land use planning, ensuring ongoing reviews of relevant environmental planning instruments include consideration of options to ensure best land use outcomes and to minimise conflicts
- Improving education and awareness on management of land use conflicts, considering potential future legislative options, should additional Government intervention be required.

4.3.5 Growth Centres SEPP

The study area is not contained within a designated growth centre, however the SEPPs of existing growth centres provide useful references for the development of the study area.

- The South West Growth Centre has been designated for long-term development over the next few decades and includes land in Camden Local Government Area (LGA).
- Land within the South West Growth Centre is subject to different planning controls under State Environmental Planning Policy (SEPP) Sydney Region Growth Centres 2006 (the Growth Centres SEPP).

The Sydney Region Growth Centres SEPP 2006 has the following aims:

- a. to co-ordinate the release of land for residential, employment and other urban development in the North West Growth Centre, the South West Growth Centre, the Wilton Growth Area and the Greater Macarthur Growth Area
- b. to enable the Minister from time to time to designate land in growth centres as ready for release for development
- c. to provide for comprehensive planning for growth centres
- d. to enable the establishment of vibrant, sustainable and liveable neighbourhoods that provide for community well-being and high quality local amenity

- e. to provide controls for the sustainability of land in growth centres that has conservation value
- f. to provide for the orderly and economic provision of infrastructure in and to growth centres
- g. to provide development controls in order to protect the health of the waterways in growth centres
- h. to protect and enhance land with natural and cultural heritage value
- i. to provide land use and development controls that will contribute to the conservation of biodiversity.

5. Analysis of key policies

Based on the above information, following are three tables that provide commentary on key policies operating in the Camden Shire that require analysis when considering alternative land development on rural zones in the Shire. The key policies are:

- Objectives of the Camden RU1 Primary Production zone (Table 9)
- Aims of the Primary Production and Rural Development SEPP (Table 10)
- Key planning principles: Camden Rural Lands Strategy (Table 11).

Table 9 Analysis against the objectives of the Camden RU1 Primary Production Zone

Objective	Commentary with respect to “Tidapa”
To encourage sustainable primary industry production by maintaining and enhancing the natural resource base.	<p>The current extensive beef cattle grazing land use is not economically sustainable, although the extensive nature of production maintains and enhances the natural resource base (i.e. results in ecologically sustainable development (ESD)).</p> <p>To achieve a breakeven primary production business profit would require an additional 100 breeding cows, and assuming one cow requires two hectares of pasture for production, this equates to purchasing an additional 200 hectares of similar land. The purchase of suitable land is constrained by the South West Growth Centre Urban Boundary to the east and the Outer Sydney Orbital road corridor to the west.</p>
To encourage diversity in primary industry enterprises and systems appropriate for the area.	<p>Diversity of primary industry enterprises is constrained by the existing natural resource attributes of the site and the prevailing climatic conditions. The current natural resource attributes result in the site being predominantly Class 3 land under the NSW Agricultural Land Classification system, being “Grazing land or land well suited to pasture improvement; overall production level is moderate; erosion hazard, soil structural breakdown or other factors, including climate, may limit the capacity for cultivation”.</p> <p>Alternative enterprises were analysed in Table 3 which showed that most are not appropriate for the site, with the intensive livestock and plant agriculture likely to create land use conflict. In addition both climate change and financial risks are exacerbated when considering alternatives to cattle grazing (i.e. alternative primary production industries are unlikely to be appropriate).</p>

Objective	Commentary with respect to “Tidapa”
To minimise the fragmentation and alienation of resource lands.	<p>An alternative zone to the RU1 zone could result in the fragmentation and alienation of resource lands but this would be no different to what has already occurred on the land surrounding “Tidapa” with residential development within the South West Growth Centre and road construction within the Outer Sydney Orbital road corridor.</p> <p>The site itself has been already been alienated from surrounding suitable resource lands by the South West Growth Centre and Outer Sydney Orbital road corridor. The alienation of these lands has severely limited the ability for farm expansion which is necessary if the beef cattle enterprise is to achieve a positive farm business profit.</p>
To minimise conflict between land uses within this zone and land uses within adjoining zones.	Residential development within the South West Growth Centre is likely to result in land use conflict between residents if alternative intensive agricultural industries are pursued in an effort to achieve a positive farm business profit.
To permit non-agricultural uses which support the primary production purposes of the zone.	Outside of the scope of this report.
To maintain the rural landscape character of the land.	The current extensive cattle grazing enterprise maintains the rural landscape of the land, but it does so at the expense of not enabling a positive farm business profit. Infrastructure associated with alternative intensive livestock and plant agricultural industries will most likely have a negative impact on the rural landscape character of the land.

Table 10 Analysis against the aims of the Primary Production and Rural Development SEPP

Aims of the Primary Production and Rural Development SEPP	Commentary with respect to “Tidapa”
To facilitate the orderly economic use and development of lands for primary production	The current use of the land is not economic as it is not possible to achieve a positive farm business profit. While alternative more intensive uses could theoretically be profitable, such development would likely be constrained by land use conflict, interruption to water flow from the Outer Sydney Orbital, and financial risks associated with capital purchases required for intensive industries.

Aims of the Primary Production and Rural Development SEPP	Commentary with respect to “Tidapa”
To reduce land use conflict and sterilisation of rural land by balancing primary production, residential development and the protection of native vegetation, biodiversity and water resources.	<p>See various discussions on land use conflict above. In regard to sterilisation of rural land, the South West Growth Centre Urban Boundary to the east and the Outer Sydney Orbital road corridor to the west have effectively sterilised the land from economically viable use as it is impossible to purchase additional land required to achieve the economies of scale for an extensive cattle enterprise to be profitable.</p> <p>The current extensive cattle grazing use of the land provides protection of native vegetation, biodiversity and water resources.</p>
To identify State significant agricultural land for the purpose of ensuring the ongoing viability of agriculture on that land, having regard to social, economic and environmental considerations,	There is no State significant agricultural land on “Tidapa”.
To simplify the regulatory process for smaller-scale low risk artificial waterbodies, and routine maintenance of artificial water supply or drainage, in irrigation areas and districts, and for routine and emergency work in irrigation areas and districts.	Not applicable – relates mainly to regulatory processes associated with maintenance of irrigation infrastructure.
To encourage sustainable agriculture, including sustainable aquaculture.	Not applicable – relates mainly to marine waters aquaculture.
To require consideration of the effects of all proposed development in the State on oyster aquaculture.	Not applicable.
To identify aquaculture that is to be treated as designated development using a well-defined and concise development assessment regime based on environment risks associated with site and operational factors.	Not applicable.

Table 11 Analysis against the key planning principles: Camden Rural Lands Strategy

Key principles Rural Lands Strategy	Commentary with respect to “Tidapa”
Protect Camden’s remaining rural lands.	<p>While the principle itself is reasonable, the extent of rural lands in Camden has been declining, especially considering the South West Growth Centre to the east and the Outer Sydney Orbital road corridor to the west.</p> <p>The alienation and sterilisation of otherwise suitable rural land for farm expansion means that “Tidapa” is unable to purchase sufficient land to achieve economies of scale for the cattle enterprise sufficient to enable a positive farm business profit.</p> <p>The increasing difficulty of primary producers to remain competitive is exemplified in section 3.1.1 whereby producers find it necessary to transport cattle to Moss Vale for sale due to increasingly reduced numbers (and therefore reduced buyer competition) at Camden saleyards. This is likely to be exacerbated in future after the closure of Leppington Pastoral Company's dairy farms in Camden LGA for residential development. The closure will accelerate the decline in agriculture production within the LGA and will have a negative flow on effect to the supporting rural industries.</p>
Retain Camden’s valued scenic and cultural landscapes.	<p>The current extensive cattle grazing enterprise maintains the scenic and cultural landscapes, but it does so at the expense of not enabling a positive farm business profit. Infrastructure associated with potential alternative intensive livestock and plant agricultural industries will most likely have a negative impact on Camden’s valued scenic and cultural landscapes.</p>
Provide certainty and avoid rural land fragmentation.	<p>Rural land fragmentation already exists close to “Tidapa”, especially considering residential development within South West Growth Centre to the east and road construction within the Outer Sydney Orbital road corridor.</p>
Minimise and manage rural land use conflict.	<p>The current extensive cattle grazing enterprise minimises land use conflict but the enterprise is not capable of providing a positive farm business profit. Potential alternative intensive livestock and plant agricultural industries are likely to exacerbate rural land use conflict.</p>
Enhance Camden’s rural economy.	<p>The current extensive cattle grazing enterprise produces a negative farm business profit and thus does not enhance Camden’s rural economy. ABS data show the value of agricultural production from extensive grazing land (cattle and sheep slaughterings, and wool production)</p>

Key principles Rural Lands Strategy	Commentary with respect to “Tidapa”
	<p>declined by 16% in the 10 years from 2006-06 to 2015-16. This value is expected to have declined further since then due to drought occurring in 2017, 2018 and 2019.</p> <p>Total employment in the Camden LGA increased by 116% between 2001 and 2016. However, employment in the agriculture, forestry and fishing sector decreased by 14% over. With the exception of two industry sectors (one being agriculture, forestry and fishing) every other sector experienced significant increases in employment.</p>
Minimise unplanned non-agricultural development.	It is expected that and proposed development application for rezoning the land would be accompanied by a thoroughly developed plan outlining the benefits of land use change compared to the current alienated agricultural land use with negative farm business profit.
Maximise opportunities for relocation of rural enterprises.	It is not certain which profitable rural enterprises could be established on “Tidapa” that would complement the current extensive beef cattle enterprise.

6. Conclusion

“Tidapa” is zoned RU1 Primary Production within the Camden LEP 2010, however the above analysis indicates that the land does not meet the major objective of this zone - to encourage sustainable primary industry production – because the land is not economically viable based on its current land use (extensive beef cattle production). The productivity of the enterprise is as expected on a well-managed farm in this location, the property size is too small to generate sufficient income to generate a positive farm business profit.

The reason for its non-viable status from an agriculture perspective is the small size of the enterprise which is unable to support overhead and family labour costs, and this has resulted in repeated annual losses as evidenced by Profit and Loss Statements over the past nine years. As a result, non-farm income is required to subsidise agricultural income to attain a reasonable level of household income.

Expansion of the farm area would be required for the extensive cattle grazing enterprise to take advantage of economies of scale that this would offer. However, it is unlikely that suitable land is available for expansion in the vicinity as “Tidapa” is surrounded by the residential area within the South West Growth Centre to the east and road construction within the Outer Sydney Orbital road corridor to the west.

Alternative agricultural land use options were examined but each has a high level of risk and uncertainty and cannot be readily implemented without careful consideration that the risks can be mitigated. In addition, alternative intensive livestock agriculture or intensive plant agriculture are likely to have a high risk of land use conflict from the encroaching residential land uses.

This scoping report finds that it is unlikely that “Tidapa” can achieve economic viability within its current RU1 zoning for the range of options considered. More certainty from a policy perspective for the retention of RU1 land in the vicinity could remove speculation around values for rural land, however this would be unlikely to result in the economic viability of the property from an agricultural perspective.

7. Scope and limitations

This report has been prepared by GHD for Edward J O'Grady Pty Ltd and may only be used and relied on by Edward J O'Grady Pty Ltd for the purpose agreed between GHD and the Edward J O'Grady Pty Ltd as set out in section 1 of this report.

GHD otherwise disclaims responsibility to any person other than Edward J O'Grady Pty Ltd arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.

The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

The opinions, conclusions and any recommendations in this report are based on assumptions made by GHD described in this report. GHD disclaims liability arising from any of the assumptions being incorrect. GHD has prepared this report on the basis of information provided by Edward J O'Grady Pty Ltd and others who provided information to GHD, which GHD has not independently verified or checked beyond the agreed scope of work. GHD does not accept liability in connection with such unverified information, including errors and omissions in the report which were caused by errors or omissions in that information.

8. Appendix 1: Beef cattle gross margin



Department of
Primary Industries

BEEF CATTLE GROSS MARGIN BUDGET

Farm enterprise Budget Series: April 2019

Enterprise: Coastal weaners improved pasture

Enterprise Unit: 100 cows

INCOME:

			Standard Budget	Your Budget
42	steer weaners @	\$630.88 /hd	\$26,497	
19	heifers weaners @	\$424.65 /hd	\$8,068	
0.6	CFA Bull @	\$1,760.00 /hd	\$1,056	
7	CFA cows @	\$963.20 /hd	\$6,742	
15	Other culls @	\$963.20 /hd	\$14,448	
A. Total Income:			\$56,812	

VARIABLE COSTS:

Replacements	1 Bull @	\$3,500 /hd	\$3,500	
Livestock and vet costs: see section titled beef health costs for details.			\$2,426	
Fodder crops / hay / grain			\$0	
Drought feeding costs.			\$0	
Pasture maintenance (173 Ha of improved pastures)			\$10,813	
Livestock selling cost (see assumptions on next page)			\$4,584	

B. Total Variable Costs:

	GM including pasture cost	GM excluding pasture cost
GROSS MARGIN (A-B)	\$35,489	\$46,301
GROSS MARGIN/COW	\$354.89	\$463.01
GROSS MARGIN/DSE*	\$25.68	\$33.50
GROSS MARGIN/HA	\$205.14	\$267.64

Change in gross margin (\$/cow) for change in price &/or the weight of sale stock

(Note: Table assumes that the price and weight of other stock changes in the same proportion as steers. As an example if steer sale price falls to 242c/kg and steer weight to 230 kg, gross margin would fall to \$291 per cow. This assumes that price and weight of all other sale stock falls by the same percentage.

Liveweight (kg's) of Stock sold		Steer sale price cents/kg live				
		232	242	252	262	272
Steer wt.						
-40 kgs	210	229	248	267	285	304
-20 kgs	230	270	291	311	331	351
0	250	311	333	355	377	399
+20 kgs	270	352	376	399	422	446
+40 kgs	290	393	418	443	468	493

GM \$ per Cow

An increase of 5% in weaning percentage increases gross margin per cow by \$23.78

Assumptions Coastal weaners improved pasture

Enterprise unit is 100 cows weighing on average 475 kg

Weaning rate: 84% , conception rate 90%

Sales

Steers sold at 8 months	250 kg	@252c/kg live weight
Heifers sold at 8 months	220 kg	@193c/kg live weight
23 heifers retained for replacement.		
Cull cows cast for age at 10 years	240 kg	@401c/kg dressed weight
100% of empty cows culled at weaning	"	" "
3% cows culled for other reasons	"	" "
Bulls run at 3% & sold after 5 years use	440 kg	@400c/kg dressed weight

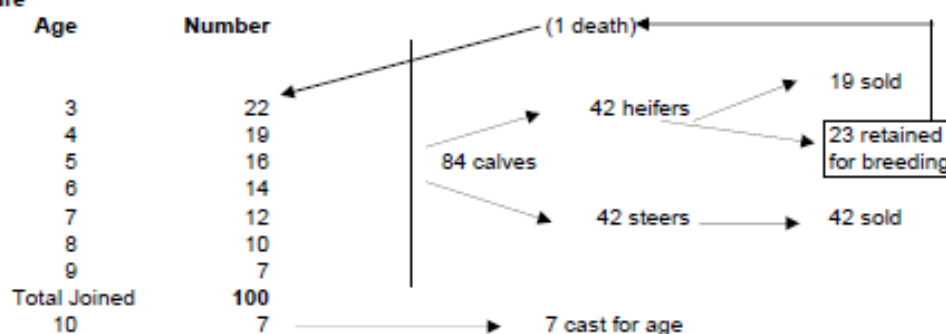
Selling costs include: Commission 4%, yard dues \$8/hd, MLA levy \$5/hd, average freight cost to saleyards \$12/hd, NLIS tag @ \$3.60 for all sale cattle.

Cows: age at first calf : 36 months

Mortality rate of adult stock: 2%

The average feed requirement of a cow + followers is rated at 2.39 LSU or 16.49 dse's*. This is an average figure and will vary during the year. Note that replacement heifers are assumed joined in the second year and this adds to the dse rating of this enterprise.

Age structure



Marketing Information:

Mixed sex store weaners sold in Autumn for further backgrounding prior to feedlot entry with some at suitable liveweights for feeder steer/heifer for pasture or grain finishing. Price for cull heifers varies according to breed.

Production Information:

Pasture maintenance cost will vary depending on stage of improvement, pasture degradation, rainfall and soil type.

NSW Department of Primary Industries Farm Enterprise Budget Series

GHD

Level 15

133 Castlereagh Street

T: 61 2 9239 7100 F: 61 2 9239 7199 E: sydmall@ghd.com



© GHD 2020

This document is and shall remain the property of GHD. The document may only be used for the purpose for which it was commissioned and in accordance with the Terms of Engagement for the commission. Unauthorised use of this document in any form whatsoever is prohibited.

12533117-98503-

11/[https://projectsportal.ghd.com/sites/pp15_01/camdenrurallandsscop/ProjectDocs/Scoping report RU1 Zone June 2020.docx](https://projectsportal.ghd.com/sites/pp15_01/camdenrurallandsscop/ProjectDocs/Scoping%20report%20RU1%20Zone%20June%202020.docx)

Document Status

Revision	Author	Reviewer		Approved for Issue		
		Name	Signature	Name	Signature	Date
0	Joe Lane	Paul Dellow		Joe Lane		18/06/2020

www.ghd.com

