



Griffith City Council  
Sustainable Development

# Griffith Land Use Strategy

Beyond 2030

Final Draft  
2012

## About this document

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## Disclaimer

This strategy is not a statutory document, but a policy document outlining Council's desired future land use strategy for the strategy area. Identification of land for specific future land use in this document does not necessarily imply that the land will be used as such or zoned for such a use in future.

Predicted growth figures and forecasted lot numbers are based on best available data at the time of preparation of this document. Council cannot guarantee that forecasted growth and lot release. The actual growth and lot yield may vary dependent on various conditions such as economic growth and unforeseen circumstances.

Constraints identified in this document, such as flood liable land, bushfire risk etc., are based on the best available data at the time of preparation of this document. Council cannot accept responsibility for any damage to person or property, injury or loss of life as result of constraints not identified or foreseen in this document.





## Message from the Mayor

The Griffith Land Use Strategy Beyond 2030 was developed by Griffith City Council over the past few years in close co-operation with the Griffith community, business groups within Griffith and a range of State agencies. The document will function as a flexible guideline to inform future decisions on spatial planning.

Regular review of the Strategy Document will ensure that it stays relevant with a clear focus on guiding and supporting development and growth in our City and surrounding areas in a sensible and sustainable way.

It is my wish that Griffith as a community keeps evolving, offering a wide variety of life styles, choices for both work and recreation and a stimulating atmosphere encouraging sustainable growth. This Land Use Study is an important part of achieving this goal.



**Cr John Dal Broi**  
**Mayor**  
**November 2012**

# Part A

## Introduction

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## Need for a new strategy

It is important to take into consideration the context within which this strategy has been drafted.

Three primary catalysts are the driving force behind this strategy namely:

- the need for an updated revised spatial planning strategy
- state wide planning reforms
- need for a new direction regarding spatial planning and land use

## Revision of GS 2030

Griffith's first comprehensive spatial planning strategy, GS 2030, was drafted and adopted by Council during 2000. GS 2030 was drafted with a thirty year vision and recommended five yearly reviews. This strategy is not part of the 5 year GS 2030 review and sets out to use new information to draft a new Land Use Strategy.

Since the drafting of GS 2030, a wide range of information has been obtained to assist Council in an improved understanding of the needs and requirements of the community. New information also highlighted the general and unique constraints on future development in Griffith. Such information includes, but is not limited to:

- new (laser enhanced) aerial surveys and topographical mapping;
- floodplain modelling for a substantial part of the urban area and fringes of the urban area;
- investigations into economic and infrastructure requirements particular to Griffith;
- an investigation into open space and community facilities requirements; and
- demographic modelling.

In addition to the specific new information for Griffith, a number of changes occurred at state, national and international level that may have an influence on future land use to some extent. Examples of such changes includes the signing of the Kyoto Protocol, prolonged drought, economic recession, changes in planning legislation, requirements for improved floodplain management, an increased understanding of environmental impacts and climate change, new technologies etc.

At the local level, significant changes have been experienced as well. These changes are both positive, e.g. continued expansion of the wine industry, and negative e.g. the effects of possible amended water allocations on the local economy that still hangs in the balance.

This strategy sets out to utilise the new information to draft a new land use strategy, taking into account the new information available to Council at the time of writing, and also learning from lessons taken from the implementation of GS 2030.

## NSW Planning Reforms

Over the past three years, the NSW Government introduced major reforms and changes to the planning system aimed at providing uniformity in planning provisions and a simplified system with greater efficiency and effectiveness.

The reforms resulted in a range of ongoing amendments to the Environmental Planning and Assessment Act 1979 and the supporting Regulations. The foundation for a further round of reforms has been laid by the Department of Planning during late 2007 with the release of a discussion paper "Improving the NSW Planning System" and subsequently with the gazettal of a new Standard Instrument for LEPs and the enactment of the Environmental planning and Assessment Amendment Act 2008. The most recent reforms were introduced on 1 July 2009, introducing changes to the Environmental Planning and Assessment Act 1979 to the plan-making process. The reforms basically revolve around improving the plan-making system, improving development assessment, encouraging opportunities for exempt and complying development and various other initiatives.

This strategy has been drafted as a local response to some of the strategic planning elements of these reforms. A new LEP and a single new DCP will further supplement Council's suite of strategic planning documents.

In this context, this strategy in particular will be used as a basis for the drafting of a new LEP for Griffith according to the latest standard template.

## Need for a new direction

In addition to the above stated "institutional" needs for a new strategy, it is fair to question why GS 2030 could not be simply revised for this purpose, i.e. "do we actually need a new strategy?"

The need for a new strategy is embedded in the political and shared desire for a new direction for Council with regard to spatial development and land use. This desire has been expressed directly and indirectly by elected Councillors, developers, land owners, the general community, and staff involved in the development assessment process.

The expressed need for a new direction in itself justifies the drafting of this strategy. In this regard it is extremely important that this strategy not be deemed as simply satisfying Council's obligations to review GS 2030 and to implement state-wide planning reforms, but that this report is seen as a reply to the expressed need for a new direction for our community.

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## Purpose and objectives

The purpose of this strategy is to provide direction for land use and spatial development for Griffith with a forward vision of approximately thirty years. It is acknowledged that the vision and perceptions of future land use needs and trends are formulated within the limitations of available information; and that this information needs to be progressively supplemented over time.

From a statutory point-of-view, this strategy also forms the strategic basis and framework for the introduction of a new local environmental plan for Griffith.

This strategy is primarily a policy document with guidelines to assist Council in decisions relating to physical development and land use matters. A secondary purpose that may be derived from this document is to inform the community of Griffith about Council's aspirations for spatial development; however it should be kept in mind that this document was not solely drafted for that purpose.

In addition, this strategy also strives to achieve an improved understanding of:

- potential constraints to future land release and development;
- potential hazards to future land release (e.g. bushfire, flooding and salinity);
- trends and patterns that affect land use and land release;
- land capabilities (e.g. groundwater, contamination and soil impacts); and
- demographic and economic driven need for future land release.

The broad objectives of this strategy are to facilitate a planning response that encourages:

- spatial development responsive to the forecasted and/or perceived needs of the community and local economy;
- spatial development carefully managed to prevent or minimise impacts on the natural environment; and
- the protection of natural and built assets from inappropriate rural and urban development that would prejudice the rural and urban attributes of Griffith.

## Local context

During 2007 Council embarked on a corporate process to establish a clear framework of achievable goals. In the initial stages of this process three broad themes were identified. Council, i.e.:

- Lifestyle
- Development
- Environment

These themes were encapsulated in a corporate visions statement called “Growing Griffith Beyond 2030”<sup>1</sup>. In the last-mentioned document three strategies were identified for each of these themes, i.e.:

- Lifestyle – Community Action Plan
- Development – Integrated Development Strategy
- Environment – Sustainable Environment Strategy

Each of these strategies is supposed to deliver identified projects and outcomes through action plans and identified and funded projects.

This strategy is effectively one of two sub-strategies fitting in under the broader framework of the Integrated Development Strategy - the other sub-strategy being the Infrastructure Development Plan.

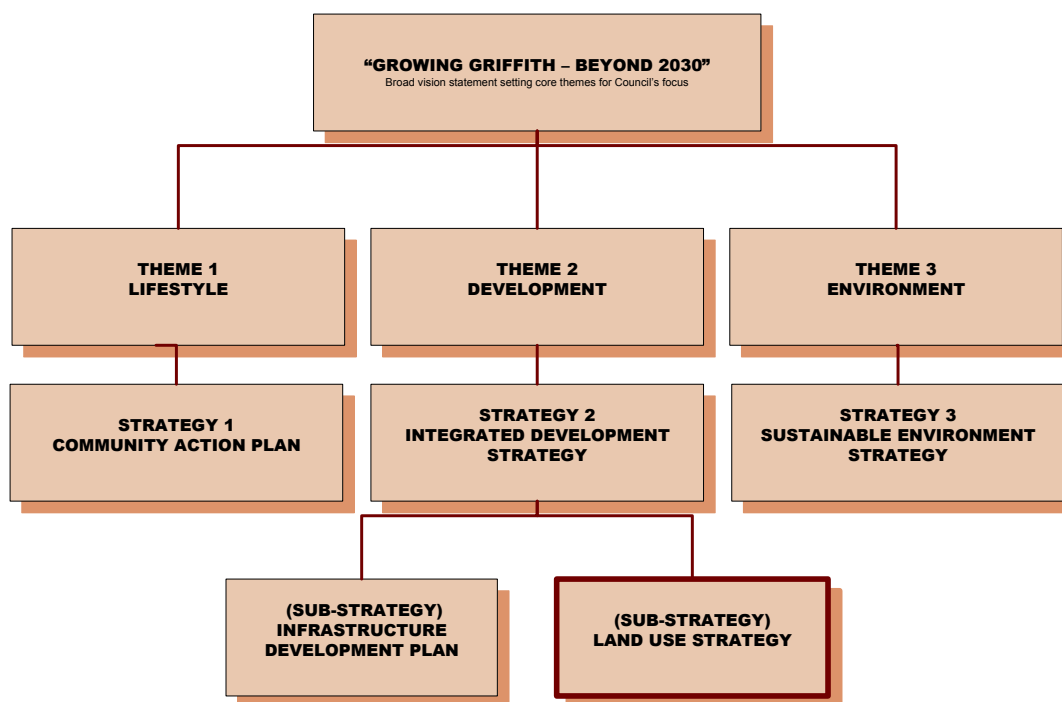


Figure 1: Local context - 'Where does this strategy fit in Council's broad strategy framework?'

<sup>1</sup> Document referred to as “Growing Griffith Beyond 2030” released ... Griffith City Council

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## A land use planning framework for Griffith

The following planning framework forms the basis for the Griffith Land Use Strategy:

### Part A: Introduction

Part A sets the framework for the Strategy. In this part we will also explore the reasons for this study, i.e. 'why do we do this now?' It is furthermore important to establish in this part how this strategy fits into the 'bigger picture', particularly with regard to Griffith City Council as an institutional organisation.

### Part B: Background data

Part B is the part in which intelligence, data and analysis are synthesised. It is important to note that this part is not static, but rather represents the most important part of the strategy with regard to keeping the strategy continuously evolving. As more information becomes available and as we undertake more studies and investigations, our understanding of our local impacts and interaction with the local environment grows. This in turn will affect our understanding of land use implications including the effect of land use decisions on our local environment. It is therefore important to keep on growing and expanding this part of the Strategy to maintain credibility as a 'current strategy'.

Most of this information is extracted and derived from primary and secondary sources such as GIS, ABS statistical data, field investigations and specific independent investigations. Processing of information involves environmental inventorying, mapping, capacity analysis etc.

### Part C: Long-Range General Planning

Part C is the part where the most obvious and basic conclusions and recommendations derived from Part B are compiled into broad and general land use recommendations. Most of the recommendations in this part will be in general terms responsive to forecasted growth and development over a long term – in excess of 20 years.

### Part D: Functional Planning

Part D represents functional plans relating to specific topics covering the entire planning area, such as infrastructure, transportation, environmental topics, heritage etc. This part will also have a high level of stakeholder involvement particularly from state agencies and operators.

### Part E: Local Area Planning

Part E entails smaller and more detailed plans for specific localities defined over the years as specific geographical areas within Griffith which the population are familiar with. The role and function of the local areas would be defined clearly with future land use classification as an important output. This part also characterise existing land use patterns and tendencies, identify critical issues in a certain localities, and provides a future vision represented in spatial form by means of mapping. The role and function of local areas are defined clearly with future land use classification forming an

important component of the planning framework. This creates a firm basis for statutory plans (e.g. LEP) derived from strategic planning endeavours.

## **Part F: Implementation Plans**

Part F formulates recommendations for implementation of certain desired or required actions determined through land use planning. The primary focus of this part will be legally required planning instruments i.e. the LEP, comprehensive DCP and contribution plans. However, this part may also suggest the development of further policies and programs to achieve visions and goals outlined in other parts of this Strategy.

## **Part G: Monitoring and Review**

Part G is an essential part of this Strategy because by monitoring, reviewing and administering the LUS document, Council will ensure that it is established and maintained as a working document that remains relevant as a guiding tool in all decisions relating to planning and development in Griffith. It will also ensure that the Strategy maintains a reasonable level of community consensus and that general confidence in the land use planning process can be maintained. This part is critical to ensure that this Strategy remains current and continues to evolve and grow with the broad community of Griffith. It is however important to acknowledge that the purpose of this part is to ensure a reasonable level of community consensus within the limits of available resources, and that it is highly unlikely that all members and stakeholders in the community can be satisfied – even with the best of intentions.

Negligence in ensuring continuous monitoring, review and sound administration of the document would result in loss of confidence in the document as a guideline and land use policy document and in time it would become irrelevant as a planning and development tool.



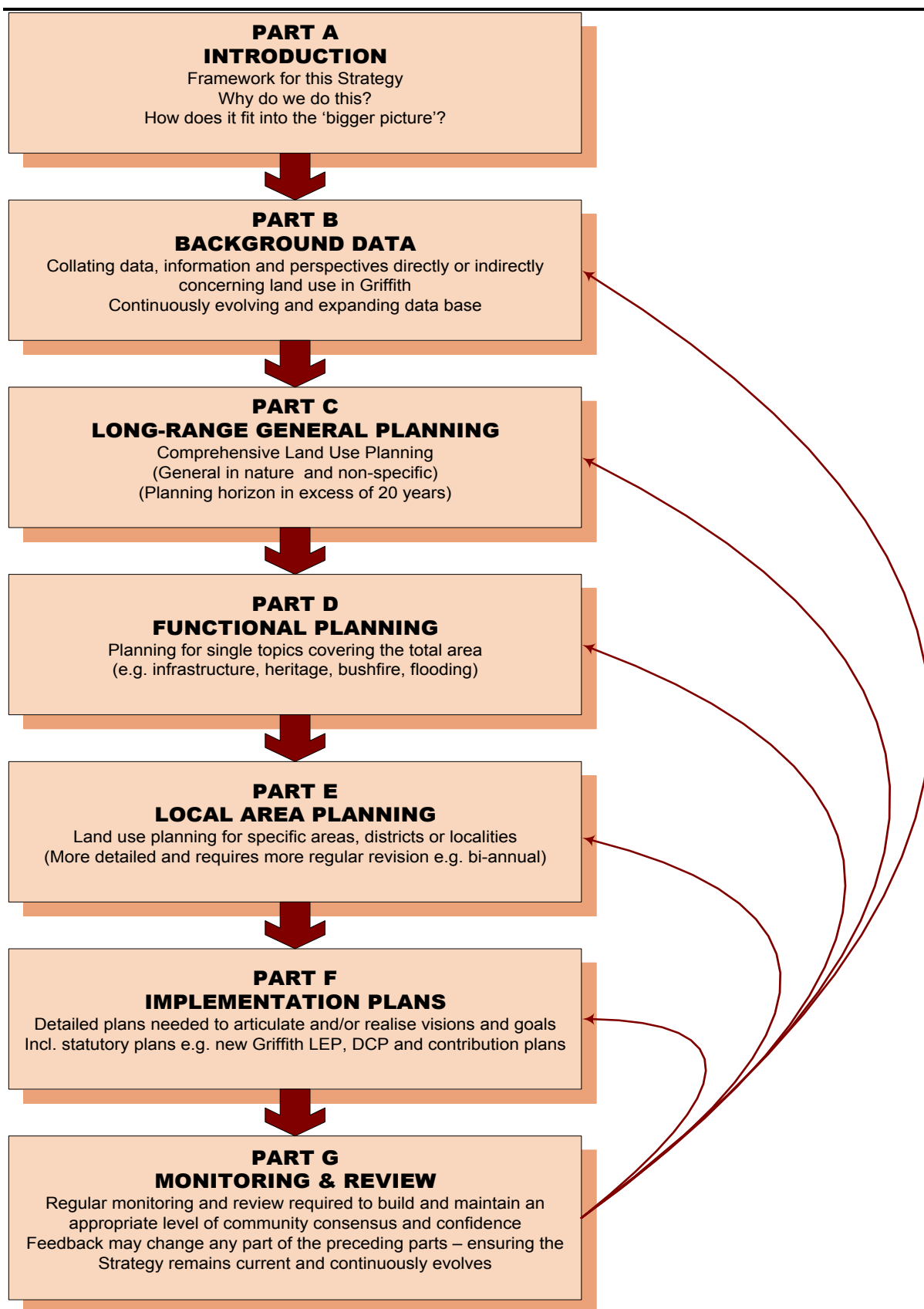
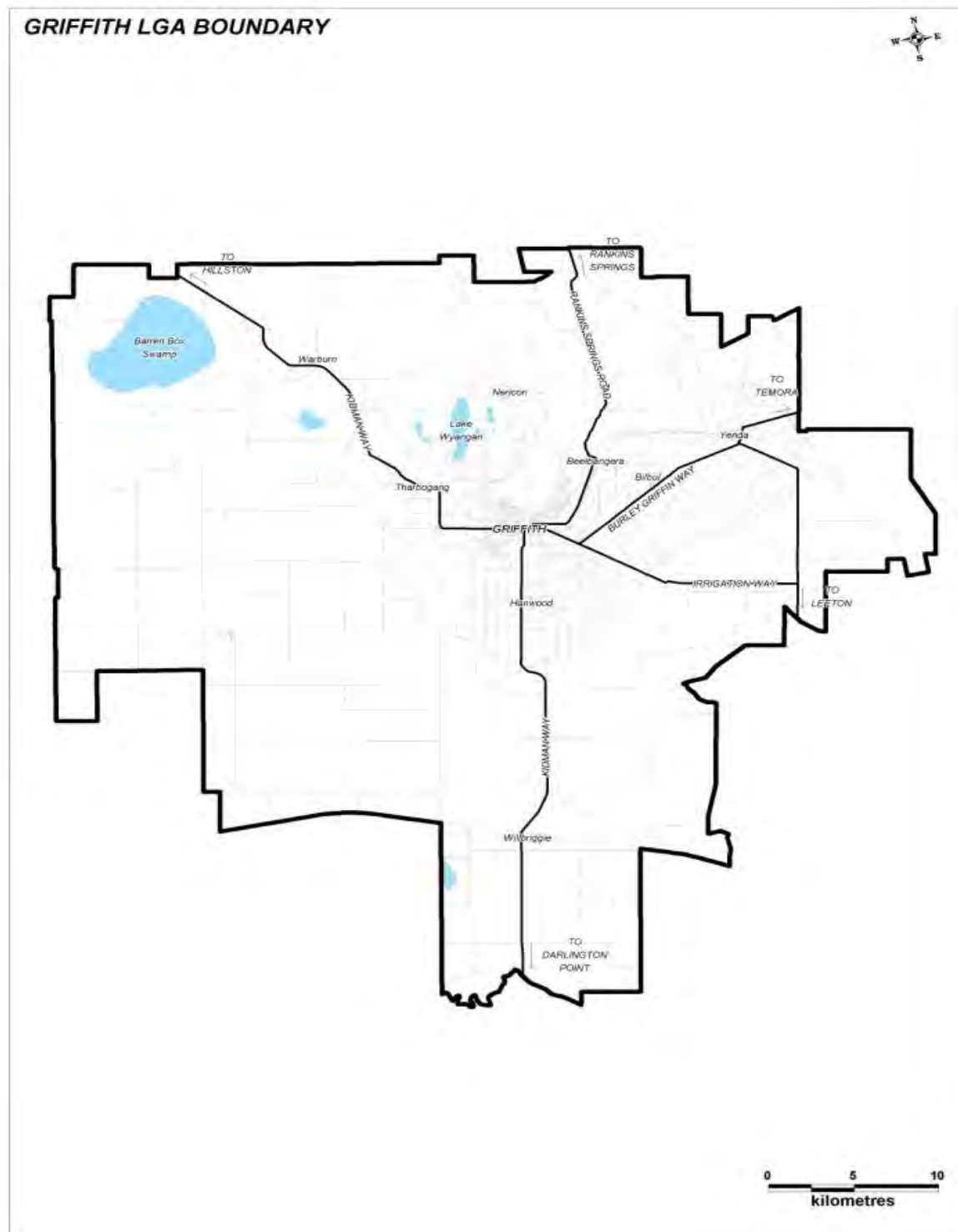


Figure 2: Land Use Planning Framework for Griffith

The strategy area comprises the local government area of Griffith City Council, however background research and data forming the foundation for this strategy is not necessarily limited to the local government area.



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Figure 3: Strategy area - i.e. Griffith LGA

## Funding and limitations

Council managed to secure a funding contribution from NSW Department of Planning under the Planning Reform Fund (Round 5), towards the drafting of this strategy as well as a new LEP. NSW Department of Planning contributed \$ 100 000 of the total cost of drafting this strategy and the subsequent new LEP. The remaining costs will be carried by Council and relates to the hours that internal staff devote to the project.

**This strategy is not a statutory document, but a policy document outlining Council's desired future land use strategy for the strategy area.** Identification of land for specific future land use in this document does not necessarily imply that the land will be used as such or zoned for such a use in future.

# Part B

## Background Data

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## Overview of Griffith and environs

Note:

*This section is intended to provide the reader a general overview of the shire and is not intended as an exhaustive or detailed analysis. The reader should be mindful that parts of this section may regularly change and vary easily, in particular statistics and demographic analysis and estimates. Any person wishing to apply analysis and estimates from this strategy is strongly advised to have such data independently verified prior to use.*

### Summary

Griffith is a regional and agricultural centre in south-western NSW, located approximately 180 km north-west of Wagga Wagga in the heart of the Murrumbidgee Irrigation Area (MIA). The central business district and urban areas are mostly situated south of Mc Pherson's Range (Scenic Hill) and comprise a thriving regional business district, services and industries surrounded by a number of smaller villages and localities including Beelbangera, Bilbul, Hanwood, Lake Wyangan, Nericon, Tharbogang, Yenda and Yoogali.

Land beyond the urban fringe is used for high intensity agriculture typical of the MIA. The area supports a large variety of crops including rice, canola, citrus, vegetables and grapes. The agricultural production within the region has enabled the establishment of a variety of food processing plants including packing sheds, canning and bottling facilities. Griffith also hosts the state's largest wine producing region, generating nearly 20% of Australia's total wine produce.<sup>1</sup>

The local government area is both urban and rural – dominated by smaller horticultural farms. The Council area encompasses a total land area of 164000Ha, of which most is dominated by irrigation farms and other agricultural practices, but also including a substantial urban area, a portion of Binya State Forest, major irrigation channels, minor waterways (e.g. Mirrool Creek), natural and artificial lakes and wetlands (e.g. Lake Wyangan, Barren box Swamp and Tharbogang Swamp), and natural bushland (particularly in the vicinity of the Murrumbidgee River and along Mc Pherson Range).

Griffith was formally proclaimed in 1916 and named after Arthur Hill Griffith (1861 – 1946), Minister for Public Works until 1915 and thereafter Minister of Public Instruction. Arthur Griffith was elected the first chairman of the Murrumbidgee Irrigation Trust (1911) and championed Australian wine whilst maintaining his profession as patent attorney – also recognised: for setting up of the Patents Investigation Board (1916); as president of the Institute of Patent Attorneys of Australia, and as a member of the Board of Examiners of Patent Attorneys for the Commonwealth.<sup>2</sup>

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<sup>1</sup> Griffith Visitor's Centre, 2005

<sup>2</sup> Bede Nairn, 'Griffith, Arthur Hill (1861 - 1946)', *Australian Dictionary of Biography*, Volume 9, [Melbourne University Press](#), 1983, pp 110-112.

Griffith was initially designed by the American architect, Walter Burley Griffin, *demonstrating on a reduced scale both the road system and aesthetics that created the planned city of Canberra*. Griffith was initially designed to be a compact city for 30,000 people.<sup>3</sup> However businesses shunned the initial concentric design and opted to open businesses along the present main street, Banna Avenue, on cheaper lots closer to the railway station.<sup>4</sup>

The original inhabitants of the Griffith area are the Wiradjuri people. Griffith is *an area remembered for its Aboriginal resettlement. As the township grew over the 1920s and succeeding decades, it drew a wide mix of both Warangesda descendants and people from places as far flung as Robinvale, Condobolin, Wilcannia and the NSW south coast*. By the 1950s Griffith had grown and the remnant Aboriginal camp households gathered in a field on the edge of town, loaned to them by a sympathetic farmer. After opposition in the town, a reserve was set aside across the canal. As with all NSW Aboriginal reserves, Three Ways was handed to the Aboriginal community in 1983.<sup>5</sup>

## Locality and regional context

Griffith is located within the Murrumbidgee Irrigation Area (MIA) in the south west of New South Wales (NSW) and operates as a regional centre serving the broader MIA and surrounding regions (refer to **Map 1**).

The MIA encompasses Griffith and Leeton, with the Murrumbidgee River, the second longest river in Australia flowing to the south of the MIA.<sup>6</sup> Griffith's population is mostly made up of persons residing in the urban area of Griffith and surrounding villages of Beelbanger, Yenda, Yoogali, Hanwood, Bilbul, Lake Wyangan, Nericon and Tharbogang.

Within a regional setting, Griffith is located (by road) 550km from Sydney, 450km from Melbourne, 370km from Canberra, and 840km from Adelaide and 1,400km from Brisbane. Due to Griffith's location within NSW and distance from other capital and regional centres, Griffith can be deemed as a major sub-regional centre. In a sub-regional context Griffith shares its local government boundaries with the shires of Carrathool, Narrandera, Leeton and Murrumbidgee. The towns of Darlington Point, Leeton, Narrandera, Barellan, West Wyalong, Goolgowi and Coleambally are within an hour's travel from Griffith and can therefore be considered as within the immediate regional context of Griffith. Although towns such as Hillston, Hay Deniliquin, and Jerilderie are more than an hour by road, these towns should also be considered as within the regional sphere of influence of Griffith (refer to **Map 2**).

In a judicial context, Griffith is roughly equally divided into two counties, i.e. the County of Sturt to the west and the County of Cooper to the east consisting of a total of 25 parishes (refer to **Map 3**).

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<sup>3</sup> Kabaila, P. R., *Griffith Heritage*, Canberra ACT, Pirron Publishing, 2005 pp 4-5

<sup>4</sup> ditto

<sup>5</sup> Ditto pp 23 – 24 (including reference to Warangesda Mission)

<sup>6</sup> Khan, S., Rana, T., Carroll, J., Wang, B., and Best, L., 2004, Managing Climate, Irrigation and Ground Water Interactions using a Numerical Model: A Case Study of the Murrumbidgee Irrigation Area, CSIRO Land and Water Technical Report No. 13/04, <http://www.clw.csiro.au/publications/technical2004/tr13-04.pdf>.



The local government area comprises 60,000Ha and is divided into 18 localities. For the purpose of this strategy localities will be referred to according to this demarcation – unless otherwise specified

(Refer to **Map 4**).

## Physical features and topography

The topography is typical of the western Riverina, flat, with the exception of McPherson Range that provides some variation in the landscape (refer to **Map 6**). Major physical features include National Park areas, State Forest areas a mountain range and various water bodies (refer to **Map 5**).

Griffith is situated 35km north of the Murrumbidgee River, which flows for 1,690 km from its headwaters in the Snowy Mountains to its junction with the Murray River. The Murrumbidgee River supports large irrigated agricultural and irrigated pastoral developments in the western part of the catchment and includes the Murrumbidgee Irrigation Area (MIA) and Coleambally Irrigation Areas (CIA). There are high demands on surface water and ground water resources in terms of quality and quantity. Viticulture is a growth industry in the Griffith LGA and the numbers of agricultural processing industries are increasing demand on water resources.

The urban area of Griffith is set against the McPherson Range. The landform of the range and its existing vegetation provides a backdrop to the City in an otherwise flat cleared landscape. Consequently, its value as a visual element in the landscape is extremely high. The majority of the McPherson Range is preserved to date. Due to its elevation and steep terrain in the past it has not been suitable for agricultural purposes. In recent years there has been increasing pressure on the native bush land for gravel resource extraction, agricultural and residential development. Parts of the McPherson Range is currently zoned as '7(v) Environmental Protection – Scenic' to decrease the pressure on the native bush land for agricultural and residential development. However, greater protection in the long term will be needed to protect the extent of bush land that exists today.

The McPherson Range is a small isolated natural reserve without connection to other fragments of natural ecosystems in the region. Within the range itself there are already developments which fragment parts of the range, such as roads, residential subdivision, orange groves and other agricultural land use. These developments may have removed habitat area, may have cut off a species link to water or food source, may have reduced a species gene pool and with the increase in roads with these developments there is an increased risk of collision with a vehicle. With more development within the Range comes an increase in weed infestations, which has an effect on both the flora and fauna of the area. Prevention of further fragmentation by development is crucial.

## Vegetation

Griffith City comprises of very little native vegetation due to the primarily cleared nature of the landscape, however, there are significant pockets of native vegetation scattered throughout the

LGA. Notably, there are pockets of vegetation near Lake Wyangan; surrounding Tharbogang landfill; the Griffith Airport; the Macpherson's Range; and Scenic Hill (refer to **Map 7**).

The residential areas within view of Scenic Hill create the impression that the natural environment is part of the City. Scenic Hill acts as a backdrop to the urban area and is also significant in terms of its landscape and visual qualities.

## Climate

Griffith has a semi-arid climate with a slight dominance of winter rainfall from April to October. Rainfall from late spring to early autumn is largely ineffective due to the high evaporation over the summer months. Frosts may occur from the end of March until the end of October, but are usually confined to May through to September.<sup>7</sup>

The mean annual rainfall for Griffith is 397mm per year, averaging 26.2mm to 39.7mm per month (under normal rainfall circumstances).<sup>8</sup>

Mean annual day temperatures range between 9.9°C and 23.8°C with maximum temperatures up to 46°C and minimum temperatures as low as -5.9°C on record.<sup>9</sup>

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<sup>7</sup> Department of Primary Industries, 2003. Griffith Centre for Irrigated Agriculture: Background, <http://www.agric.nsw.gov.au/reader/res-stations/ars-griffith.htm>.

<sup>8</sup> Bureau of Meteorology – Climate Statistics for Griffith Airport AWS

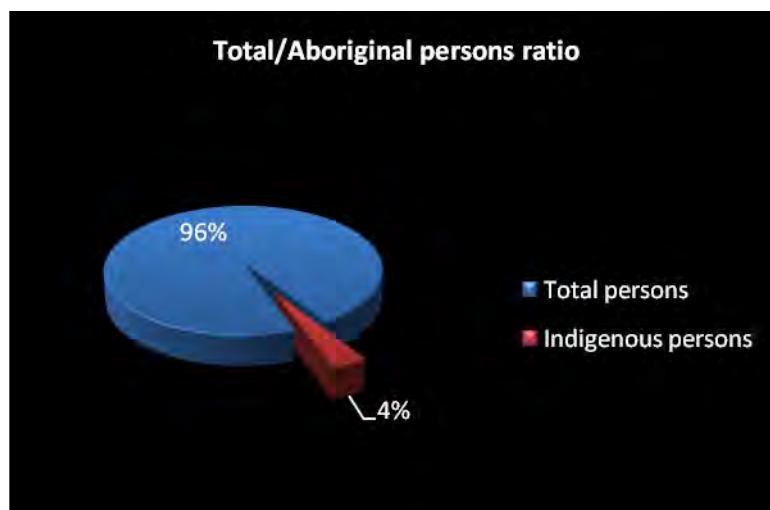
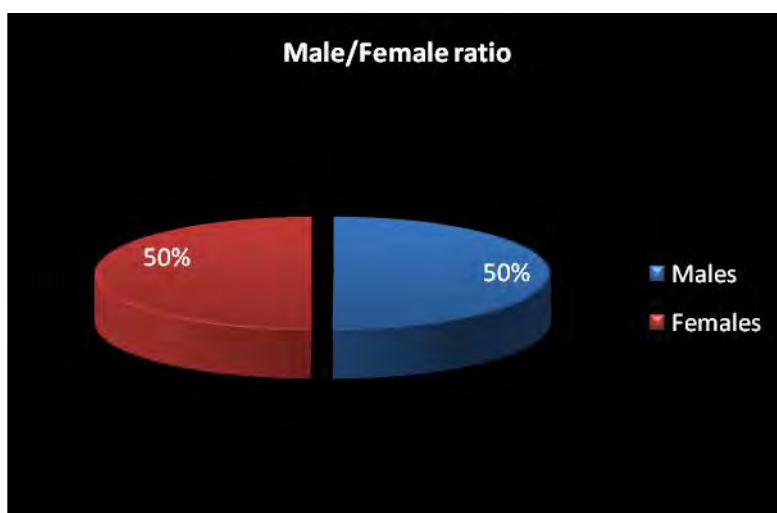
<sup>9</sup> *ibid*

## Demographic profile

### Key Statistics

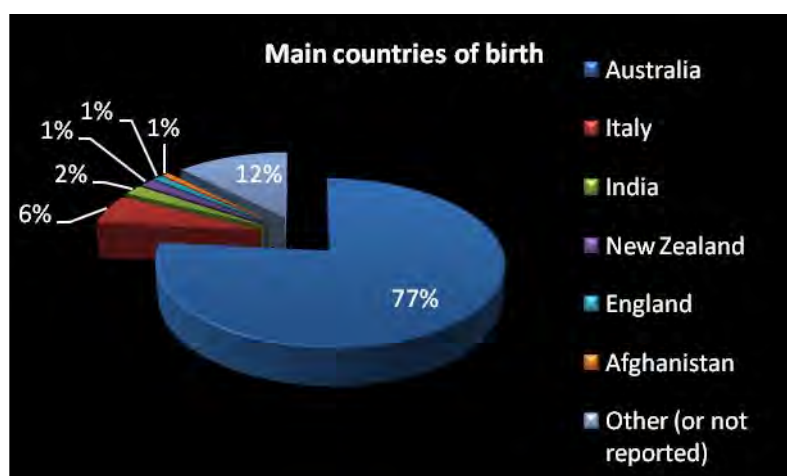
The following key statistics are based on combined data for post codes 2680 and 2681 and may vary due to time lapse. Unless otherwise specified all data in this section is derived from ABS 2006 Census data. Certain comparisons were made with data from the 2001 Census. The purpose of this section is not to provide a detailed analysis, but rather a brief overview of key statistics. Brief analysis is provided under some of the tables/graphs to simplify the data or to highlight identified trends that may have a significant impact on land use planning.

<i><b>Person Characteristics</b></i>	<i><b>Number of Persons</b></i>	<i><b>% of total persons</b></i>
<b>Total persons</b>	24062	
<b>Males</b>	12050	50.08
<b>Females</b>	12012	49.92
<b>Indigenous persons</b>	909	3.78



## Country of Birth

Main countries of birth		
<i>Country of Birth</i>	<i>Number of persons</i>	<i>% of total persons</i>
<b>Australia</b>	18423	76.56
<b>Italy</b>	1421	5.91
<b>India</b>	460	1.91
<b>New Zealand</b>	364	1.51
<b>England</b>	238	0.99
<b>Afghanistan</b>	185	0.77
<b>Other (or not reported)</b>	2971	12.35

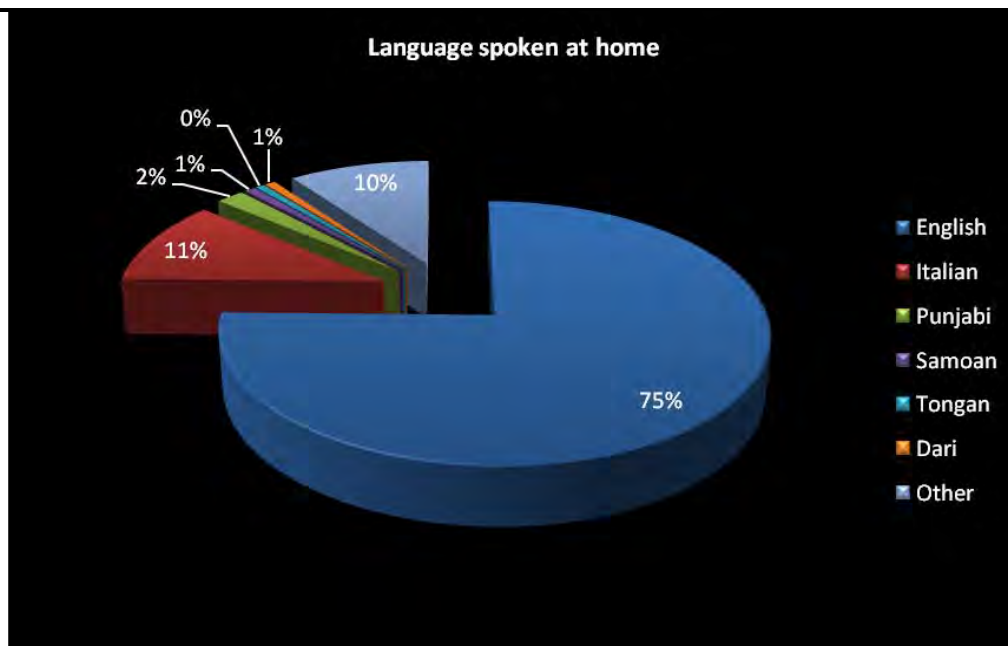


## Languages spoken

Main languages spoken at home		
<i>Language spoken at home</i>	<i>Number of Persons</i>	<i>% of total persons</i>
<b>English</b>	18091	75.32
<b>Italian</b>	2607	10.85
<b>Punjabi</b>	463	1.93
<b>Samoan</b>	177	0.74
<b>Tongan</b>	140	0.58
<b>Dari</b>	171	0.71
<b>Other</b>	2370	9.87

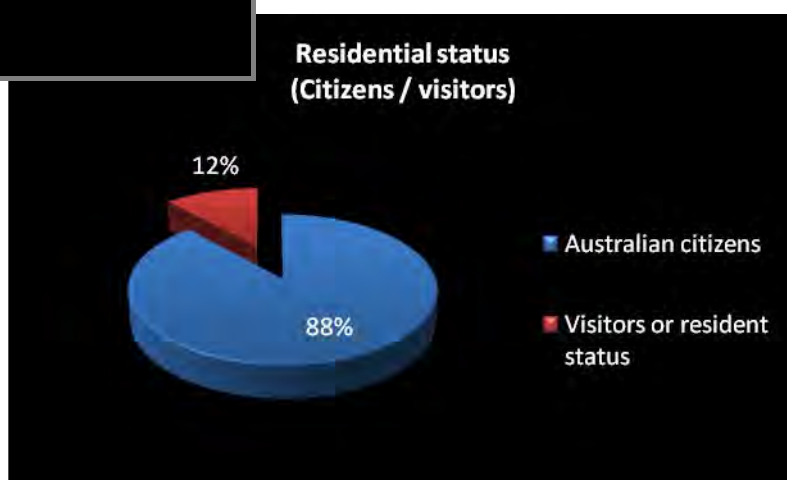
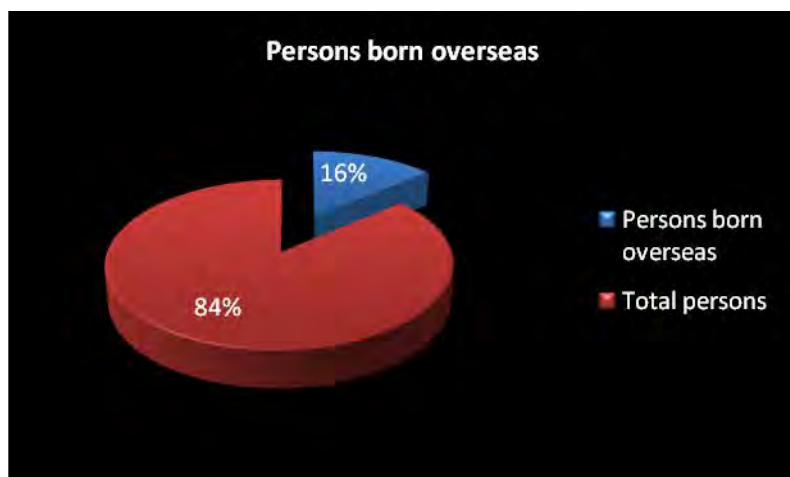
### Analysis:

The above table and following graph may be indicative of a degree of “underreporting” particularly if compared with the previous table (main countries of birth) and more detailed “country of origin” data. From other data it is reasonable to conclude that a substantial proportion of residents in Griffith are first or second generation immigrants from non-English speaking backgrounds.



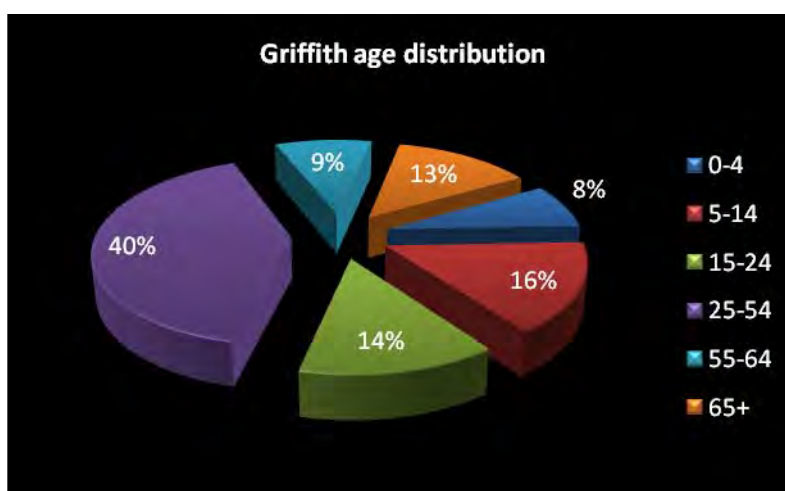
## Citizen and Resident composition

Selected characteristics – residential status		
	Number of Persons	% of total person
Australian citizenship	21243	88.28
Persons born overseas	3837	15.95
Overseas visitors	156	0.65
Total persons	24062	



## Age Structure

Griffith age distribution		
Age (Years)	Number of Persons	% of total persons
0-4	1856	7.71
5-14	3743	15.56
15-24	3293	13.69
25-54	9714	40.38
55-64	2238	9.30
65+	3215	13.36
Median age of persons = 35.5		



Age distribution – detailed breakdown (including comparison with 2001 Census data and NSW data)										
	2001 Number	2001 %	NSW Number	NSW %	2006 Number	2006 %	NSW Number	NSW %	% change LGA	% change NSW
0-4	1998	8.4	9315	7.0	1856	7.7	8668	6.2	0.7	0.8
5-9	1953	8.2	11017	8.2	1921	8.0	10267	7.3	0.3	0.9
10-14	1884	8.0	11399	8.5	1822	7.6	11382	8.1	0.4	0.4
15-19	1627	6.9	8923	6.7	1837	7.6	9573	6.8	-0.8	-0.2
20-24	1519	6.4	5532	4.1	1455	6.0	5725	4.1	0.4	0.0
25-29	1709	7.2	6585	4.9	1456	6.1	5688	4.1	1.2	0.9
30-34	1794	7.6	8197	6.1	1616	6.7	7690	5.5	0.9	0.6
35-39	1802	7.6	9837	7.4	1724	7.2	9187	6.6	0.4	0.8
40-44	1580	6.7	10730	8.0	1761	7.3	10293	7.4	-0.6	0.7
45-49	1512	6.4	9515	7.1	1657	6.9	11127	8.0	-0.5	-0.8
50-54	1325	5.6	8867	6.6	1500	6.2	10190	7.3	-0.6	-0.7
55-59	1068	4.5	7484	5.6	1263	5.2	9971	7.1	-0.7	-1.5
60-64	969	4.1	6939	5.2	978	4.1	8578	6.1	0.0	-0.9
65-69	855	3.6	5853	4.4	913	3.8	7026	5.0	-0.2	-0.6
70-74	761	3.2	5420	4.1	779	3.2	5382	3.9	0.0	0.2
75-79	135	0.6	3732	2.8	686	2.9	742	0.5	-2.3	2.3
80-84	604	2.5	2294	1.7	514	2.1	4293	3.1	0.4	-1.4
85+	595	2.5	1616	1.2	322	1.3	2753	2.0	1.2	-0.8



#### Analysis:

The above graph indicates the % of change in age group cohorts for Griffith compared to the average trend for NSW.

The most marked positive changes are in the age groups 25-29, 30-34 and 85+. The positive changes for age groups 25-29 and 30-34 may be interpreted as indicative of a trend to attract younger adults seeking to settle in a Griffith at an early stage of setting up a family for various reasons, probably relating to employment opportunities and cost of living.

The significantly above average positive change in the 85+ group may be linked to intra-regional migration, i.e. elderly persons retiring to Griffith from the surrounding towns and region, with a view on access to medical support facilities, dependency on extended family and aged care coupled with strong family values present in the community and palliative care.

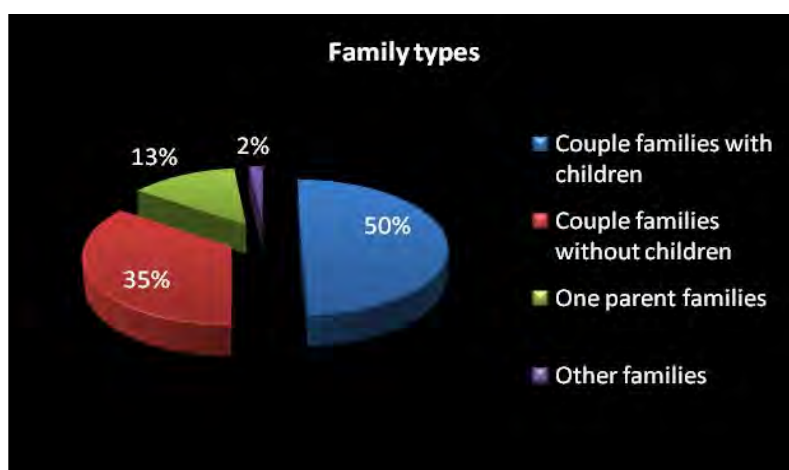
The most marked negative changes are in the age 75-79. Negative change in the age group 75-79 most likely relate to relatively limited choices for aged care and retirement in an age group where persons are in general still fairly independent.

A concerning negative change is observed in the 15-19 age group, which may be indicative of early school-leavers leaving Griffith, young students leaving Griffith to pursue tertiary studies, and to a lesser extent boarding schooling.

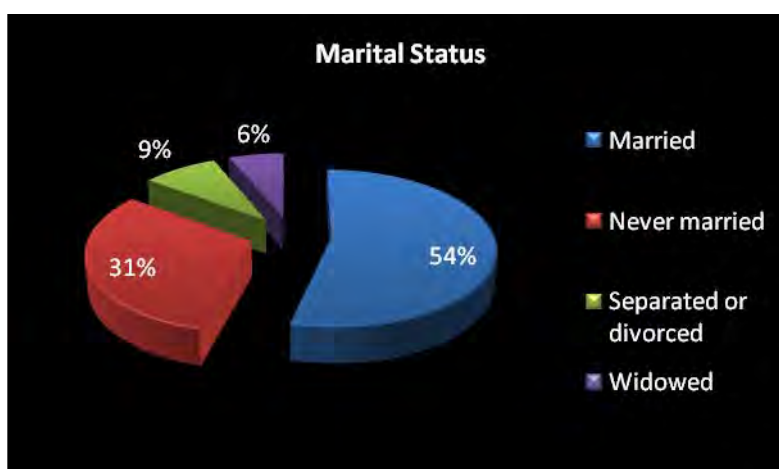
The age group 40-44 experienced negative changes that are lower, but consistent with the overall trend for NSW. This most likely to relates to relatively fewer career opportunities in Griffith for persons in this age group.

## Family characteristics

Family characteristics		
<i>Family types</i>	<i>Number of families</i>	<i>% of total families</i>
Couple families with children	3085	49.71
Couple families without children	2175	35.05
One parent families	840	13.54
Other families	106	1.70
<b>Total families</b>	<b>6206</b>	



Marital Status		
<i>Status</i>	<i>Number of Persons</i>	<i>% of total persons</i>
Married	10137	54.02
Never married	5827	31.06
Separated or divorced	1617	8.62
Widowed	1182	6.30



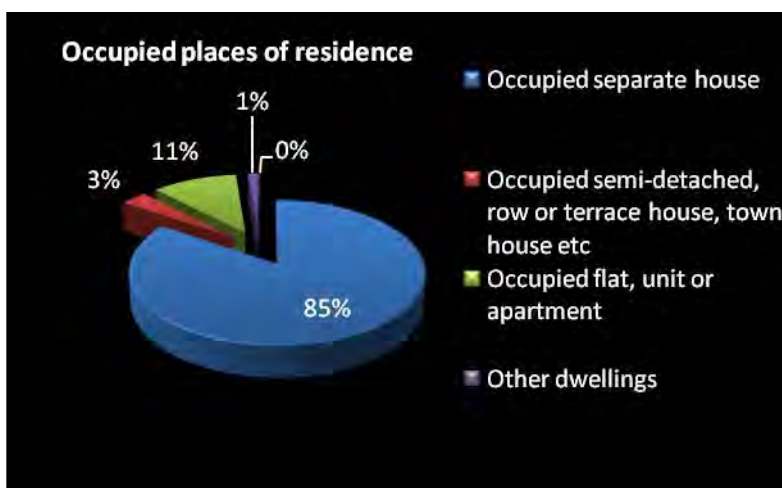


## Dwelling characteristics

Dwelling characteristics (occupied / unoccupied dwellings)	
	Number of dwellings
Total private dwellings	9516
Occupied private dwellings	8640
Vacant private dwellings	876

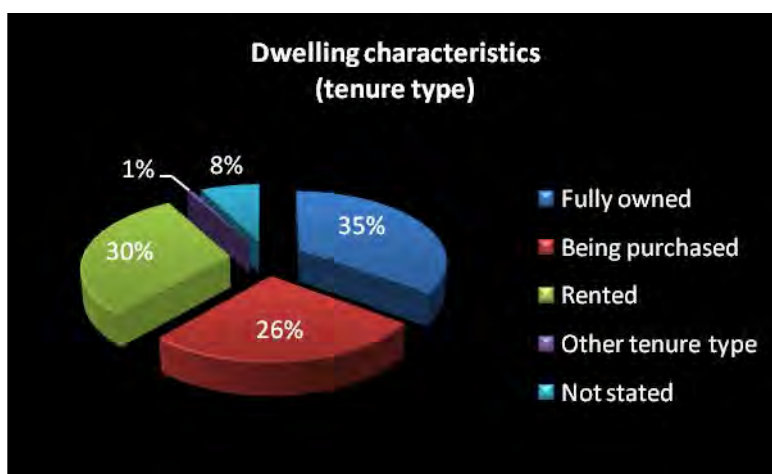


Dwelling characteristics (Occupied places of residence)	
Dwelling characteristics	Number of dwellings
Occupied separate house	7300
Occupied semi-detached, row or terrace house, town house etc	284
Occupied flat, unit or apartment	938
Other dwellings	115
Not stated	3



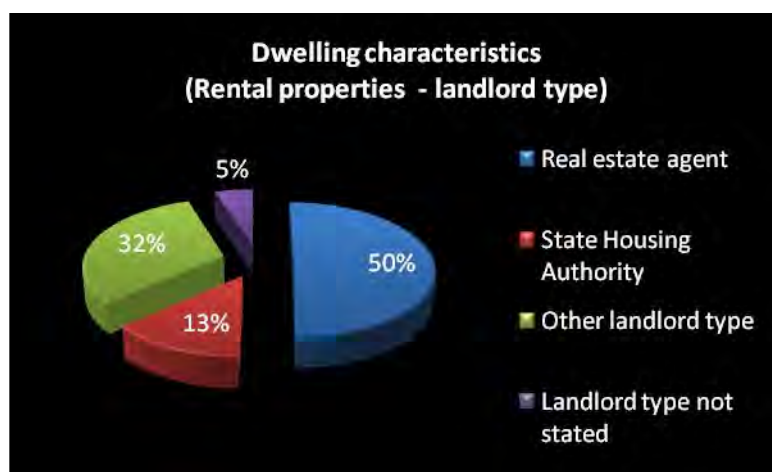
**Dwelling characteristics**  
**(Tenure Type - Occupied private dwellings)**

<i>Tenure Type</i>	<i>Number of dwellings</i>	<i>% of total occupied private dwellings</i>
Fully owned	3036	35.11
Being purchased	2278	26.35
Rented	2624	30.35
Other tenure type	57	0.66
Not stated	651	7.53



**Dwelling characteristics**  
**(Landlord Type - Occupied private dwellings being rented)**

<i>Landlord Type</i>	<i>Number of dwellings</i>	<i>% of total rented dwellings</i>
Real estate agent	1320	50.27
State Housing Authority	348	13.25
Other landlord type	824	31.38
Landlord type not stated	134	5.10



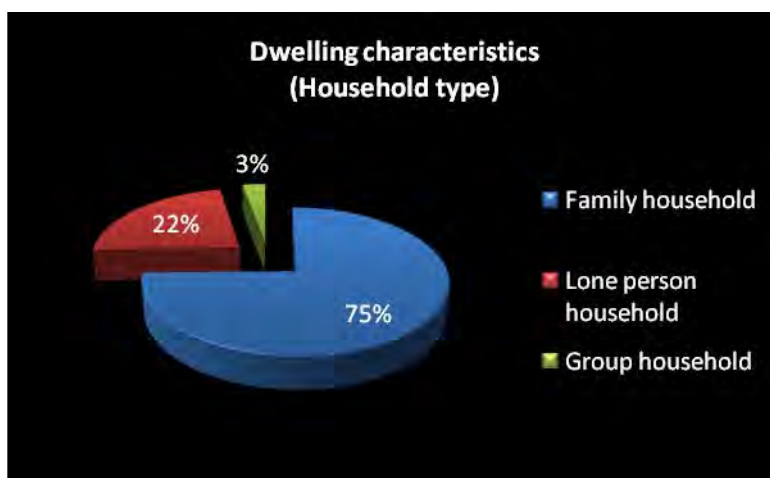
**Dwelling characteristics**  
(Other key data from 2006 Census data)

Median rent (\$/weekly)	155
Median housing loan (\$/monthly)	1200
Average household size	(2.7)
Average number of person per bedroom	1.1

## Household size

**Dwelling characteristics**  
(Household Composition - Occupied private dwellings)

<i>Household Composition</i>	<i>Number of dwellings</i>	<i>% of total occupied private dwellings</i>
Family household	6118	74.70
Lone person household	1839	22.45
Group household	233	2.85



### (Number of persons usually resident)

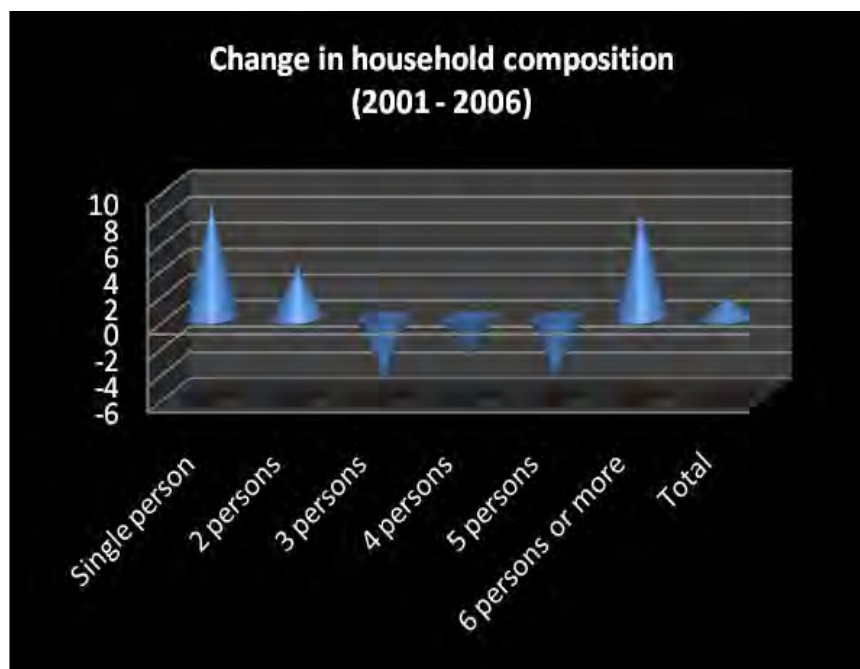
Household size (or the number of persons usually resident) is considered as another important indicator of the strategy area's residential profile and function and how it is likely to grow and develop spatially. This indicator, in its simplest form, is also the most important variable besides actual population estimates and forecast to determine the future demand for residential release. Household size is furthermore considered indicative of the form of urban settlement experienced in a community and provides insights into the level of demand for residential release areas and infill development.

Household size is derived from the three Census questions: 'Name of each person including visitors who spent census night in this dwelling', and 'Where does the person usually live?', and 'Are there any persons who usually live in this dwelling who were absent on census night?'

The size of households in general terms mimics the life-cycle of families. Smaller households are usually distinctive of relationships, and then increase in size with the addition of children. Households then typically reduce in size again as children reach adulthood and leave home to pursue studies, work or relationships. Household size can also be influenced by a lack, (or over-supply) of affordable housing. Furthermore, it is noteworthy for a diverse community such as Griffith that some cultural affiliations, recent migrants and indigenous persons sometimes have a tendency of living with extended family members and/or other families.

Household sizes							
Enumeration factor	2001			2006			% Change from 2001 to 2006
	Family households	Non-family households	Total	Family households	Non-family households	Total	
Single person	0	1688	1688	0	1837	1837	8.83
2 persons	2392	197	2589	2479	189	2668	3.82
3 persons	1251	38	1289	1199	28	1227	-4.81
4 persons	1299	14	1313	1261	14	1275	-2.89
5 persons	795	4	799	762	0	762	-4.63
6 persons or more	373	0	373	403	0	403	8.04
<b>Total</b>			<b>8051</b>			<b>8172</b>	<b>1.50</b>

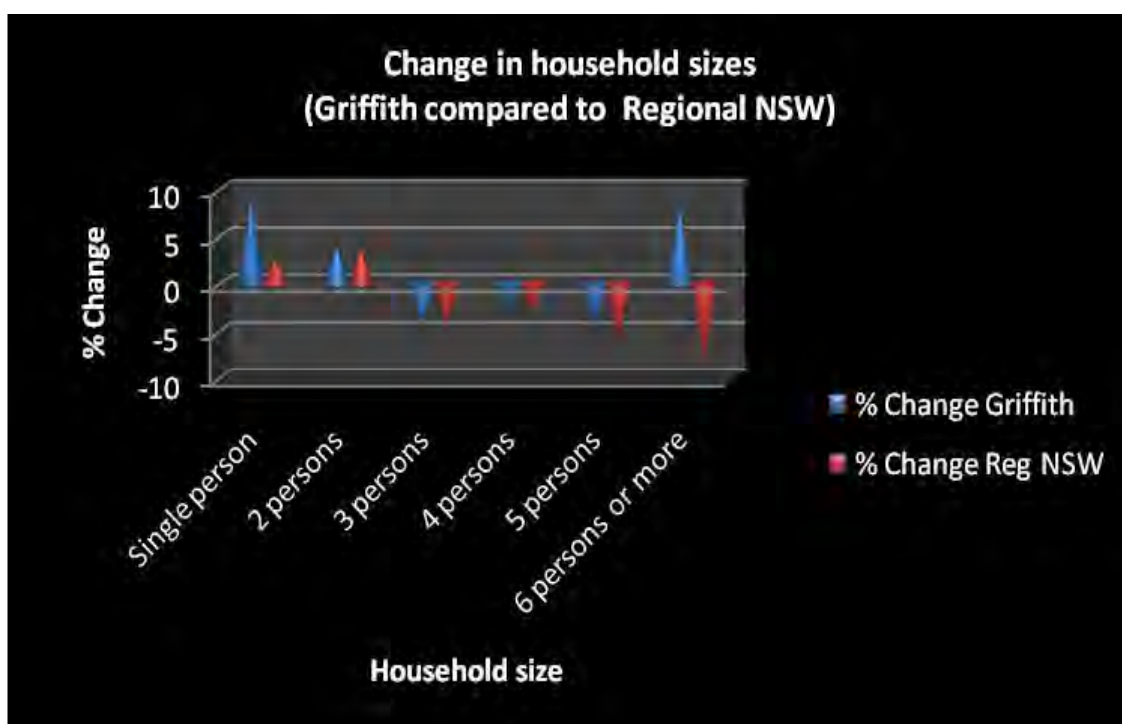
(Note: A 'non-family household' comprises 'lone persons' and 'group households' as defined by ABS)



### Analysis:

Analysis of the number of persons usually resident in a household in the Griffith area compared with Regional NSW shows that the trends are in general similar to regional trends with the exceptions being with single person households and large households with 6 or more persons.<sup>10</sup> The proportionally significant positive change in single person households in Griffith can probably be ascribed to a rise in elderly people retiring in Griffith as well as young individuals entering the job market and employment. The exceptionally positive change experienced for large household consisting of six or more persons are most probably linked to cultural values and tendencies prevalent in Griffith. Comparative data is depicted in the following table and graph.

Household Size - % Change (Griffith compared to Regional NSW)		
Enumerator factor	Griffith % change	Regional NSW % change
Single person	8.83	2.33
2 persons	3.82	3.56
3 persons	-4.81	-4.71
4 persons	-2.89	-3.13
5 persons	-4.63	-5.89
6 persons or more	8.04	-8.05



<sup>10</sup> Comparison is undertaken by extracting similar data from 2001 and 2006 ABS Census data for NSW Rural Balance (Section of State)

## Income and labour force

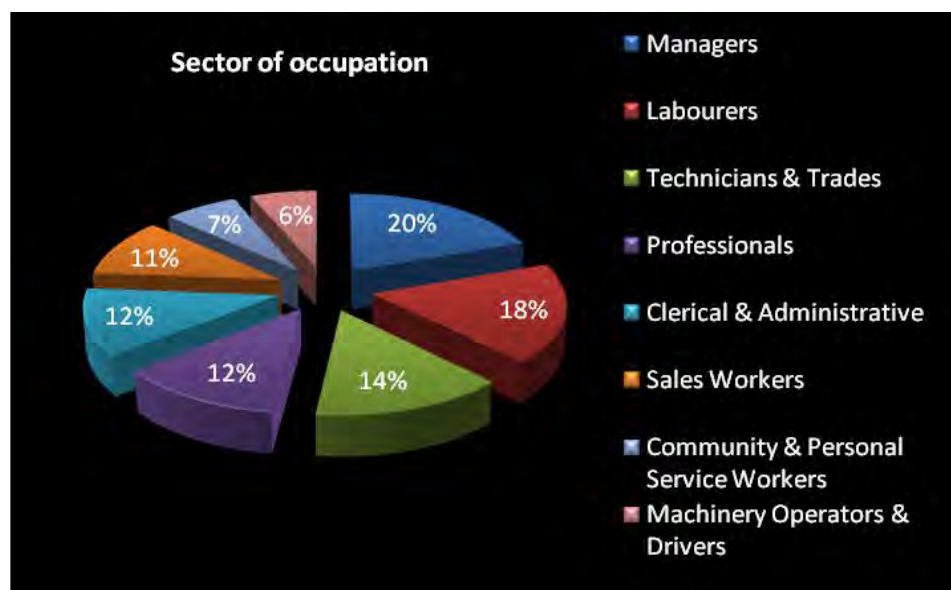
Average income	
<i>Reported Income (15 yrs &amp; over)</i>	<i>\$/week</i>
individual	466.5
household	1003.5
family	1135

Labour force characteristics	
	Number of persons
Persons active in labour force	11663
Persons not active in labour force	5514

Labour force characteristics (FT/PT employment)		
Labour force	Number of Persons	% of total labour force
Employed full-time	7393	63.39
Employed part-time	3021	25.90
Employed away from work	420	3.60
Employed hrs not stated	369	3.16
Unemployed	460	3.94



Main occupation types		
Occupation	Number of Persons	% of total persons
Managers	2148	19.53
Labourers	1986	18.05
Technicians & Trades	1582	14.38
Professionals	1355	12.32
Clerical & Administrative	1317	11.98
Sales Workers	1161	10.55
Community & Personal Service Workers	763	6.94
Machinery Operators & Drivers	688	6.25



## Population growth estimates

In order to supplement background data for this strategy, Council commissioned an independent research project with the purpose of gaining insight into population growth outcomes for Griffith local government area over the next 25 – 30 years ( refer to [Annexure B](#)).

The aims of the research project were to undertake consultative demographic analysis, whilst incorporating undercounting, with population growth estimates undertaken simulating three long-term scenarios:

- **Conservative estimates** based on a stream of population projections largely reflecting current trends and, therefore, predicated on these remaining essentially stable.
- **Increased estimates** based on a stream of population projections dependent on increased growth and, therefore, reliant on the Council's and the numerous stakeholders' capacity to adapt to and capitalise on both the times and immediate climate.
- **Decreased estimates** based on a stream of population projections dependent on decreased growth when compared with current trends—namely natural decrease, whereby deaths will outnumber births much sooner than in other projection scenarios. These figures will only come into effect should Council and local stakeholders be overcome by critical factors such as drought, economic recession, attraction/retention of staff, etc.

Undercount was factored into the three growth estimates with consideration of ABS post enumeration surveys and through applied metric methodology.

## Research findings

As at August 8, 2006, the population of Griffith LGA was estimated at 23,801. This represented approximately 0.12% of Australia's national population. This proportion remained steady in relation to the area's total labour force.

Additional details include:

- Even gender distribution within the region: 11,905 males to 11,896 females.
- Above average proportion of indigenous persons: 3.8% (Griffith); 2.3% (National).
- Median age of persons just below average: 35 (Griffith); 37 (National).
- At least three-quarters of Griffith residents were born in Australia and only speak English at home.
- Italian was the second-most represented language (10.9%) and ethnicity (5.9%) in Griffith.



Using ABS data, there are a number of conclusions to be drawn from the research – with final projections featured in the table below. While these figures function solely as projections and not forecasts, they do provide useful approximations of possible outcomes based on demographic trends that may unfold in the Griffith region over the coming years.

Series B		Series A		Series C	
2033	2038	2033	2038	2033	2038
MIN 34,717	MIN 36,390	MIN 37,618	MIN 40,251	MIN 32,452	MIN 33,540
AVG 34,905	AVG 36,587	AVG 37,822	AVG 40,469	AVG 32,628	AVG 33,722
MAX 35,093	MAX 36,784	MAX 38,026	MAX 40,687	MAX 32,803	MAX 33,903

Figure 1: Population Growth Estimates

#### General estimates

These Griffith LGA projections take into account all of the figures detailed in the table. In 25 years it is anticipated that the population will fall between:

- an absolute minimum of 32,452 (a dramatic decrease scenario), and
- an absolute maximum of 38,026 (a dramatic increase scenario)

The mid-point for these figures is 35,239 and closely resembles the maximum calculation in the conservative estimates of Series B (see table).

In 30 years it is anticipated that the population will fall between:

- An absolute minimum of 33,540 (dramatic decrease scenario), and
- An absolute maximum of 40,687 (dramatic increase scenario)

The mid-point for these figures is 37,114 and, again, most resembles the maximum calculation in the conservative estimates of Series B (see table).

#### Conservative estimates

Based on Series B calculations, this stream of population projections largely reflects current trends and is, therefore, predicated on these remaining essentially stable.

In 25 years it is anticipated that the population will be 34,905. This is a mid-point figure between the minimum calculation of 34,717 (produced by the balance of NSW undercount rate) and the maximum calculation of 35,093 (produced by the total of NSW undercount rate).

In 30 years it is anticipated that the population will be 36,587. This is a mid-point figure between the minimum calculation of 36,390 and the maximum calculation of 36,784.

### Increased estimates

Based on Series A calculations, this stream of population projections is dependent on increased growth and is, therefore, reliant on the Griffith City Council's and the numerous stakeholders' capacity to adapt to and capitalise on both the times and immediate climate.

In 25 years it is anticipated that the population will be 37,822. This is a mid-point figure between the minimum calculation of 37,618 and the maximum calculation of 38,026.

In 30 years it is anticipated that the population will be 40,469. This is a mid-point figure between the minimum calculation of 40,251 and the maximum calculation of 40,687.

### Decreased estimates

Based on Series C calculations, this stream of population projections is dependent on decreased growth when compared with current trends—namely natural decrease, whereby deaths will outnumber births much sooner than in other projection scenarios. These figures will only come into effect should Council and local stakeholders be overcome by some of the significant issues e.g. ongoing drought, ongoing recession, difficulty with attraction/retention of staff, etc.

In 25 years it is anticipated that the population will be 32,628. This is a mid-point figure between the minimum calculation of 32,452 and the maximum calculation of 32,803.

In 30 years it is anticipated that the population will be 33,722. This is a mid-point figure between the minimum calculation of 33,540 and the maximum calculation of 33,903.

## Application of estimates

For the purpose of land use application the foregoing estimates need to be applied to estimate expected demand for residential release.

Average household size calculates at 2.7 persons per household according to census data. For the purpose of this strategy it can be assumed that the household size will remain fairly stable for the foreseeable future. It is therefore reasonable to adopt the household size of (2.7) persons per household for the purposes of this strategy.

### Estimated future total number of households

Should the average estimated household size be applied to the population growth estimates ascertained earlier in this section it can be represented as the required total number of households for Griffith LGA in the following table:

Series B		Series A		Series C	
2033	2038	2033	2038	2033	2038
MIN 11,792	MIN 12,360	MIN 12,778	MIN 13,672	MIN 11,023	MIN 11,392
AVG 11,856	AVG 12,428	AVG 12,847	AVG 13,746	AVG 11,082	AVG 11,454
MAX 11,920	MAX 12,495	MAX 12,916	MAX 13,820	MAX 11,142	MAX 11,516

Figure 2: Estimated average number of households in Griffith LGA

### Estimated shortfall in residential release

According to 2006 Census a total of 8191 dwellings were counted in Griffith LGA. According to Griffith City Council rate statistics as on 15/04/2010 8216 residential units exist within the urban area including the villages but excluding farm dwellings. 1422 rateable farmland properties exist.<sup>11</sup>

Should this figure be applied to the 'estimated number of households' as established in the previous section it can be represented as the required total number of dwelling units for Griffith LGA - therefore the shortfall to be provided by future land releases.

This shortfall is represented in the following table:<sup>12</sup>

Series B		Series A		Series C	
2033	2038	2033	2038	2033	2038
MIN 3,601	MIN 4,169	MIN 4,587	MIN 5,481	MIN 2,832	MIN 3,201
AVG 3,665	AVG 4,237	AVG 4,656	AVG 5,555	AVG 2,891	AVG 3,263
MAX 3,729	MAX 4,304	MAX 4,725	MAX 5,629	MAX 2,951	MAX 3,325

<sup>11</sup> Total number of dwellings for localities 2680 and 2681 derived from ABS Series B31 (Dwelling Structure) for the respective localities – including 33 temporary dwellings (caravans, tents etc,) and 28 dwellings attached to a shop, office or commercial building.

<sup>12</sup> The estimated shortfall is determined by subtracting the number of dwellings provided as per 2006 Census from the estimated average number of households.

## Recommended estimate

Statistical forecasting remains an inexact science, particularly since there are so many variables over which we do not have any control, for example drought and economic recession. This is particularly evident in the case of long-range population growth estimates, and becomes an even harsher reality in a regional locality with a relatively volatile, though prosperous, local economy.

Prior to making a final recommendation to adopt a specific estimate for land use planning purposes, a number of factors were taken into account:

- Griffith's population growth has consistently exceeded previous population growth estimates. (Though not always by a significant margin – but repeatedly exceeding estimates.);
- Griffith's population has not been in decline since 1976;
- Growth trends in Griffith have similarly defied the norm for smaller regional centres, i.e. slow decline in growth;
- Economic growth rates far exceed regional centres of similar sizes;<sup>13</sup>
- Property prices are high with a strong real estate market in comparison with other regional centres. (To the contrary, the property market compares well with certain coastal localities.<sup>14</sup>);
- Insecurity and uncertainty with regard to the future of water allocations may influence positive growth in Griffith; and
- Limited information is available with regard to the effect of a volatile market for the wine, rice and citrus industry on the growth of Griffith – in particular the effect on residential expansion. However, it is reasonable to accept a negative impact on residential growth to accompany a slowdown in economic growth.

Based on the fact that Griffith's growth has consistently exceeded growth estimates during the past two to three decades, it is likely that the more 'conservative' Series B estimates could be exceeded in future. From a planning point-of-view Series C was only considered as reasonable in terms of contingency purposes. Should considerable decline in growth be experienced in future, Series C may be revisited for future revisions of this strategy.

This leaves us with Series A. The Series A estimate for 2038 is however considered an overly optimistic estimate given the range of uncertainty surrounding the future of water and future environmental impacts – particularly associated with climate change.

Based on the mentioned considerations it stands to reason that the Series A estimate for 2033 is the most reasonable estimate to apply for the purpose of this strategy. This estimate is well below the Series A estimate for 2038, but still significantly higher than the more conservative estimates

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<sup>13</sup> Refer to further discussion of Economic and Infrastructure Study undertaken by URS for Griffith City Council

<sup>14</sup> NSW Parliamentary Inquiry into the Planning Framework made a comparison in raw land values and related issues between Griffith and Byron Bay

contained in Series B. It is accepted that the adoption of the Series A estimate for 2033 may even be considered as an oversupply; however it is considered that market forces will eventually determine the actual need. From a services and infrastructure viewpoint the adoption of the Series A estimate for 2033 may be deemed as an appropriate strategic response.

According to the Series A estimate for 2033, Council should attempt to provide/release additional residential land for approximately 4,656 new dwelling units over the next 25 years – no less than 4,587 dwelling units but may keep the target supply below 4,725 dwelling units.

Series B		Series A		Series C	
2033	2038	2033	2038	2033	2038
MIN 3,601	MIN 4,169	MIN 4,587	MIN 5,481	MIN 2,832	MIN 3,201
AVG 3,665	AVG 4,237	AVG 4,656	AVG 5,555	AVG 2,891	AVG 3,263
MAX 3,729	MAX 4,304	MAX 4,725	MAX 5,629	MAX 2,951	MAX 3,325

Figure 3: Proposed shortfall in dwelling units to be provided over the next 25 years – Series A for 2033.

In general terms, to simplify matters, a reasonable target for the purposes of this strategy would be to provide housing for approximately 4,650 households over the next 24 years. This target equates to providing on average housing opportunities for 194 households per year.

Even at the lower end of the spectrum, i.e. the Series C average estimate for 2033 the estimate equates to providing, on average, housing opportunities for 120 households per year.

According to historical development data (as outlined in the following section) Griffith has been providing an average of 200 new dwelling units per year for the past decade. This trend is consistent with the estimate suggested in Series A for 2033.

Based on an average household size of 2.7 adopted for this study these figures are adjusted as follows:

The estimated average additional population until 2033<sup>15</sup> is 12,847 which equates to an additional (4758) households by 2033 – on average based on 2.7 per household.

... a reasonable target for the purposes of  
this strategy would be to provide housing  
for approximately 4,650 households over

<sup>15</sup> Being the difference between the base population under the 2006 Census and the average 'Series A' estimate for 2033 – refer to Part B ('Application of Estimates') of this Strategy

## Development trends

### Subdivision

The following data was derived from Council's development statistics with regard to the number of subdivisions approved during the past decade.<sup>16</sup> Unfortunately the raw data does not discern between subdivisions for residential purposes and subdivisions for non-residential purposes.

TOTAL NUMBER OF SUBDIVISIONS APPROVED	
Year	Total number of subdivisions approved
1998 - 1999	349
1999 - 2000	352
2000 - 2001	137
2001 - 2002	310
2002 - 2003	677
2003 - 2004	318
2004 - 2005	394
2005 - 2006	167
2006 - 2007	111
2007 - 2008	552
2008 - 2009	250
2009 - 2010	225
2010 - 2011	303

### Residential development

The following data has been derived from Council's development statistics with regard to the number of new residential dwelling units approved during the past decade<sup>17</sup>.

APPROVED NEW DWELLING UNITS					
Year	Single Detached Dwellings	Dual Occupancy Units	Multiple Dwellings	Rural Detached Dwellings	Total number of new dwelling units
1998 - 1999	62	46	57	44	209
1999 - 2000	110	42	69	43	264
2000 - 2001	37	11	11	12	71
2001 - 2002	93	31	348	39	511
2002 - 2003	57	31	30	17	135
2003 - 2004	82	24	20	32	158
2004 - 2005	139	34	25	28	226
2005 - 2006	78	23	47	11	159
2006 - 2007	99	11	17	10	137

<sup>16</sup> Data as per financial year but excluding data for June 2009 which was not available at date of analysis.

<sup>17</sup> Data as per financial year but excluding data for June 2009 which was not available at date of analysis. Data is representative of approved dwelling units and does not necessarily represent constructed dwellings.

2007 - 2008	62	12	16	11	101
2008 - 2009	83	16	34	10	143
2009 - 2010	100	10	12	9	131
<b>Average</b>	<b>87</b>	<b>25</b>	<b>57</b>	<b>23</b>	<b>192</b>

## Rural Dwellings

Rural dwellings as a component of the total dwelling stock has gradually declined during the past decade. This trend may be related to a number of factors such as drought, increased mobility and mechanisation of farming practices, excision controls introduced with the current LEP, and access to more facilities in an urban setting.

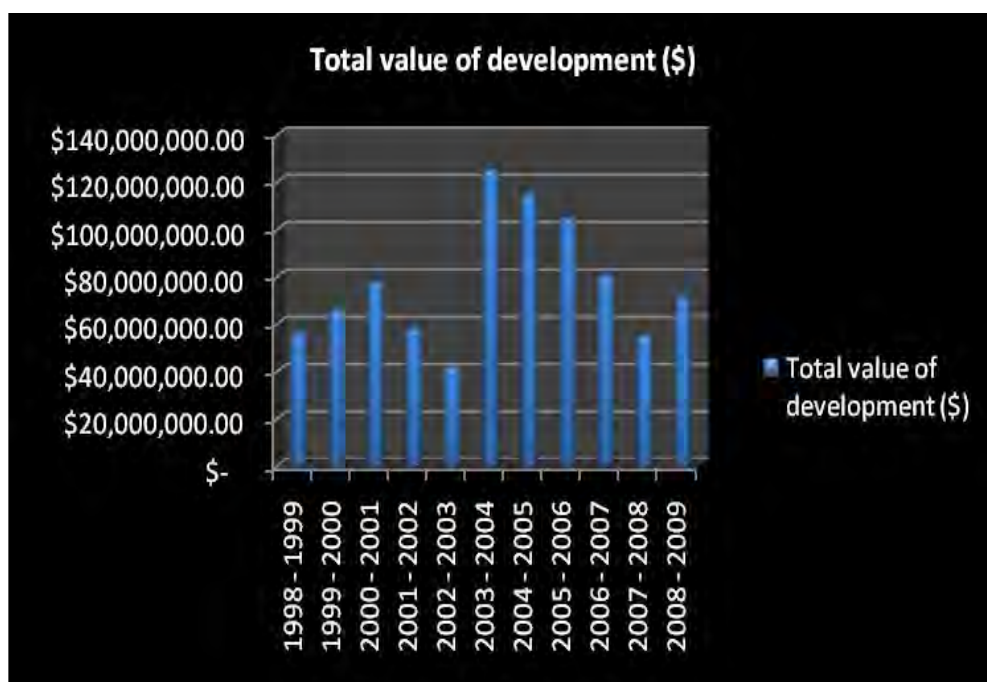
It is reasonable for the purpose of this strategy to conclude in this regard that the percentage of rural dwellings as component of total housing stock is more likely to decrease than increase. In view of the new prohibitions introduced on residential excisions by the state government, particularly through the promulgation of the SEPP (Rural Lands) 2008, it is more likely that this percentage will further decrease in future.

For the purpose of this strategy it is reasonable to conclude that rural dwellings is unlikely to exceed more than 10% (on average) of the total housing stock of Griffith in future.

It is important to note that references to rural dwellings exclude lots currently zoned "Rural Residential" and proposed to be zoned "Large Lot Residential" under the new standard LEP template.

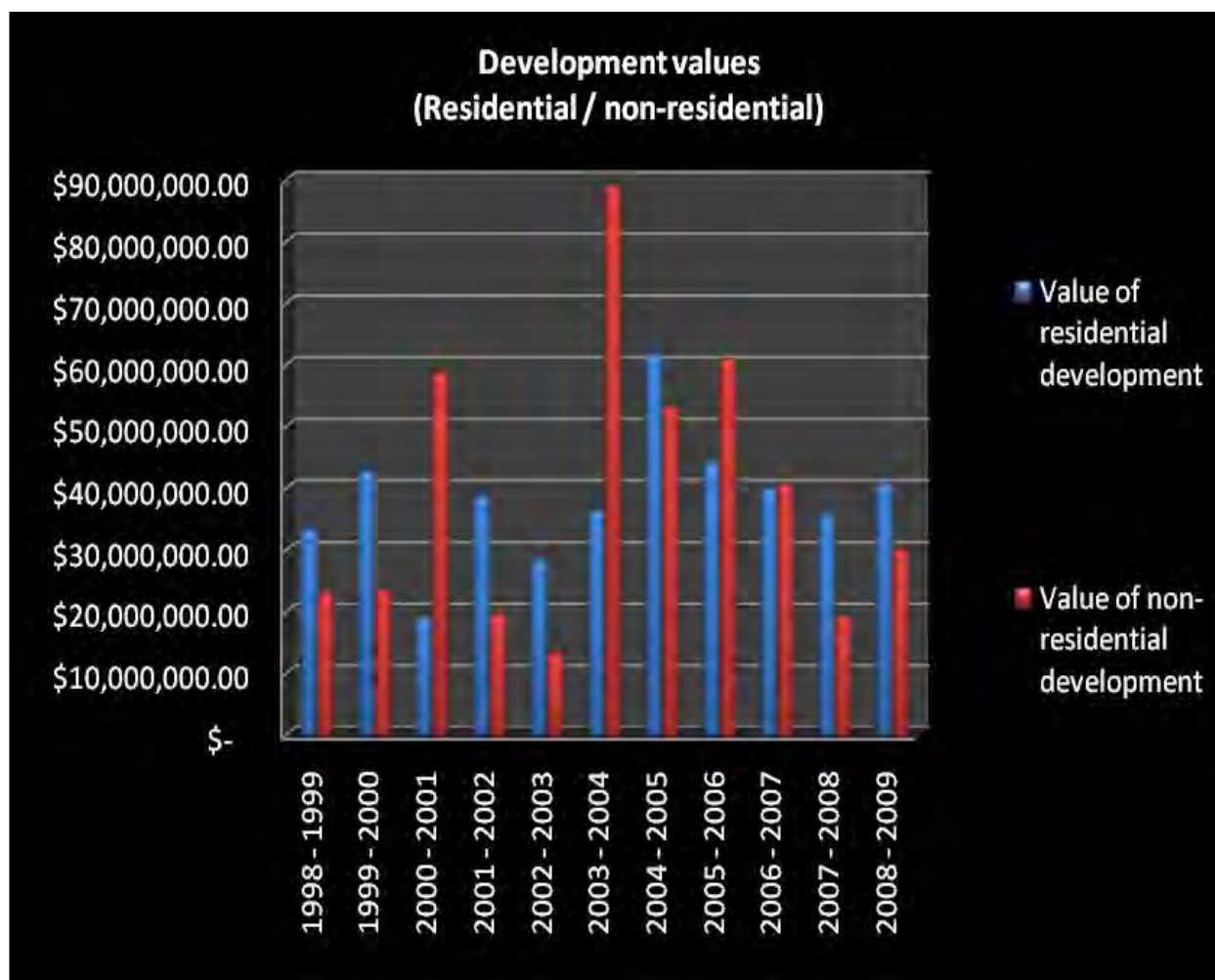
## Development Value

TOTAL DEVELOPMENT VALUE 1998 - 2009 <sup>18</sup>			
Year	Residential (\$)	Non-Residential (\$)	Total (\$)
1998 - 1999	\$33,008,754.00	\$22,892,006.00	\$ 55,900,760.00
1999 - 2000	\$42,479,246.00	\$23,145,515.00	\$ 65,624,761.00
2000 - 2001	\$18,759,635.00	\$58,485,169.00	\$ 77,244,804.00
2001 - 2002	\$38,480,410.00	\$19,357,664.00	\$ 57,838,074.00
2002 - 2003	\$28,163,932.00	\$13,110,275.00	\$ 41,274,207.00
2003 - 2004	\$36,058,129.00	\$88,703,378.00	\$ 124,761,507.00
2004 - 2005	\$61,467,737.00	\$52,988,543.00	\$ 114,456,280.00
2005 - 2006	\$43,972,968.00	\$60,698,283.00	\$ 104,671,251.00
2006 - 2007	\$39,775,233.00	\$40,359,574.00	\$ 80,134,807.00
2007 - 2008	\$35,642,278.00	\$18,820,375.00	\$ 54,462,653.00
2008 - 2009	\$40,502,601.00	\$29,794,758.00	\$ 70,297,359.00



<sup>18</sup> Data as per financial year but excluding data for June 2009 which was not available at date of analysis. Data is representative of stated values at time of lodging of development application and does not necessarily represent market values. Data has been adjusted for FY2001/02 to provide for a staged 292 multiple dwelling unit development (only partially constructed)





### Linking development and demand on land and infrastructure

For the purposes of strategic land use planning it is important to have an understanding of the (historical) demand of development on land and infrastructure.

Demand on infrastructure is normally expressed as an Equivalent Tenement (ET) value, i.e. the load or demand that will typically be placed on infrastructure by a single household unit.

ET values can be determined with relative ease in the case of residential developments as the number of dwellings and units as well as the extent thereof is generally readily available data. The determination of ET values for non-residential components is however far more complex. An accurate estimate can normally be obtained by using floor area factors and other variables. At the time of writing of this strategy no detailed data existed according to which ET values could be determined with any significant accuracy. Collection of the data by means of land use assessment and calculation of floor areas from approved building plans was considered too time consuming and not cost effective.

Instead 'reverse apportionment' was applied to development values in order to attain an understanding of the possible load imposed by development on infrastructure and land. This technique is not as accurate as using floor area factors, but provides an indicative understanding of likely impact on land and infrastructure.

After applying this technique the \$-value per ET was estimated for the respective financial years as a denominator of the total value of residential development for a particular year.<sup>19</sup>

Year	Estimated \$ value per Financial Year
1998 - 1999	\$ 143,516.00
1999 - 2000	\$ 151,172.00
2000 - 2001	\$ 215,628.00
2001 - 2002	\$ 161,682.00
2002 - 2003	\$ 207,087.00
2003 - 2004	\$ 228,216.00
2004 - 2005	\$ 248,857.00
2005 - 2006	\$ 269,773.00
2006 - 2007	\$ 292,465.00
2007 - 2008	\$ 352,894.00
2008 - 2009	\$ 309,180.00

The actual ET demand for residential development and estimated ET demand for non-residential development is depicted in the following table and graph.<sup>20</sup> It is noteworthy to observe that the trends in these graphs closely follow historical market trends and significant local developments for the past decade. The estimated additional ET load due to non-residential development is deemed as a conservative, albeit crude estimate.

ACTUAL/ESTIMATED ADDITIONAL ETs			
Year	Actual additional residential load (ETs)	Estimated additional non-residential load (ETs)	Estimated total additional load (ETs)
1998 - 1999	230	160	390
1999 - 2000	281	153	434
2000 - 2001	87	271	358
2001 - 2002	238	238	476
2002 - 2003	136	136	272
2003 - 2004	158	389	547
2004 - 2005	247	213	460
2005 - 2006	163	225	388
2006 - 2007	136	138	274
2007 - 2008	101	53	154
2008 - 2009	131	96	227
<b>Average</b>	<b>173</b>	<b>188</b>	<b>362</b>

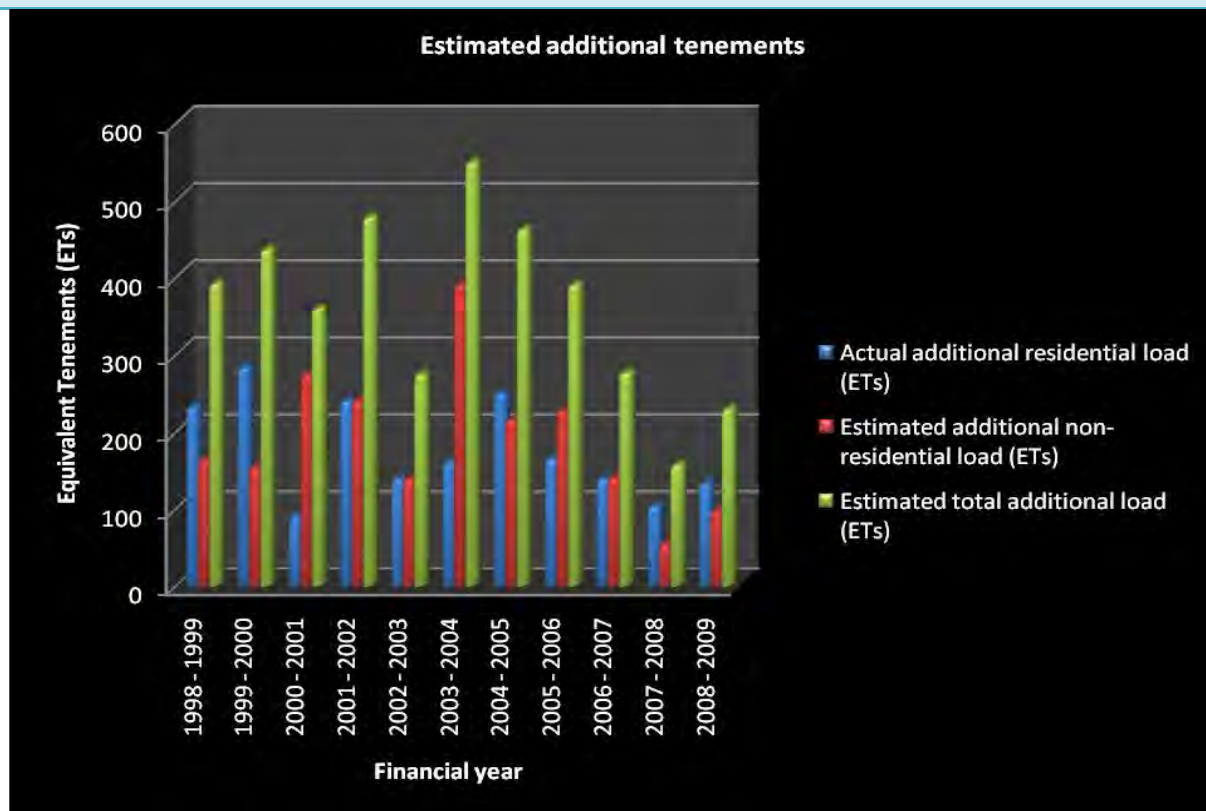
<sup>19</sup> The technique can be simplified by applying: Estimated ET x(year) = [ a / b ] ÷ c

a ≈ Σ \$ value of residential development for x(year)

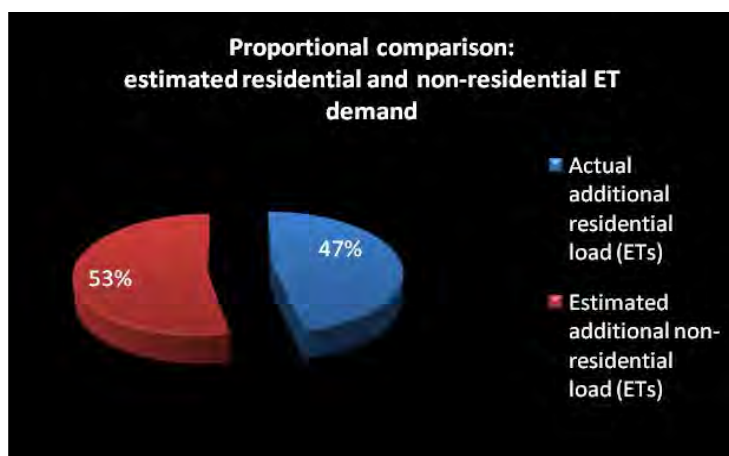
b = n (new residential units for x(year))

a ≈ Σ \$ value of non-residential development for x(year)

<sup>20</sup> Data has been adjusted for FY2001/02 to exclude a staged 292 multiple dwelling unit development (only partially constructed)



The ratio of actual average additional demand for residential ETs in comparison with estimated additional demand for non-residential ETs are depicted in the following graph. It is noteworthy that the correlation is roughly 50:50, i.e. for every actual ET created in the residential sector, we can expect a demand equivalent to another ET to be created by eventual non-residential development. If this observation is used by any means as a rough measure for future efficiency in the supply of infrastructure, Council will therefore need to provide infrastructure for an expected likely demand/load of 2 ETs for every new dwelling unit established in the shire.



Council will therefore need to provide infrastructure for an expected likely demand/load of 2 ETs for every new dwelling unit established in the shire

## Transport Network

Griffith is well linked in a regional context with all available transport modes, i.e. air, rail and road transport. Services are provided for passenger transport as well as freight transport linking Griffith with important business and export destinations such as Sydney and Melbourne.

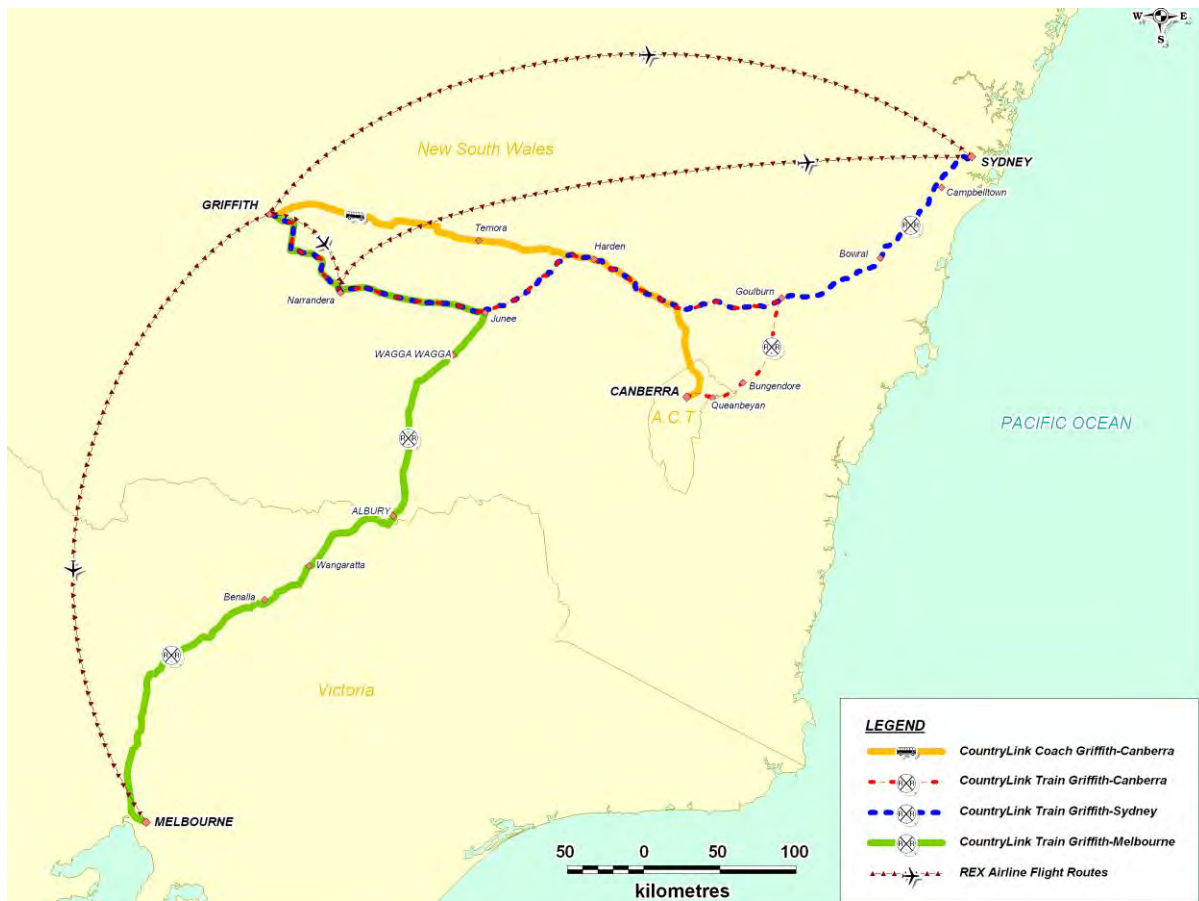


Figure 4: Transport links to major destinations

## Road Network

The network of main roads within Griffith services both local and regional based trips. The function of these roads is further described in this section.<sup>21</sup> (Refer to **Map 13**)

### State Road Operations

Griffith is a strategically important location for road traffic having the following road connections to the State Road Network

<sup>21</sup> Information and text in this section derived from Road/Rail Interface Study (Strategic issues Assessment), October 2004, Griffith City Council/GHD – internal research document

Burley Griffith Way (SH 94) provides a connection to the east linking up with both the Newell and the Hume Highways and follows a similar alignment to the Griffith-Cootamundra rail line. Both the Newell and Hume Highways are strategically important freight, business and tourist travel routes linking with Northern NSW and Queensland via the Newell Highway and Sydney, ACT and Melbourne via the Hume Highway.

Leeton Road (MR 80 also known as Irrigation Way) is a regional road that runs from Griffith in a south-easterly direction along a similar alignment to the Griffith-Yanco rail line. This regional road route connects Griffith with the Sturt Highway, Wagga Wagga, Hume Highway and Melbourne.

The Kidman Highway (SH 87) runs north-south, in the south it provides access from Griffith to the southern section of the Newell Highway (Northern Victoria) and the western section of the Sturt Highways (South Australia), and in the north it connects to the Mitchell Highway at Bourke, which continues up to Queensland. The northern section of the Kidman Highway runs west from the Griffith CBD through West Griffith and then travels in a north-westerly direction following a similar alignment to the Griffith-Roto rain line. In recent years this route has been upgraded with NSW and Commonwealth Government funding in recognition of its times growing importance as freight and tourist route.

All of the above routes are identified in the RTA B Double route mapping to be capable of accommodating a 25m B double type vehicle and with close proximity to the Griffith Township capable of also accommodating 35m road trains. (Refer to **Map 16**)

### Local Road Operations

Griffith has approximately 612km of sealed roads and 838km of unsealed roads. Unsealed roads comprise approximately 597km of roads of a gravel standard, and the remainder of unsealed roads are within the categories of “formed”, “natural” or “no road”.<sup>22</sup>

Road conditions vary substantially across the shire with sealed and formed roads providing access to the urban area, villages and major arterial roads. Road conditions however tend to deteriorate in more remote rural localities up to a where some roads can be described as dirt tracks or where no actual road exists. (Refer to **Map 14** and **Map 15**)

Street mapping for Griffith identifies five main routes that travel into Griffith, these are as follows:

Mackay Avenue is an eastern road route into the Griffith CBD and a continuation of Burley Griffin Way (SH 94). This road route runs from the intersection with Irrigation Way (MR 80 via Leeton) with Griffith-Leeton rail line level crossing in Yoogali to Central Griffith. The road travels east-west following an alignment to the south of the Griffith-Leeton rail line. The road is known as Banna Avenue west of the intersection with Blumer Avenue (access road to the Mooreville Industrial

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<sup>22</sup> Factors affecting the accuracy of figures relate thereto that some segments of roads are a combination of sealed and unsealed, or gravel and natural; and furthermore a small percentage of roads bordering on Carrathool Shire may actually be managed by the said shire



Estate). This route carries high levels of local, regional and interstate traffic including freight and tourist vehicles.

Rankin Springs Road provides the north-eastern road route into Griffith and runs directly to the west of the Griffith-Yenda rail line. This road route offers an alternative route to Yenda and a direct route to eastern road section of the Mid Western Highway. The route turns into Wakaden Street west of the intersection with Whybrow Street (Mooreville Industrial Area), where it serves as a northern bypass route around the CBD. This road section provides direct access to schools, residential properties, the CBD (via Crossing and Ulong Streets), the Riverina Freight Terminal (via Wakaden Lane) and main local road links in East, North and West Griffith. This route carries both local and regional traffic including freight vehicles.

The southern road route into the Griffith CBD is provided via Harwood Road, which is a continuation of Kidman Way (SH 87). The route accommodates both local and state traffic travelling to the wineries, Darlington Point, Southern NSW and Northern Victoria. The route travels north through Wickham's Hill and is known as Jondaryan Avenue north of Willandra Avenue. This section of the route connects with Stafford Road, Oakes Road and Willandra Avenue (east-west bypass routes), as well as servicing recreational and tourist land uses on route to Central Griffith. Kidman Way meets Burley Griffin Way at Banna Avenue and then travels west through the main shopping precinct and exits Central Griffith via West Griffith towards Hillston.

The north-western road route into Griffith CBD is provided via Hillston Road, which as mentioned above is a continuation of the Kidman Highway.

The northern road route into Griffith CBD is provided via Wyangan Avenue, which has a main local road function and services traffic travelling to Lake Wyangan recreational area and the airport.

### **Griffith City Centre Road Operations**

Banna Avenue / Mackay Avenue connect with all State Roads that enter Central Griffith from the east, west or south and has arterial road function. Banna Avenue between Crossing Street and Kookora Street roundabout in the west attracts high volumes of local traffic movement and is surrounded by retail and commercial land uses. Banna Avenue between Jondaryan Avenue (Kidman Way) and Wayeela Street is the main high street for Griffith and attracts high volumes of conflicting pedestrian, cyclist, bus, and private vehicle and freight movements. Traffic operations along this section of Banna Avenue are dramatically reduced due to numerous pedestrian crossing points and centrally located on street angled parking. These treatments considerably slow down traffic movements though Central Griffith during busy periods. The model indicates that traffic wanting to pass through Central Griffith, in order to avoid delays along Banna Avenue will sometimes seek alternative parallel road routes.

Road connections opportunities to the Banna Avenue are restricted to the north by the railway line and to the south by the main canal. When in use, the level crossing at the Banna Avenue and Crossing Street roundabouts impacts on both traffic flows and road safety.

Other key road routes that travel west-east through Griffith are as follows:

**Railway Road** is a wide local road that runs along a parallel route to the north of Banna Avenue from the intersection Bonegilla Road in the east to Ulong Street. It acts as an overspill parking area for the CBD, alternative route for traffic travelling between North Griffith and Wickhams Hill/Mooreville and provides road access to the railway station, Riverina Freight Terminal and off street parking areas.

**Yambil Street** is a wide local road that runs along a parallel route to the south of Banna Avenue from the intersection with Crossing Street in the east to Kookora Street roundabout in the west. To the east of Jondaryan Avenue, Yambil Street accommodates local traffic and provides direct access to large off street parking areas and loading areas with Griffith Plaza, Electricity depot, State Offices and RFS. To the west of Jondaryan Avenue, Yambil Street is a wide local road with kerbside and central located on street parking and direct access to numerous off street parking areas. The land use surrounding this road link is predominately commercial and retail with some light industry. The route is used as an alternative road route for local traffic travelling between Wickhams Hill and West/North Griffith.

**Wakaden Street** is a wide local road that runs along a parallel route to the north of Banna Avenue and the main rail line connecting North Griffith to Driver. This route is intersected by several main road links, which include Koorngal Avenue in North Griffith, Ulong Street in Central Griffith, Crossing Street and Blumer Avenue in East Griffith and Rankin Springs Road in Driver. The road route is reactive free of on street parking and offers direct access to the RFT, education facilities, Civic (via Koorngal Avenue), hospital precinct (via Beal Street or Koorngal Avenue), Banna Avenue (via Crossing Street and Ulong Street) and Griffith Plaza (via Crossing Street). The land use surrounding this road link is mixed with commercial, light industry, education, recreational, residential and the railway line fronting the route. The route is used as an alternative road route to avoid traffic delays in Banna Avenue.

## Rail transport<sup>23</sup>

Four rail lines are currently located in the Griffith local government area:

- Griffith-Roto line (via Hillston)
- Griffith-Cootamundra line (via Yenda and Temora)
- Griffith-Junee line (via Leeton and Yanco)
- Hay-Yanco

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<sup>23</sup> Information and text in this section derived from Road/Rail Interface Study (Strategic issues Assessment), October 2004, Griffith City Council/GHD – internal research document

The Griffith-Cootamundra line is a class 3 line with a speed range of 80-100km/h, whereas the Griffith-Roto line is a class 5 line that can only accommodate light locomotives at a maximum speed of 30km/h. The Griffith-Junee line (between Griffith and Leeton) is classed as a class 3W line indicating that the track is of a poor quality restricting speed and axle loading capacity at a speed range of 35-100km/h depending on the track condition and the weight of rolling stock and loads.<sup>24</sup>(Refer to **Map 17**)

The Griffith rail yard and Riverina Freight Terminal are located adjacent to the Griffith CBD. The Temora-Roto rail line runs east to west, bisecting the City. The Yanco-Griffith railway line serves as a rail link with Leeton. Numerous crossings existing within the City boundaries and the Ulong and Crossing St crossings are currently signalled and automated.

The Griffith rail freight terminal was completed in 1997, with the rail connection mainly servicing goods destined for export markets via ports in Sydney and Melbourne.

Trains from Griffith destined for Sydney or Melbourne can use either the Griffith-Cootamundra or Griffith-Junee rail lines to access the national rail network. Bulk freight destined for export is usually taken by rail and can travel via Sydney or Melbourne. There are currently some disadvantages in taking rail freight via Sydney as it appears to take longer in travel time in comparison to the Melbourne seaport and is impacted by line capacity issues on the Metropolitan network. Funding has recently been identified to separate freight and passenger trains on route to Port Botany and may influence rail freight travel in the future. Non-bulk rail freight from the Griffith area is understood to travel via Cootamundra, which is used as a rail terminal on the national network for adding additional rail wagons to passing trains

### Local rail movements

The following summarises the rail movements in/out of the Griffith area. The data has been compiled from various sources:

#### Passenger movements:

Currently 1 train service per week operates between Sydney and Griffith (terminating at Griffith). The service operates every Saturday from Sydney (via Leeton) arriving at Griffith at 3.40pm. The return service leaves Griffith at 7.40am every Sunday. Country Link operate diesel Explorer's on this route.

#### Intermodal Freight (Container Freight) movements:

Patricks and Pacific National jointly operate the Riverina Freight Terminal. The terminal and operations managers from the above organisations were interviewed and provided the following key details:

A single service is operated each day between Cootamundra and Griffith via Yenda, which has been identified to be the Mainline for bulk freight movement from Griffith. The service arrives at Griffith

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<sup>24</sup> Road-Rail Interface Study 2004, GHD & Griffith City Council



between 7am and 7.30am each day. During this time 2-3 shunts are required to shunt wagons to the top sidings in the yard. Due to the configuration of the yard, each shunting movement impacts on road movements across Ulong Street to the west of the terminal. From GHD's observation on site, this could be avoided by some yard rationalisation in addition to a reduction in the number of wagons shunted at any one time.

Other key information is as follows:

- Trains leave the terminal at around 4pm each weekday thus impacting on PM peak traffic conditions;
- The train service currently operates 5 days per week;
- The trains are in the order of 550m long;
- Product exported from Griffith includes wines and general frozen products; and
- Patricks expect that exports from Griffith will increase and they may shortly move to 6 days per week operation.

Patricks indicated that there is an irregular service, which operates between Griffith and Leeton. The service apparently operates up to 5 times per week; however operation is irregular and may not operate all weeks of the year.

Grain is hauled (in season) by a number of operators, including:

- Freight Australia;
- Grain Corp;
- Lachlan Valley;
- Pacific National

The operation is highly dependent on the season. At peak times, grain services will utilise all 3 Mainlines radiating from Griffith and includes the collection of products from silos and rail sidings located along lines.

#### Train Number Statistics

Perhaps the most reliable data on current operations comes from the RIC records<sup>25</sup> (sourced by GHD) for the year ending 2001-2002. The records, which appear in a document titled "Budget Verification Process, October 2001, Volume 2: Freight" contain the following important statistics:

- Griffith to Roto (via Hillston) Line: Total Trains pa: 126(126 grain trains)
- Griffith to Yanco (via Leeton) Line: Total Trains pa: 401 (15 grain trains, 104 passenger trains, 282 general freight trains)
- Griffith to Temora (via Yenda) Line: Total Train pa: 654 (313 grain trains, 341 general freight trains)

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<sup>25</sup> Sourced by GHD

The train numbers are both ways, i.e. the 104 passenger train movements is made up from the weekly return service to Sydney.

The statistics are based on 1999 counts, and while these are some years old they appear to be still relevant. We assume from our discussions that the major growth since these figures were compiled has been along the Griffith to Temora (Cootamundra) line, where according to the information provided by Patricks, the number of trains that travelled along this line ranged from 3 to 5 days per week.

## Air transport

Griffith's airport is located 5km north of the City centre, along Remembrance Drive (see Figure 2). Scenic Hill separates the airport from the city centre and residential areas. The airport consists of the terminal building; the main runway; the cross runway; and the main apron which is a marked section with parking positions for 2 regional airline aircraft or similar sized aircraft (refer to **Map 18**).

Services and operators using the Griffith Airport can be summarised as:

- One main operator - Regional Express – providing around 30 return services to Sydney per week.
- 5 Aerial Agricultural operators – number of take off and landings varies greatly depending on the agricultural season occurring
- Air Ambulance – providing on average about four visits per week
- Minor flying school operated by Griffith Aero club
- Wagga Air Centre – up to two freight takes off and landings per day
- General Aviation - around average 10 flights per day

Commuter air services provided to Griffith include regular services by Regional Express (REX). Pax numbers were tracking approximately 70,000 (anticipated) for the 08/09 financial year. At present only one service is provided between Griffith and Sydney with basically 4 - 5 return services per day Monday to Friday and three return services on Saturday and Sunday. A Master Plan for Griffith Airport was commissioned during 2008.<sup>26</sup> The Master Plan included the following recommendations relating to aviation and non aviation (refer to **Map 20**)

### Aviation:

Provision for runway 06/24 to be extended to a total length of 2100m, with an initial extension to 1700m

- Protection of the Obstacle Limitation Surfaces to allow for the runway extension;
- Provision for a parallel taxiway to service runway 06/24;
- Provision of a Terminal and Car Park Precinct;

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<sup>26</sup> Master Plan prepared for Griffith City Council by Airports Plus Pty Ltd and SEMF Pty Ltd in association with VIPAC Engineers and Scientists Pty Ltd

- Provision for the development of public open space at the entrance to the Terminal Precinct (to create a 'gateway effect');
- Provision for a relocated illuminated wind indicator;
- Provision for an expanded regional passenger transport apron and general aviation parking;
- Helicopter ground operations separated from the fixed wing areas;
- A base for emergency services aircraft operations (including the Air Ambulance and fire bombing);
- Retention and protection of runway 18/36;
- Provision for additional commercial aviation activity; and
- Provision for a common user aircraft wash down facility and evaporation pond.

#### Non Aviation:

- Provision of conservation areas;
- Development of a flood retention basin to store run-off from Scenic Hill;
- Provision for commercial development on the Rifle Range Road property boundary;
- Provision for a road to connect Remembrance Drive with Rifle Range Road; and
- Development of Aerodrome Road to provide access from the west.

#### Land Uses in the Vicinity of the Airport

To the south and west of the airport is a large portion of land which is zoned for Open Space and Environmental Protection purposes. Land uses within this area are predominantly used for recreational purposes, including a golf course, a racetrack and walking trails throughout the environmental protection area. To the north and east of the airport are further lands zoned for environmental protection, open space and rural purposes. Land uses within this area consist of horticultural farms and broad acre irrigation lands. This strategy does not include any candidate sites within Part E which are considered to be within close proximity to the airport for residential, community or commercial purposes which would require the preparation of an ANEF to determine potential noise levels.

#### Obstacles Limitations Surface (OLS) Plan (refer to Map 19)

An OLS plan is available in the current Local Environmental Plan (LEP) as well as policies restricting development within the Plans Areas. Within the most restrictive areas of the Plan, requiring structures to be built at 90 to 170 RL, are lands zoned for the purposes of the Airport, Open Space and Environmental Protection as well as a portion of land zoned for Rural Agricultural uses. Within these areas there is not expected to be any development which would exceed the OLS other than telecommunications tower and infrastructure associated with Airport. However, the LEP requires that any development within the areas affected by the plan which exceeds the permitted RL be referred to CASA.

## Infrastructure <sup>27</sup>

### Water Supply

Griffith City Council operates 2 water treatment plants (WTP): (a) Griffith water treatment, and (b) Yenda water treatment plant. Raw water is supplied from Murrumbidgee Irrigation (MI) channel, which is the only source of non potable water. Council also maintains over 376 km of water mains with 2,084 stop valves (refer to **Map 21** and **Map 22**).

#### Griffith Water Treatment Plant (WTP)

Griffith water treatment plant was constructed in 1988. It is situated to the west of the city. The maximum design capacity of the plant is 60 ML/day. The plant has been designed to remove both colour and turbidity from the raw water, which is stored in an open reservoir adjacent to the plant.

Treated water from the plant is pumped to 3 reservoirs on the McPherson Range. Water from the reservoirs is then distributed to customers by gravity.

The water levels in the reservoirs and the operation of the WTP is monitored by a telemetry system.

The open reservoir has a capacity to store 300 ML of raw water and the only operational problems experienced have been during winter months. With demand management measures in place, peak daily demands are currently, and for short- mid term capable of being supplied by the current plant capacity

#### Projected Growth and Capacity

To ensure that the area of the LGA serviced by the Griffith WTP has capacity for or can be upgraded to accommodate projected future growth, Griffith City Council has prepared a Water Supply Development Servicing Plan and coordinated this with a Capital Works Programme. The Development Servicing Plan has also been drafted based on Council's Long Term Capital Works Plans. The following chart presents the number of cumulative ET's within the area serviced by the Griffith WTP as well as a projected increase in ET's per year:

Year	Number of new Equivalent Tenements (ET's)	Cumulative Number of ET's
2011/2012	168	14,088
2012/13	168	14,256
2013/14	168	14,424

<sup>27</sup> Most information in this part has been derived from Council's Long Term Infrastructure Plan as prepared by Hyder Consultants (22 August 2000)

2014/15	168	14,592
2015/16	168	14,760
2016/17	168	14,928
2017/18	168	15,096
2018/19	168	15,264
2019/20	168	15,432
2020/21	168	15,600

The projected growth in the amount of ET's to be serviced by the Griffith WTP to 2020 and beyond will require upgrades to Council infrastructure. The location of the new equivalent ET's will be within Council's existing growth areas and those proposed by this strategy in Part E. To ensure that Council has a detailed plan to accommodate for this growth, a detailed Capital Works Program has been prepared. The program includes a number of upgrades which will be required based on the projected growth of Griffith. Such upgrades include the 15 ML/d augmentation of the WTP by 2024, progressive upgrades of the WTP, and increase in capacity of the Scenic Hill service reservoirs. It is evident that the cumulative number of ET's projected for the Griffith area (including new growth areas) can be accommodated through the Capital Works Program.

### Yenda Water Treatment Plant

Yenda water treatment plant was originally constructed in the 1940s. It was upgraded with the addition of 2 storage tanks, each with 1.75 ML capacity. The plant was further upgraded to 2.5 ML/day capacity in 2000 with a modern microfiltration treatment process. Both reservoirs were fully refurbished in 2009/2010

### Projected Growth and Capacity

To ensure that the area of the LGA serviced by the Yenda WTP has capacity for or can be upgraded to accommodate projected future growth, Griffith City Council has prepared a Water Supply Development Servicing Plan and coordinated this with a Capital Works Programme. The Development Servicing Plan has also been drafted based on Council's Long Term Capital Works Plans. Although the Development servicing plan does not indicate that there is projected to be an increase in ET's which are serviced by the Yenda WTP, Part E has proposed a candidate site in the Bilbul area which will be serviced by the WTP. An analysis of potential upgrades to the Yenda WTP and associated infrastructure has been provided in Part E.

### Wastewater

Griffith City Council operates 3 sewage treatment plants (STP); (a) Griffith sewage treatment, (b) Yenda sewage treatment plant, and (c) Bilbul sewage treatment plant, to treat approximately 8 ML of sewage per day. The Council also maintains over 168 km of sewer mains with 26 pumping stations and 1,975 manholes (refer to **Map 23**, **Map 24** and **Map 25**).

## Griffith Sewage Treatment Plant (STP)

Griffith sewage treatment plant is situated in an agricultural area, to the west of the CBD. It was first constructed in 1930s. The plant was upgraded in 1991/92. The design capacity of the plant is 50,000 EP.

The plant has been replaced with a membrane bioreactor (MBR) system. The plant is designed with additional capacity for approximately 15 years, and designed to cater for a further expansion of capacity following the take up of the initial additional capacity.

All flows are pumped to the headwork from where they gravitate through the plant. Treated effluent is discharged under licence to Main Drain J that subsequently drains to Mirrool Creek.

### Projected Growth and Capacity

To ensure that the area of the LGA serviced by the Griffith STP has capacity for or can be upgraded to accommodate projected future growth, Griffith City Council has prepared a Sewerage Supply Development Servicing Plan and coordinated this with a Capital Works Programme. The Development Servicing Plan has also been drafted based on Council's Long Term Capital Works Plans. The following chart presents the number of cumulative ET's within the area serviced by the Griffith WTP as well as a projected increase in ET's per year:

Year	Number of new Equivalent Tenements (ET's)	Cumulative Number of ET's
2011/2012	144	17,223
2012/13	144	17,367
2013/14	144	17,511
2014/15	144	17,655
2015/16	144	17,799
2016/17	144	17,943
2017/18	144	18,087
2018/19	144	18,231
2019/20	144	18,375
2020/21	144	18,519

The projected growth in the amount of ET's to be serviced by the Griffith STP to 2020 and beyond will require upgrades to Council infrastructure. The location of the new equivalent ET's will be within Council's existing growth areas and those proposed by this strategy in Part E. To ensure that Council has a detailed plan to accommodate for this growth, a detailed Capital Works Program has

been prepared. The program includes a number of upgrades which will be required based on the projected growth of Griffith. The most substantial of the upgrades to be carried out within this planning horizon is currently under way, including a substantial upgrade to the Griffith STP as previously discussed. It is considered that the Griffith STP, as upgraded, will be able to cater for the projected ET's beyond 2020

To support candidate sites listed in Part E (Collina), a more detailed infrastructure study was carried out by GHD in 2003. Required upgrades to infrastructure for this candidate site are listed in Part E.

### Yenda Sewage Treatment Plant (STP)

Yenda sewage treatment plant was originally constructed in the 1980s. It has a design capacity of 15,500 EP. It treats flows from Yenda areas including flows from wineries. The treated effluent is then discharged into a Drainage Channel that leads to Main Drain J. Due to disconnection of the "Berton" winery from the system, significant spare capacity exists at the Yenda STP.

#### Projected Growth and Capacity

To ensure that the area of the LGA serviced by the Yenda STP has capacity for or can be upgraded to accommodate projected future growth, Griffith City Council has prepared a Water Supply Development Servicing Plan and coordinated this with a Capital Works Programme. The Development Servicing Plan has also been drafted based on Council's Long Term Capital Works Plans. Although the Development servicing plan does not indicate that there is projected to be an increase in ET's which are serviced by the Yenda STP, Part E has proposed a candidate site in the Bilbul area which will be serviced by the STP. An analysis of potential upgrades to the Yenda WTP and associated infrastructure has been provided in Part E.

### Bilbul Sewage Treatment Plant

Bilbul sewage treatment plant was originally constructed in the late 1980s. It has a design capacity of 310 EP. It treats flows from Bilbul Village. The treated effluent is then discharged into evaporation lagoons.

To ensure that the area of the LGA serviced by the Bilbul STP has capacity for or can be upgraded to accommodate projected future growth, Griffith City Council has prepared a Sewerage Supply Development Servicing Plan and coordinated this with a Capital Works Programme. The Development Servicing Plan has also been drafted based on Council's Long Term Capital Works Plans. The following chart presents the number of cumulative ET's within the area serviced by the Griffith WTP as well as a projected increase in ET's per year:

Year	Number of new Equivalent Tenements (ET's)	Cumulative Number of ET's
2011/2012	2	74
2012/13	2	76

2013/14	2	78
2014/15	2	80
2015/16	2	82
2016/17	2	84
2017/18	2	86
2018/19	2	88
2019/20	2	90
2020/21	2	92

Only minor growth is expected in the area serviced by the Bilbul STP, none of which has been proposed as candidate sites. It is considered that the STP will be able to cater for this minimal growth without substantial upgrades.

### Sewage Pumping Stations

There are 26 sewage pumping stations; 12 in Griffith, 3 in Yenda, 6 in Hanwood, 4 in Beelgangera and 1 in Bilbul.

### Treatment Systems in Wineries

All wineries connected to the Griffith sewerage system have their own treatment systems. They are required to remove solids and correct the pH. All connected wineries comply with council's Trade Waste Policy.

### Levels of Service

Description	Unit	Level of Service	
		Current	Long Term Target
<b>Availability of Service</b>	Connections should be provided to all allotments within the Griffith urban service area		
Industrial connections licensed under Council's Trade Waste Policy	% licensed	100	100
<b>System Failures</b>			
Controlled & expected from overflow structure			
Controlled & unexpected from flow relief			



Description	Unit	Level of Service	
		Current	Long Term Target
structure	Per year	0	0
Uncontrolled & unexpected from private property	Per 5 years	5	1
Uncontrolled & unexpected from public property in sensitive areas	Per 200 allotments per year	1	1
Uncontrolled & unexpected from public property elsewhere	Per 5 years	1	1
	Per 10km main per year	1	1
<b>Response Times</b>			
Time to have staff on site to commence rectification after notification			
Failure to contain sewage within the sewage system of any problem affecting a user at any time	Hours (working hours)	1	1
	Hours (after hours)	2	2
<b>Customer Complaints</b>			
Minor operational problem, complaint or inquiry which can be dealt with at a mutually convenient time (defined as time to advise customer of intended action)			
Response to 95% of written complaints or enquires			
Response to 95% of personal complaints or enquires	Working days	10	10
	Working days	1	1
<b>Odours</b>			
Incidents that result in complaints	No./ year	20	5

Description	Unit	Level of Service	
		Current	Long Term Target
<b>Effluent Discharge and Sludge Management</b>  Number of failures to meet standards as set by statutory requirement and licensing conditions	Per year	1	0

In order to meet the required level of services, a number of capital works projects have been planned including an upgrade of the STP and pumping stations; and reticulation system for several villages.

## Stormwater Drainage / Flood Management

Refer to **Map 26** for a depiction of the Stormwater Drainage Network, **Map 27** for the Open Channels Drainage.

Griffith City and the surrounding villages of Tharbogang, Yenda, Yoogali, Hanwood, Bilbul and Beelbanger lie within the catchment of the major Main Drain J (MDJ) drainage channel. All secondary and tertiary drainage networks convey stormwater to MDJ which subsequently discharges the stormwater runoffs to Mirrool Creek, to the west of the city.

The drainage system was originally constructed for agricultural use but now it also conveys flows from the expanding urban areas. The increase in impervious area and construction of secondary and tertiary channels draining new urban developments has exacerbated flooding.

Numerous hydraulic structures have been built along the drainage channels such as culverts, bridges and siphons, to carry the channels under roads, railway and delivery canals (raw water supply canal). These structures which are not controlled by Council are exacerbating flooding problems.

The network of drainage channels forms part of the regional irrigation drainage system and hence is controlled by MI while DLWC control Mirrool Creek, into which MDJ drains. Council controls the stormwater drainage infrastructure within the urban areas.

Council's stormwater drainage infrastructure includes over 60 km of piped drainage lines, 7 km of box culverts, and 3.5 km of concrete lined channel, OSDs, and pits and pits covers. It also includes over 30 km of earth channels.

In general terms it is found that land with a gradient less than 0.5% is difficult to service cost effectively due to the extent and costs of excavation and infrastructure involved. Refer to **Map 9** for a depiction of land with a gradient of less than 0.5%.

Lake Wyangan, to the north of the city, is situated in an enclosed system where runoff enters from the surrounding catchments but leaves only via evaporation losses, recirculation to irrigation canals or pumping across McPherson Range to MDJ and the Mirrool Creek drainage system.

Council has completed a Flood Study and has completed a Floodplain Risk Management study and Floodplain Risk Management Plan. Implementation of the Plan will be ongoing, depending on funding availability. The first stage in the process involved the preparation of a detailed Flood Study for Griffith and its surrounding villages (south of McPherson Range). The Flood Study was adopted by Council in August 2006.

## Electricity Supply

Electricity supply is conducted by Country Energy as the main distributor with secondary smaller private providers also active in the region. Infrastructure includes main powerlines; zone-substations and reticulation to individual lots (refer to **Map 8** and **Map 29**)

## Gas Supply

Griffith has a well developed Gas supply network managed by JEMENA. The main gas supply lines are indicated on **Map 30** and hard copies of further distribution was supplied for Planning and Engineering purposes.

## Telecommunications

Griffith forms part of the broader National and International telecommunications network with service providers having offices and support networks within Griffith.

## Community Facilities

A broad spectrum of community facilities are provided in Griffith including medical services, churches, educational facilities, institutions, halls, recreation facilities and open spaces. A number of more centrally located community facilities in Griffith are indicated on **Map 35**.

## Education

Primary education is provided by ten public primary schools and three private (Catholic) primary schools (refer to **Map 31**).

Secondary education is provided through two public high schools and one private (Catholic) high school (refer to **Map 32**).

A number of pre-schools provide in day-care needs, and a special school provide in the needs of children with special needs. TAFE NSW has a campus in the civic precinct of Griffith providing tertiary education, and also provides limited distance education opportunities through Charles Sturt University. GALA provides in adult learning needs (refer to **Map 33** and **Map 34**).

The age cohort for the age groups 10-14 and 15-19 from the 2006 ABS Census data has a combined population of 3,659. As this age-group is the most dominant school going group, it implies that existing high schools are close to saturation or that pupils opt for attending boarding schools elsewhere. This figure is suggestive of a need for an additional high school in the near future.

## Emergency Services

Emergency services are provided by means of the Emergency Department of Griffith Base Hospital, supported by the Ambulance Service located in Jondaryan Avenue.

NSW Fire Brigade operates a fire station, also in Jondaryan Avenue, and the NSW Rural Fire Services and State Emergency Services operates from a combined centre in Oakes Road.

NSW Police provide a local area presence from their new police station in Railway Street, having moved from their previous smaller facility in Ulong Street (refer to **Map 36**).

Currently construction of a new a combined emergency centre at the south-western corner of Crossing Street and Wakaden Street is well on its way. The new building will provide improved facilities for the Ambulance Services and the Fire Brigade, whilst it is also more strategically located to minimise response times.

## Economy

### Economic growth analysis

During 2007 Council commissioned a review into economic growth and infrastructure. This study was undertaken by URS Australia Pty Ltd. Due to the extent of the report, a copy is not attached to this Strategy.

The study focused on identifying key industries by means of:

- location quotient industry employment analysis<sup>28</sup>;
- industry growth qualitative analysis; and
- strategic SWOT analysis of the local economy.

Location quotient industry employment analysis identified the following ten industries as key industries appropriate for value-chain profiling<sup>29</sup>:

- Citrus;
- Wine;
- Other Agriculture and Food Manufacturing and Processing.
- Retail/ Wholesale/ Personal Services;
- Government/ Community Services (including health, education, cultural and rec services);
- Professional Services (including financial, legal, property and other business services);
- Manufacturing and Water Supply Services (agricultural machinery and irrigation equipment/ services, other than food manufacturing and processing);
- Tourism/ Restaurants;
- Construction; and
- Transport and Storage.

Reduced emphasis was suggested on the following sectors to allow for increased emphasis on each of the identified horticulture sub-sectors:

- Construction- low location quotient, reliant on Council planning policies for growth and not major users of local infrastructure;
- Government/ Community Services- reliant on government planning policies for growth (major issues relate to potential for expansion of major health and education facilities locally); and
- Professional Services- low location quotient and not a major user of infrastructure (mainly car- parking, air-services and telecommunications infrastructure).

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<sup>28</sup> The location quotient is calculated according to the formula: (number of jobs in local industry / total number of local jobs) ÷ (number of jobs in non-metro NSW industry / total number of non-metro jobs)

<sup>29</sup> URS suggested that the evaluation of agriculture should be split into 3 separate industries, i.e. citrus, wine and other food manufacturing and processing - as each has different growth drivers

Upon selecting the priority industries for targeted growth, URS then commenced an in-depth analysis of each industry to determine which initiatives were most appropriate to support its growth.

The framework for this analysis involved profiling each industry's value-chain in the local area and its relationships to other firms (within and outside the EBOP area). The profiling process involved:

- review of any available published research or analysis on the industry;
- targeted primary research (interviews with key firms in each priority industry, representatives of the infrastructure providers that each industry relies on), and
- distillation of the key strategic challenges facing each industry and the implications for securing the region's economic development.

## Economic Growth Estimates

The following economic growth estimates are extracts or derived from the report Review of Economic Growth and Infrastructure (June 2007) by URS Australia Pty Ltd. (It is important to note that the recommendations derived from the URS report is for background information only and does not reflect recent economic developments – in particular does not incorporate the recent economic recession.)

*Growth prospects are expected to be positive in the future, but slower than in recent years. The key reason for this is that major employers in the region including wineries and food processing facilities appear to have switched from higher growth phases into maturity. Additionally, whilst there are a number of potential growth opportunities for new crops and primary industry in the region, industries like citrus are expected to experience flat or slightly negative growth in coming years. Concerns over availability of water both in the short and medium term also appear to be operating to encourage deferral of major projects in the region until prospects pick up again. Even so, the region has a very strong economic base and is an attractive location for many businesses compared to other regional locations.*

*The point to note is that with only slightly positive growth rates expected, existing infrastructure is likely to be under less pressure from economic growth than it may have been in the past. With this outlook, Council is, in general terms, less likely to face the same critical challenges as it has in the past 5-10 years.*

*This is not to say that the situation should not continue to be monitored. There are a significant number of threats and variables which will operate to affect the local economy in the future. The following factors in particular could operate to have substantial impacts on economic growth in the region:*

*Decisions regarding short and medium term water supply to MIA irrigators and industry*

*Any major decisions by major employers in the region to either expand production/ operations or otherwise relocate functions outside the region.*

*Shifts in exchange rates or competitor markets which operate to put the local region's exporters at a comparative disadvantage to other primary production regions throughout the world.*

*Biological threats and diseases which could impact on the region's horticultural production and major businesses in particular.*

*Changes in the region's infrastructure which supports export activity (particularly freight infrastructure and services).*

*Availability of staff/ key workers, whilst less 'dramatic' than other threats, can have a pervasive effect of limiting potential growth through a number of the region's most important businesses.*

*Throughout the industry analysis, comment has been provided on the growth prospects of each industry in the region (and indeed their sub-industries). These growth estimates are summarised in the table below.*

Industry Growth Comparison <sup>30</sup>		
Industry	Estimated proportion of Griffith economy	Growth Rate Estimate
Citrus	12%	-1.5%
Wine	19%	2.5%
Other Agriculture and Food Manufacturing/ Processing	16%	0.0%
Retail and Wholesale	19%	5.5%
Government/ Health/ Education/ Community Services	13%	2.0%
Professional Services	7%	2.0%
Manufacturing (other than food manufacturing) and Water supply services	5%	3.0%
Construction	4%	2.0%
Tourism/restaurants	3%	2.0%
Transport and Storage	2%	2.0%
Other ( including Electricity and Mining)	<1%	2.0%
<b>Overall Economy</b>		<b>2.1%</b>

*A simple weighted combination of the various industry growth estimates suggests an estimated growth rate of 2.1% for the Griffith economy. This rate is certainly positive, but not as high as growth rates experienced by the region in recent years.*

<sup>30</sup> Derived from Review of Economic Growth and Infrastructure (June 2007) p 174 URS Australia Pty Ltd

*The growth estimates in the table above involve a number of assumptions at various stages of the analytical process. Assumptions relating to growth estimates for each individual industry are outlined in the industry value-chain profiling section of the report. Assumptions regarding compilation of these growth estimates into a combined estimate of growth for the whole economy include:*

*taking 'mid-points' of growth estimates for those industries where a range of possible growth outcomes are presented*

*Estimating proportions of the local economy represented by the various industry categories. As discussed previously, these industry categories do not neatly align with the corresponding 2-digit ANZSIC categories. Available data from industry and other sources was used to augment the estimated proportions where considered appropriate.*

*Weighting the overall economic growth prospects towards those industries that make up a larger (estimated) share of the local economy.*

*As noted in the assumptions and limitations section of this report, readers should be very careful in interpreting and relying on these growth estimates. They have been developed largely with a qualitative (rather than quantitative) analytical process. Whilst the estimates were developed using the best available information at the time of analysis, the reality is that their accuracy necessarily will depend on a wide range of factors and there is a real risk that this growth rate will not eventuate.*

*One example of a potential risk to the growth estimates is water availability. The analysis has generally taken a medium term approach to consideration of water issues (in assuming sufficient water will be available such that local industries continue to function effectively). There is however a real chance that zero water allocations could place permanent plantings at risk of survival, having a major impact on numerous local industries in the short and medium term. This specific risk has not been taken into account in developing the growth estimates, although in the general climate of drought, conservative inputs have been used in representing factors such as population growth and growth in retail catchments etc.*

*The findings however provide a useful framework for considering the issues and factors likely to influence future growth. Further detail on the drivers and key factors likely to influence growth of the various local industries is provided in the detailed industry analysis.*

*In summary, the growth estimates are based solely on available information for analysis and have been produced solely for Council. Third parties should not rely upon the analysis and results. The results are only 'estimates' of growth and in practice are subject to change and be influenced by a variety of factors, both those foreseen and highlighted in the current analysis and indeed others that may have been unforeseen. It is in this context that the economic and industry growth estimates should be interpreted (with caution).*

The Review of Economic Growth and Infrastructure (June 2007) by URS Australia Pty Ltd report made several recommendation concerning Council's economic development strategy, planning policy recommendations and more specific infrastructure recommendations. For the purpose of this strategy the focus will be on the planning policy recommendations and infrastructure recommendations – as outlined in the following two sections.



## Planning Policy Recommendations

The following planning policy recommendations are extracts derived from the report *Review of Economic Growth and Infrastructure* (June 2007) by URS Australia Pty Ltd<sup>31</sup>:

*The current study can provide valuable input to Council's planning policies in two ways:*

*The first is in providing industry size and growth estimates to enable Council to gauge demand for different land-use types including:*

*Retail land (including CBD property)*

*Industrial land (both inside and outside the metropolitan boundary of Griffith)*

*Non-CBD commercial land*

*Residential land supply (in so much as the current study provides a guide as to estimates of industry/economic growth and thus employment growth in the region).*

*The second is in providing strategic recommendations arising from the industry analysis as to ways that different Council planning policies might support industry growth.*

*With regard to the first category of input, it is understood that Council is in the process of completing a CBD planning study which implicitly considers retail floorspace in the CBD. The current study provides estimates of short to medium term growth for the following industries as follows:*

- *Retail*
- *Cafes/ Restaurants*
- *Professional Services/ Government Services*

*A CBD floorspace supply and demand analysis can be completed by first applying the appropriate growth rate estimates to current employment levels (i.e. developing appropriate employment forecasts). These employment forecasts can then be converted to floorspace demand figures using an appropriate floorspace per employee benchmark. In this context, floorspace demand can then be compared to floorspace supply figures to determine whether additional CBD floorspace is likely to be required in the region over time. This technique provides a simple framework for analysis which can be further refined according to local circumstances, as necessary.*

*A similar approach can be undertaken when investigating supply and demand for industrial land. In this context, the following industries are most likely to be relevant in determining industrial land demand (some industries will be more inclined to locate in certain parts of Griffith):*

*Manufacturing (particularly equipment manufacturing) and water supply services*

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<sup>31</sup> It is important to note that the recommendations derived from the URS report is for background information only and does not reflect recent economic developments – in particular does not incorporate the recent economic recession.

*Transport and Storage (storage businesses will generally be located in different locations to transport businesses)*

*Personal Services/ Retail (i.e. light service industry including mechanics etc)*

*Construction*

*In addition to CBD retail and industrial land categories, Council will also need to consider potential demand for non-CBD related commercial or government developments. Non-CBD commercial floorspace demand will be particularly influenced by the growth of the following industries:*

*Tourism (i.e. hotels located outside the traditional CBD precinct)*

*Government and Community Services (especially with respect to the potential for growth associated with major projects in the health, education and government/ community services sub- segments).*

*Comparisons of supply and demand for this segment of floorspace could be a valuable input to Council planning policy in outside of the CBD.*

*Council's residential land use policies require consideration of potential population growth and thus demand for housing. The estimates for industry and economic growth in Griffith can provide an important input into development of estimates of potential population growth in Griffith in the future (and thus residential land demand, which can be compared with residential land supply).*

*In addition to the direct implications flowing from the industry growth estimates there are a number of more indirect strategic recommendations arising from the detailed industry analysis. The most relevant of these are summarised as follows:*

*Council should consider the pros and cons of different levels of population and residential growth in Griffith (as unemployment and housing price data appears to suggest demand exists for further residential growth in Griffith). Planning policies that support continued growth will place pressure on existing infrastructure, but will also raise Griffith's profile as a major regional centre, thus helping to attract a new level of 'regional jobs' to the town. Population growth will also assist in building the business case for additional hospital and tertiary education facilities in Griffith.*

*Council's planning department should consider the pros and cons of alternative governance structures for economic development service delivery in Griffith. In the context of the various identified threats and challenges facing the local economy, the role of economic development in Griffith is increasingly important. The economic development unit's ability to independently represent industry interests to Council's planning officers (particularly with respect to certain DA's) could be limited if they report directly to the head of the planning department.*

*Planning policy should attempt to facilitate movement away from small lot sizes in region's agricultural industries (including supporting amalgamation of lots and changes to associated housing and infrastructure on site).*

*Council should support development of industrial area in location that avoids potential land-use conflicts with residents (i.e. outside the metropolitan area). This development may be adjacent to the proposed rail-freight terminal relocation if it proceeds.*

*Council should consider developing maximum integration between the CBD and potential amenity or environmental precincts and assets (i.e. explore better integration with Canal or open space areas) in any CBD planning strategy.*

*Council should ensure that the planning and DA process provides support for energy related infrastructure developments (especially to those industries where infrastructure is a key issue). In particular energy infrastructure upgrades which support irrigation system upgrades are strategically important given the challenges to the region regarding continued water supply.*

*Council can ensure that land-use planning policies facilitate smaller numbers of increasingly larger wineries and growers as the industry evolves. Council can also ensure that land-use planning policies facilitate alternative revenue streams for smaller operators (cafes, accommodation etc) where/ if proposed.*

*An on-going planning challenge is balancing the land-use conflicts that arise between residents and horticultural processing facilities located in proximity to the metropolitan area.*

*Parking and traffic concerns in the CBD should continue to be managed to support retail industry growth and viability.*

*The location of the proposed community centre development should be considered with a view to ensuring it properly fits within a broader CBD planning context.*

*Council planning (and other) staff to continue to liaise with external infrastructure and service providers including RTA, Telstra, Country Energy, Hospital, Patrick's etc. There was no evidence to suggest this was not occurring smoothly at present.*

## Infrastructure Recommendations

The following infrastructure recommendations are extracts derived from the report *Review of Economic Growth and Infrastructure* (June 2007) by URS Australia Pty Ltd<sup>32</sup>:

*Whilst the current study offers the opportunity to provide comment on planning and economic development issues, one of the primary objectives of the study is to provide recommendations on infrastructure provision in the context of expected economic growth.*

*The current study's analysis has foreshadowed a slightly positive economic growth outlook. Within this outlook, the prospects for different industries and their expected impact on different types of infrastructure vary (as outlined in the previous chapters of the report. In this context, the key recommendations for each infrastructure type are outlined below.*

*(Airport/ Air Services)*

*The 2005 Airport Strategy commissioned by Council provided the following recommendations regarding air-side infrastructure:*

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<sup>32</sup> It is important to note that the recommendations derived from the URS report is for background information only and does not reflect recent economic developments – in particular does not incorporate the recent economic recession.

*"The main runway pavement is showing signs of deterioration. GCC is budgeted to engage a specialist aircraft pavements engineer to determine whether an overlay or an alternative, much cheaper, enrichment treatment is all that is required. The cross runway is in poor condition and little used. A wind analysis would determine if the cross runway is needed and if it is, then an extension to the north and regular maintenance would create a safer situation. A parallel light aircraft taxiway between the runway and GA area would ease runway congestion at busy times and potentially avoid the need for the larger wing span Code B agricultural aircraft to use the Code A taxiway through the centre of the GA area. In the short term an aircraft parking plan needs to be prepared to maximise the safe use of the existing apron".*

*Specific recommendations from the report for infrastructure upgrades on airport included:*

*extension of runway 06/24 preferably to the west;*

*a part parallel code B taxiway to service the GA area;*

*an extension to the north of runway 18/36 if wind analysis confirms a continuing need for its use;*

*replacement or expansion of the terminal; and*

*expansion of the car park and upgrade of the airport entry.*

*Upgrades to the apron area were understood to be particularly important with the introduction of Melbourne Services, as the potential would then exist for two aircraft to be parked on the apron at one time.*

*The current study supports these recommendations in so much as they lead to a higher quality airport which is becoming increasingly important given the changes in the make-up of Griffith's economy (and its increased export focus) over the past 5-10 years. In a broader climate of globalisation and technological change, local firms must be able to react quickly to opportunities outside of Griffith and the airport plays an important role in delivering that connectivity to local businesses and residents.*

*The ultimate challenge to Council will however be to balance financial considerations with the desirability for airport infrastructure upgrades. In this regard, initiatives that deliver tangible aviation outcomes (i.e. supporting demand for increased frequency of flights or new destinations etc) will be of particular importance (it goes without saying that safety considerations are most important). A secondary priority will be to pursue those initiatives which improve the 'amenity of the airport experience' for users*

*Council should certainly consider alternative funding and ownership mechanisms, if they are considered likely to deliver tangible upgrades in the quality of airport infrastructure. Transferring ownership of the airport to the private sector could open up these sorts of opportunities; however these benefits should be balanced against the costs to Council associated with loss of control of the asset (and the ability to control landing charges etc in the future).*

*(Rail Freight Interchange)<sup>33</sup>*

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33 Lands for a potential future rail freight interchange and associated industrial lands are available and presently zoned 4(a) General Industrial on Lots 54-57 DP 751728 on Irrigation Way between Yoogali and Widgelli.

*Council should continue to support the potential relocation of the rail-freight terminal outside of the metropolitan area (providing there are minimal financial costs to Council), not specifically because of any identified direct positive impacts on economic growth, but more because the relocation creates an opportunity to improve the amenity and liveability of the town (thus helping to attract key workers to the region) and might also support the development of an associated industrial area outside the metropolitan area which could house businesses which are less suited to a metropolitan location.*

*No detailed business case has been completed which considers precise cost and benefits associated with the terminal relocation to date. In the absence of any relocation, the 2002 Maunsells study make the following recommendations:*

*Additional rail crossovers to the east of the CBD*

*Re-focus of the marshalling activities to the east of the railway station*

*Grade separation of the crossing street*

*To the extent that the current study has involved no technical review of the Maunsells study or the infrastructure itself, these recommendations are supported accordingly.*

*(Roads/ intersections)*

*Only limited information from Council was made available on priority intersections and stretches of road for the current analysis. Based on discussions to date with industry, Council representatives and the RTA, there are no additional recommendations for priority road related projects for Council arising from the current study, other than supporting those recommendations made in previous studies.*

*Despite the important role that road infrastructure plays in the region, the general standard of road infrastructure was identified to be sufficient for industry needs on the whole. The main strategic recommendation for Council relates to ensuring that in the future, systems and channels are available for efficient communication between business, industry and Council to ensure that road related challenges are addressed as they arise.*

*A detailed and comprehensive freight and traffic study for the region is the best way to understand which roads projects deliver the most benefit to the local economy.*

*(Water/ Irrigation)*

*In the longer term, Council work with other stakeholders to support initiatives which operate to reduce the chance and potential impact of similar water availability threats in the future. In this regard, supporting efforts to introduce drip irrigation and more water efficient farming methods and crops throughout the region will help to better 'drought proof' the local economy.*

*Council can also continue to work with other Government and industry bodies to manage any threats regarding water availability. With respect to the short term water availability, Council has previously submitted the following recommendations to State/ Federal government:*

*Allow allocations to keep permanent plantings alive until substantial inflows are received. The amount of inflows could be determined by meetings with industry representatives.*

NSW Government with the assistance of Murrumbidgee Irrigation seek to secure sufficient water requirements to keep permanent plantings alive and processing industries operating until substantial inflows are received.

Allow wineries to use their treated effluent on their plantings for the purposes of keeping plantings alive. The Government would need to work with EPA and this could be reviewed on a monthly basis to ensure compliance.

NSW Government expands the cloud seeding trial currently underway by Snowy Hydro Limited.

Allow new and existing bores to feed the river system and town supplies, so that water can be reallocated to horticultural use.

If sufficient rain is not recorded to replenish storage levels sufficiently prior to the commencement of the irrigation season, Council might also consider establishing a low allocations management plan that could involve evaluation and prioritisation of various measures designed to mitigate the impact of any low allocations decision in the future on the local economy/ community.

#### *(Drainage/ Sewerage)*

From a strategic perspective, the priority for Council when dealing with industry waste generation should be to ensure that an effective user-pays system operates in practice. So long as the waste generated by industry can be processed or treated, industry should simply pay the actual cost associated with their waste generation. The introduction of higher charges for untreated industry waste should go some way to achieving this situation.

Consultation with Council drainage officers provided the following list of drainage infrastructure at critical capacity:

Main Drain J (Major Drainage System) - Constraint to Development Areas

Drainage Channel DC "S" (Trunk Drain)- Current Cause of Major Flooding in the CBD

DC "Industrial S" (Trunk Drain)- Current Cause of Major Flooding in the Eastern CBD

Drainage Channel (DC) "U" (Trunk Drain)- Current major cause of flooding in North West Griffith

DC "MacPherson" (Trunk Drain)- Current Major Cause of Flooding in Mooreville Estate

These infrastructure capacity issues essentially lead to flooding in lands currently zoned for commercial development. This flood damage essentially affects the viability of businesses and private properties (for which it was suggested that Council may be liable). In this context, both public safety and damage to property are considered to be at risk with non-provision.

#### *(Telecommunications)*

Whilst some issues of concern were reported by industry representatives, the quality of infrastructure appears to be adequate at present from an economic view-point. It is however noted that as technology continues to change this situation may change quickly, so it is important that the quality of this infrastructure and services keeps pace with change into the future.

*Council can continue to work with Telstra and new infrastructure providers to ensure this quality of service continues to be high.*

*(Energy)*

*Current infrastructure appears generally adequate to sustain industry activities at present. Council is generally unable to have a substantial impact on the price of electricity or gas (other than to support any additional energy generation activities when they arise) and thus has limited power to influence industry growth with this infrastructure type.*

*Council can however ensure that the planning and DA process provides support for energy related infrastructure developments (especially to those industries where infrastructure is a key issue). These developments may be relatively minor (i.e. approving pipeline works or relocation on particular sites), but can have an important benefit to the businesses involved. Discussions to date indicate that Council's planning department has been very co-operative to date on these issues.*

*Council's economic development unit can however take a pro-active approach to supporting/facilitating negotiations between drip irrigation providers/ growers and Country energy to facilitate transformer upgrades wherever necessary to sustain the introduction of drip irrigation systems. This is a particularly important issue because it helps support a pro-active response to any future irrigation water supply threats in the future.*

## Statutory Framework

This section outlines the planning and environmental legislative framework applicable to Griffith. The framework also includes references to policies and government initiatives affecting land use and planning decisions.

### Federal context

#### Environmental Protection and Biodiversity Conservation Act 1999

The purpose of the Environmental Protection and Biodiversity Conservation Act 1999 (EPBC Act) is to protect matters of environmental significance at a national level.

Various matters have been identified as having national environmental significance:

- Declared World Heritage Properties<sup>34</sup>
- National Heritage Places
- Wetlands of International Importance<sup>35</sup>
- Listed Threatened Species and Communities
- Listed Migratory Species
- Nuclear Actions

<sup>34</sup> i.e. a property declared as such on the World Heritage List

<sup>35</sup> i.e. wetlands or a part thereof designated by the Commonwealth under Article 2 of the RAMSAR Convention



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- Marine Environment<sup>36</sup>

In terms of the EPBC Act, actions that are likely to have a significant impact on a matter of national environmental significance may only be undertaken with the prior approval of the Minister.<sup>37</sup>

At the time of the writing of this strategy Griffith are only affected by two matters identified in the EPBC Act, i.e. listed threatened species and communities; and listed migratory species.

Where a proposed action (development) constitutes a controlled action under the EPBC Act, it requires referral to the Commonwealth Department of Environment and Heritage. Proponents would be required to demonstrate consultation and compliance with all relevant Commonwealth requirements prior approval.

### Kyoto Protocol

During December 2007, Australia ratified the Kyoto Protocol, committing to meeting a set target to reduce greenhouse gas emissions by 60 per cent on 2000 levels by 2050.<sup>38</sup> Australia will further participate in negotiations working towards a post-2012 agreement.

The future impacts of the ratification of the Kyoto Protocol at local level is uncertain at this stage, however it is fairly certain that Council will be required to participate in (emission) reporting to a lesser extent. It is also foreseen that a national registry and national authority will be formed to facilitate the target reductions in emissions.<sup>39</sup>

From a local perspective the most significant impacts are more likely to relate to monitoring emissions from prospective developments and trading schemes such as 'carbon trading'.

### State legislative context

#### Environmental Planning and Assessment Act 1979

The Environmental Planning and Assessment Act 1979 (EP&A Act) is the most significant statute at state level for land use planning and development.

The objectives of the EP&A Act are:

*(a) to encourage:*

*(i) the proper management, development and conservation of natural and artificial resources, including agricultural land, natural areas, forests, minerals, water, cities, towns and villages for the purpose of promoting the social and economic welfare of the community and a better environment,*

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<sup>36</sup> i.e. Commonwealth Marine Areas

<sup>37</sup> i.e. Commonwealth Minister for the Environment and Heritage

<sup>38</sup> The Kyoto Protocol is an international agreement aimed at reducing global greenhouse gas emissions by requiring developed countries to meet national targets for greenhouse gas emissions over the five year period from 2008 to 2012

<sup>39</sup> More details are available from the Commonwealth Department of Climate Change and at <http://www.climatechange.gov.au/international/publications/fs-kyoto.html>



- (ii) the promotion and co-ordination of the orderly and economic use and development of land,*
- (iii) the protection, provision and co-ordination of communication and utility services,*
- (iv) the provision of land for public purposes,*
- (v) the provision and co-ordination of community services and facilities, and*
- (vi) the protection of the environment, including the protection and conservation of native animals and plants, including threatened species, populations and ecological communities, and their habitats, and*
- (vii) ecologically sustainable development, and*
- (viii) the provision and maintenance of affordable housing, and*
- (b) to promote the sharing of the responsibility for environmental planning between the different levels of government in the State, and*
- (c) to provide increased opportunity for public involvement and participation in environmental planning and assessment.*

The EP&A Act also provides a broad legislative framework for land use planning and development decision-making in NSW.

Part 3 of the EP&A Act has provisions for the making of environmental planning instruments such as state environmental planning policies (SEPPs), local environmental plans (LEPs) and development control plans (DCPs).

Part 4 of the EP&A Act deals with development assessment, in particular the types of development that needs consent, public participation, assessment and the determination of development applications (DAs), post consent procedures and development contributions.

Part 5 of the EP&A Act deals with environmental assessment, in particular with developments that requires environmental impact statements (EIS)

The EP&A Act is furthermore supplemented by extensive supporting regulations – the Environmental Planning and Assessment Regulation 2000.

The EP&A Act affects almost all aspects of land use planning and assessment of development proposals in Griffith.

### **Forestry Act 1916**

The Forestry Act 1916 and, to a lesser extent, the Plantations and Reforestation Act 1999, are principal legislation controlling forestation and the management of plantations.

The Forestry Act 1916 regulates state forests, timber reserves and flora reserves; and also has provisions relating to carbon sequestration rights.

The Plantations and Reforestation Act 1999 contains provisions relating to the growing of plantations, the relation to other legislation. The Plantations and Reforestation (Code) Regulation 2001 contain specific requirements for the establishment of forests and plantations such as buffer distances, slopes, crossings, roads, tracks etc.

Given that plantations and forestation is fairly limited in the Griffith local government area, it is unlikely that this legislation will have significant impact on local land use patterns. Future development and land use may be affected by carbon sequestration rights; however the likely effect is uncertain at the time of writing of this strategy.

### **Heritage Act 1977**

The Heritage Act 1977 contains a full range of provisions regarding all aspects of heritage conservation. These include, but not limited to provisions for Interim Heritage Orders, items listed for local heritage significance and items listed for State heritage significance. It also contains provisions with regards to heritage to considered and incorporated to environmental planning instruments such as LEPs. The Heritage Act 1977 is administered by the NSW Heritage Council.

The provisions of the Heritage Act 1977 carries fairly significant weight in terms of future land uses and development applications in Griffith. Although Griffith currently has only twelve items listed of local heritage significance, it is likely to gradually increase. A Community Based Heritage Study was undertaken during 2003 that considered in excess of 180 potential sites and identified a range of sites to be considered for future listing. There are currently two sites in Griffith listed on the State Heritage Register.

Council, in conjunction with the NSW Heritage Council, also established a part-time heritage advisory service, which has been operating since 2004. A specific Heritage Management Committee was also established by Council during 2004 to raise public awareness and to assist in land use decisions affecting heritage or potential heritage items or sites.

### **Local Government Act 1993**

Although the Local Government Act 1993 cannot be described as planning or environmental legislation as such, the Act has a significant bearing on planning and environmental decisions. The Local Government Act 1993 primarily deals with the way in which local authorities conduct their affairs, but as far as this strategy is concerned it is important in the sense that it exerts control over the way in which a Council manages the land under its management and control. Aspects of importance may include matters such as regulatory clauses pertaining to environmental protection, waste management, fire prevention, orders etc.

### **National Parks and Wildlife Act 1974**

This Act deals with the reservation and management of parks, conservation areas, nature reserves and the like. More importantly, from a land use perspective, the National Parks and Wildlife Act 1974 provides protection for threatened flora and fauna, as well as for Aboriginal sites.

The provisions of the National Parks and Wildlife Act 1974 are taken into consideration in Griffith, particularly in the case of new and peri-urban subdivisions.

### **Native Vegetation Act 2003**

The Native Vegetation Act 2003 contains provisions and requirements for the clearing (and rehabilitation) of native vegetation. This Act also has requirements for the drafting of Property Vegetation Plans (PVPs) according to which a landholder may make provision for native vegetation management on the land to which it applies.

The provisions of the Native Vegetation Act are fairly often encountered in Griffith, particularly in the case of horticultural and peri-urban subdivisions.

### **Protection of the Environment Operations Act 1997**

The Protection of the Environment Operations Act 1997 contains provisions regulating pollution and waste disposal. This Act is regulatory in nature and mostly enforced by the Department of Environment and Climate Change and to lesser extent by local authorities.

From a land use perspective it is important to take note of Schedule 1 of the Protection of the Environment Operations Act 1997. Schedule 1 lists a range of scheduled activities or developments that that requires a licence from the Department of Environment and Climate Change.

Scheduled activities and developments are sometimes encountered in the development process in Griffith, particularly as part of agriculturally-based developments and food-processing activities. These are normally dealt with as integrated development as provided for in terms of the EP&A Act and Section 51 of the Protection of the Environment Operations Act 1997.

### **Roads Act 1993**

The Roads Act 1993 deals with a wide variety of matters such as: closing of roads, classification of roads, road works, traffic regulation, access/entry, acquisition of land for roads, and public consultation regarding roads. Part 9 of the Roads Act 1993, contains provisions regarding consent for certain activities and developments from the Roads and Traffic Authority.

Activities and developments within the scope of Part 9 are fairly often encountered in the development process in Griffith, particularly concerning access to and from developments along classified state roads. These are sometimes dealt with as integrated development as provided for in terms of the EP&A Act and Section 139 of the Roads Act 1993.

### **Threatened Species Conservation Act 1995**

The Threatened Species Conservation Act 1995 is primarily aimed at providing a legal framework for the protection of threatened and endangered species, ecological communities and critical habitats. In a local planning context it is important to take note that Section 126 contains provisions for biodiversity certification of environmental planning instruments. The Act furthermore contains four

schedules listing: endangered species, populations and ecological communities; critically endangered species and ecological communities; vulnerable species and ecological communities; and key threatening processes

Local developments are sometimes required to undertake a 'seven part test' pursuant to Section 5A of the EP&A Act. Council apply such a test to determine the extent of potential impacts on threatened species, populations, ecological communities and habitats. Should it be established that there will be a significant impact a species impact statement is normally required in accordance with Division 2 of Part 6 of the Threatened Species Conservation Act 1995.

### **Water Management Act 2000**

The Water Management Act 2000 provides a legislative framework for water management, including: floodplain management, water supply, access (licensing), water use approvals, water management works, water supply works, irrigation corporations, catchment management authorities, and development contributions.

In terms of the principles outlined in the Water Management Act 2000, there is a clear obligation on Council to facilitate land use planning to limit flood risks. This in itself is the single most important implication of this Act for any future land use strategy.

Council is not a scheduled water supply authority per se within the context of the Water Management Act 2000, but a local water utility exercising a water supply function within which is vested ownership of all water supply and drainage infrastructure. Water is obtained from Murrumbidgee Irrigation which is a scheduled Irrigation Corporation in terms of the Water Management Act 2000.

### **State Environmental Planning Policies (SEPPs)**

In recent years, there have been several SEPP's drafted at the state level which has direct relevance to strategic land use planning at the local level. These SEPP's have filled notable voids in planning legislation at the local level. SEPP's are planning policies drafted at state level with statutory standing and overrides local provisions. This strategy has been drafted taking into consideration all of the relevant SEPP's which pertain to the Griffith Local Government Area, including:

SEPP (Major Development) 2005

SEPP No. 1 – Development Standards

SEPP No. 21 – Caravan Parks

SEPP No. 30 – Intensive Agriculture

SEPP No. 33 – Hazardous and Offensive Development

SEPP No. 36 – Manufactured Home Estates

SEPP No. 52 – Farm Dams and Other Works in Land and Water Management Plan Areas

SEPP No. 55 – Remediation of Land

SEPP No. 65 – Design Quality of Residential Flat Development  
SEPP (Affordable Rental Housing) 2009  
SEPP (Housing for Seniors or People with a Disability) 2004  
SEPP (Mining, Petroleum Production and Extractive Industries) 2007  
SEPP (Rural Lands) 2008  
SEPP (Temporary Structures) 2007  
SEPP (Infrastructure) 2007

Where appropriate within this strategy further analysis and details of the applicability of the above noted SEPP's has been provided.

### **Regional Environmental Plans**

There are no regional plans applicable to the Griffith local government area.

### **s117 Directions**

In terms of Section 117 of the Environmental Planning and Assessment Act 1979 the Minister may make provisions which will achieve or give effect to principles, aims, objectives or policies, as are specified in the direction. These directions normally apply to planning instruments and land use principles. The initial list of directions under Section 117(2) was revoked by the Minister of Planning on 14 June 2007. New directions were subsequently issued to councils under section 117(2) of the Act:

At the time of writing of this strategy directions considered to potentially have some relevance to Griffith are:

1. Employment and Resources
  - 1.1 Business and Industrial Zones
  - 1.2 Rural Zones
  - 1.3 Mining, Petroleum Production and Extractive Industries
  - 1.5 Rural Lands
2. Environment and Heritage
  - 2.1 Environment Protection Zones
  - 2.3 Heritage Conservation
  - 2.4 Recreation Vehicle Areas
3. Housing, Infrastructure and Urban Development
  - 3.1 Residential Zones
  - 3.2 Caravan Parks and Manufactured Home Estates
  - 3.3 Home Occupations

- 3.4 Integrating Land Use and Transport
- 3.5 Development near Licensed Aerodromes
- 4. Hazard and Risk
  - 4.1 Acid Sulphate Soils
  - 4.2 Mine Subsidence and Unstable Land
  - 4.3 Flood Prone Land
  - 4.4 Planning for Bushfire Protection
- 5. Regional Planning
  - 5.1 Implementation of Regional Strategies
- 6. Local Plan Making
  - 6.1 Approval and Referral Requirements
  - 6.2 Reserving Land for Public Purposes
  - 6.3 Site Specific Provisions

## Local legislative context

Land use planning at a local level is mainly limited to instruments and policies within four broad categories:

- Local Environmental Plan
- Contribution Plans
- Development Control Plans
- Local Policies
- Griffith Local Environmental Plan 2002

### Griffith Local Environmental Plan

Griffith Local Environmental Plan 2002 is the only LEP applicable to Griffith. Griffith LEP 2002 is the principle instrument for regulating land use and development in Griffith. A fundamental aim of this strategy is to provide a well researched analytical basis for a future new LEP.

A new LEP will be drafted in accordance with the Standard Instrument (Local Environmental Plans) Order 2006 and the Standard Instrument (Principal Local Environmental Plan).

### Contributions Plans

A range of contribution plans are applicable to development within Griffith. These can be roughly divided into two groups, i.e.

- Contribution Plans introduced in terms of Section 94 of the Environmental Planning and Assessment Act 1979; and
- Development Servicing Plans (DSPs) introduced in terms of Section 64 of the Local Government Act 1993.

Section 94A Contribution Plans currently applicable in Griffith require development contributions towards new open spaces, sport and recreation facilities, community facilities and roads and traffic management.

Section 64 DSPs currently applicable in Griffith require developer contributions towards water, sewerage headworks and stormwater management.

### Development Control Plans

A number of Development Control Plans (DCPs) are currently applicable to Griffith. These plans contain a range of requirements and standards for developments ranging from rural and rural residential development, residential development and industrial and mixed use development. Certain DCPs furthermore contain application and assessment procedures, such as notification of applications and exempt and complying development.

As part of the state-wide planning reforms the Environmental Planning and Assessment Act 1979 has been amended to the effect that only a single DCP will be applicable in future on a certain portion of land.

Reviews of all DCPs are currently underway with a view of combining it into a single comprehensive DCP. Site-specific DCPs for certain properties may still be drafted, in which case such properties will be excluded from the requirements of the proposed single comprehensive DCP.

### Local Policies

A wide range of policies have been adopted by Council over time. These policies deals with a wide range of issues and a number of these policies apply to planning and development decisions.

Some of the policies that are currently in force and that have a planning or development implication include the following:

- Advertising
- Roadside Stalls
- Development
- Conduct of Councillors and Staff in Assessing and Determining Development Applications
- Frost Control Fan
- Policy Variation
- Stormwater Drainage and Disposal
- Fencing
- Access & Facilities for Disabled Persons
- Awnings on Commercial Properties
- Building Lines
- Construction over Sewer Line
- Distance from the Boundary

- Engineer's Certificates
- Fees Refund
- Floor Heights
- Relocation
- Consolidation of Allotments
- Submissions made regarding Development and Activity Applications
- McPherson Range
- Griffith Aerodrome (Security Requirements and Hangar Operations)
- Contributions to footpaths
- Kerb and Guttering/Footpath Construction
- Discharges to sewerage
- Extension through Properties
- Headwork's Charges
- Headwork's Charges for Yenda

It is envisaged that these policies will be incorporated into the single comprehensive DCP as far as possible in order to ensure a more rationalised approach to planning and development guidelines and decisions.



# Maps

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## Back Ground Maps [pertaining to Part B]

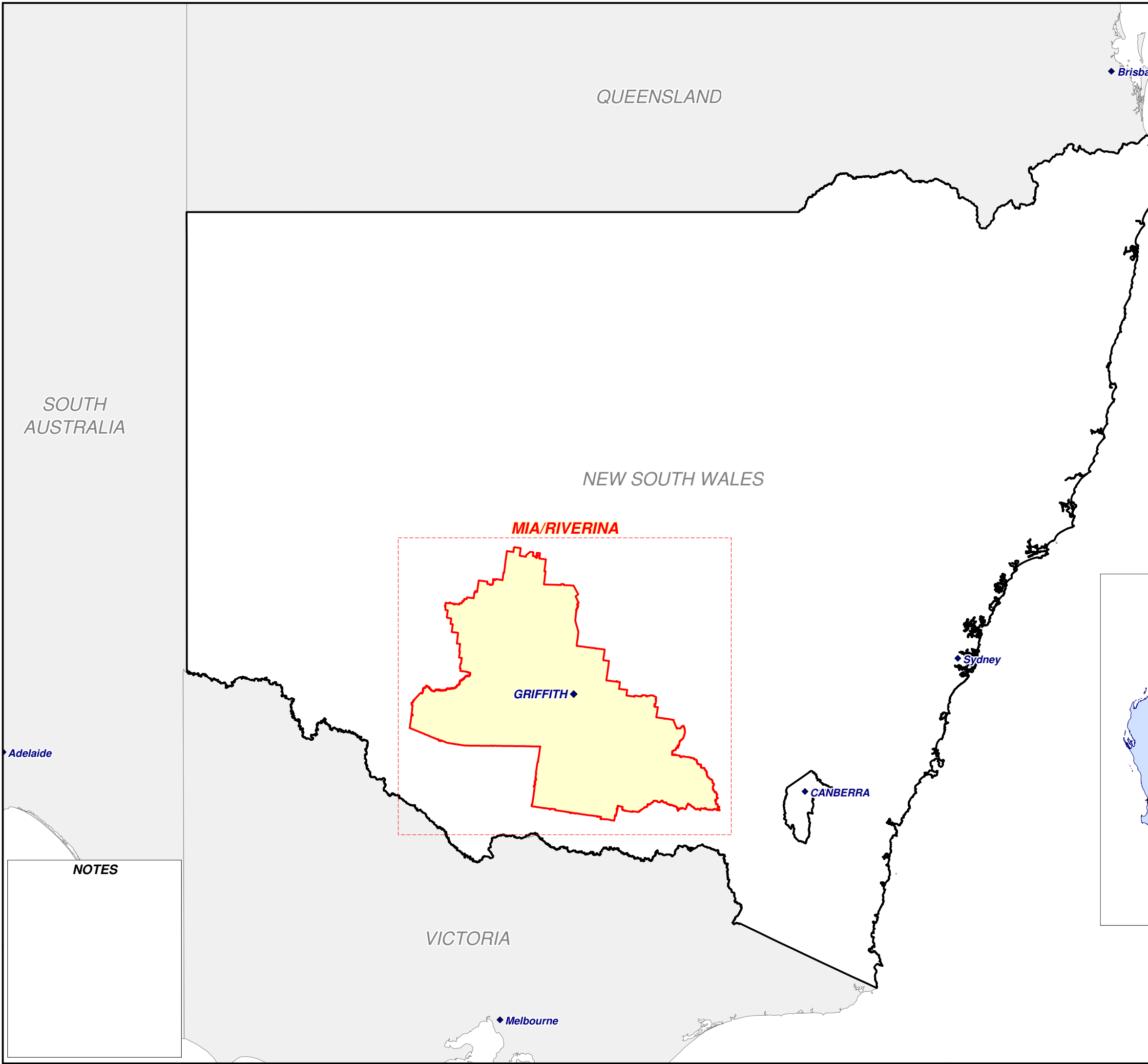
### Index of Maps

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2	Sub-regional context
3	Judicial Areas
4	Localities (Geographical names)
5	Major Natural and Physical features
6	Topography
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8	Environmentally Sensitive Areas
9	Terrain – 0.5 % Gradient areas
10	Bushfire Prone Land
11	Flood Prone Land (1:100 – 2006)
12	Flood Constraint Map ( Including Floodway 2010)
13	Roads & Rail network
14	Roads (major, sealed & unsealed)
15	Road surface conditions
16	B-double and Road train routes
17	Railway lines & level crossings
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21	Potable Water Main Network
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37-39	Heritage Listed Sites (Under 2002 LEP Schedule 6)
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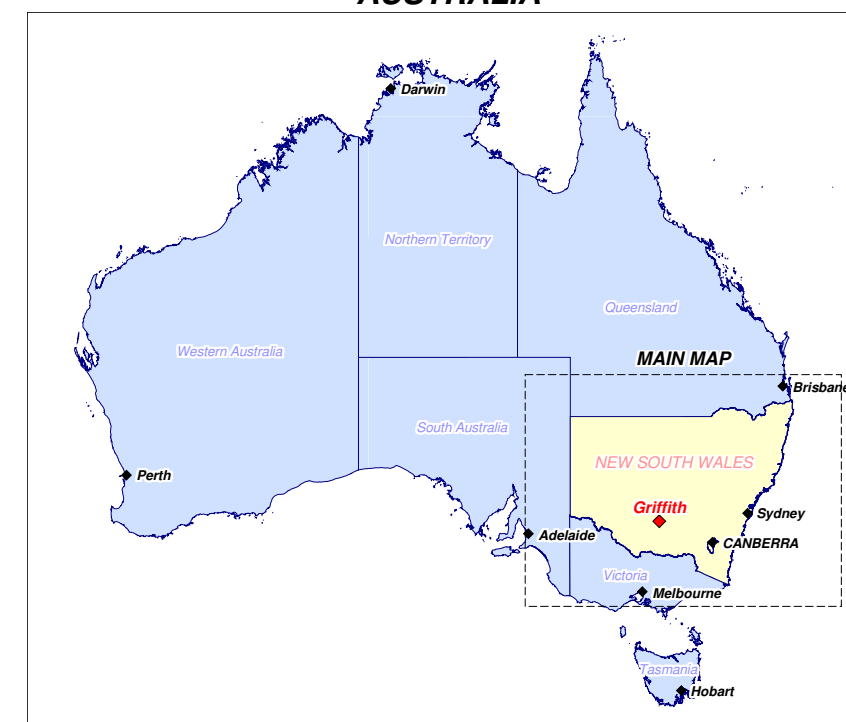


# MAP 1

Locality - NSW/Australia



## AUSTRALIA



### NOTES

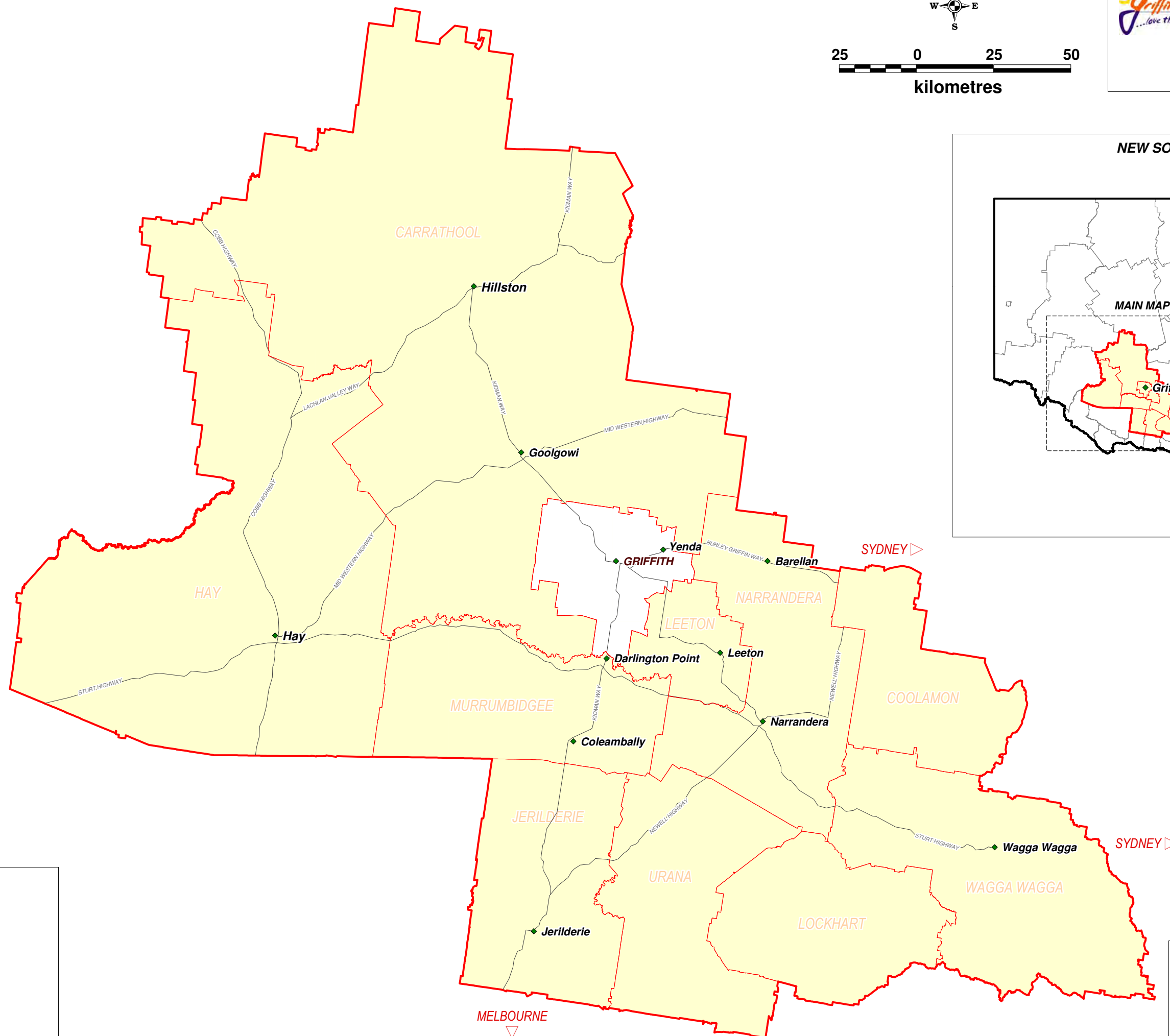
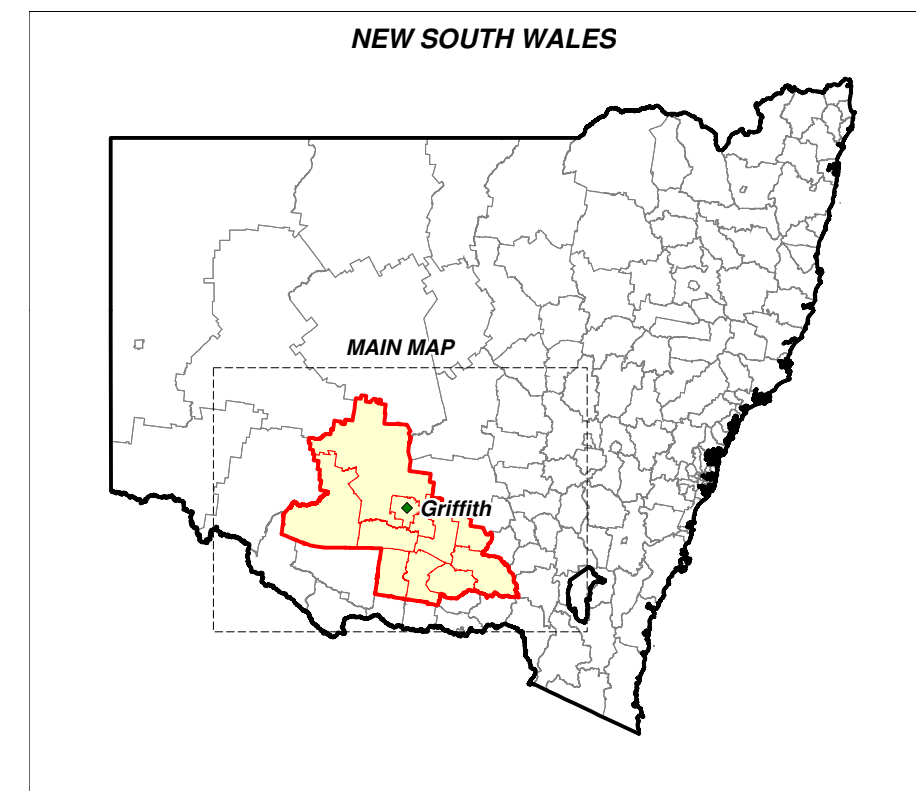
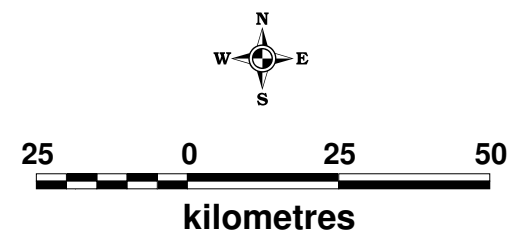
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## MAP 2

Sub-Regional Context



### NOTES

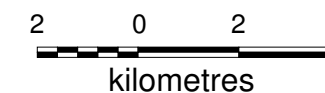
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# MAP 3

Judicial Areas



## LEGEND

- LGA Boundary
- Parish Boundary
- County of Sturt
- County of Cooper

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## NOTES

## INSET

COLARAGANG

CUBA

SEE INSET

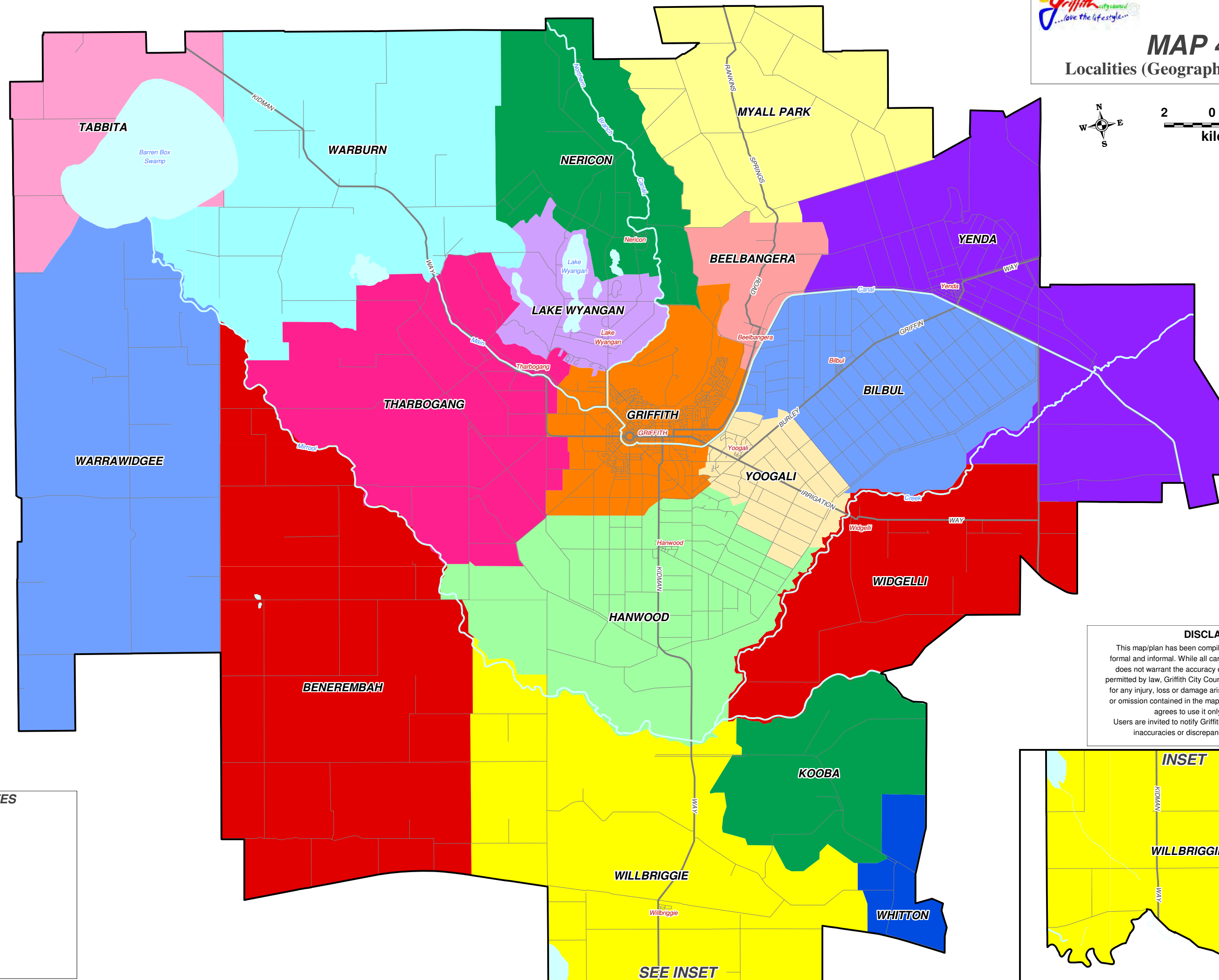


# MAP 4

Localities (Geographical Names)



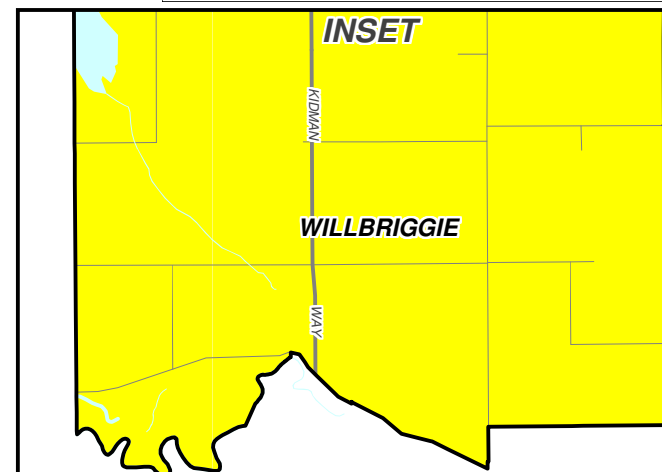
2 0 2 4  
kilometres



NOTES

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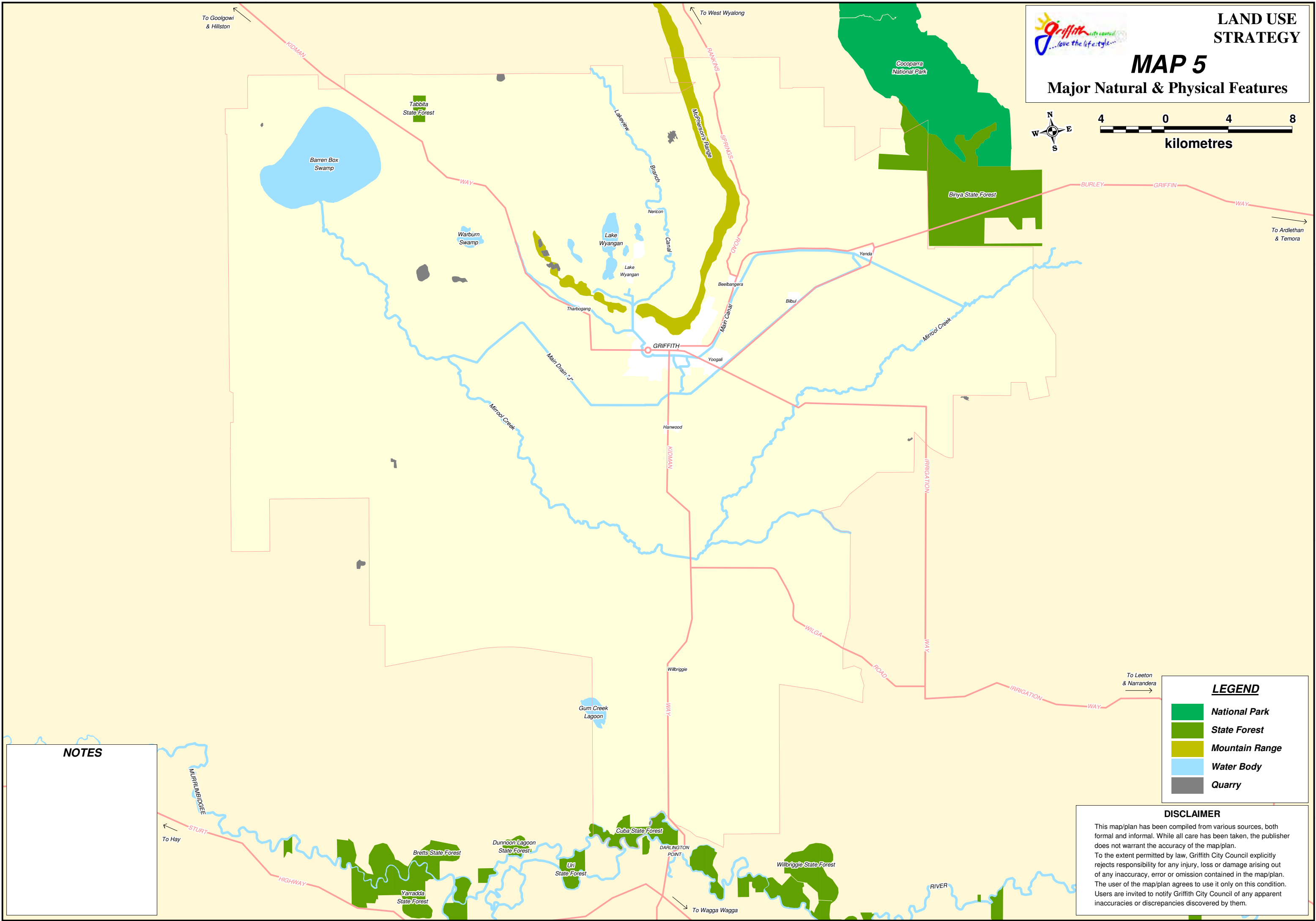






MAP 5

Major Natural & Physical Features



**NOTES**

**LEGEND**

- National Park
- State Forest
- Mountain Range
- Water Body
- Quarry

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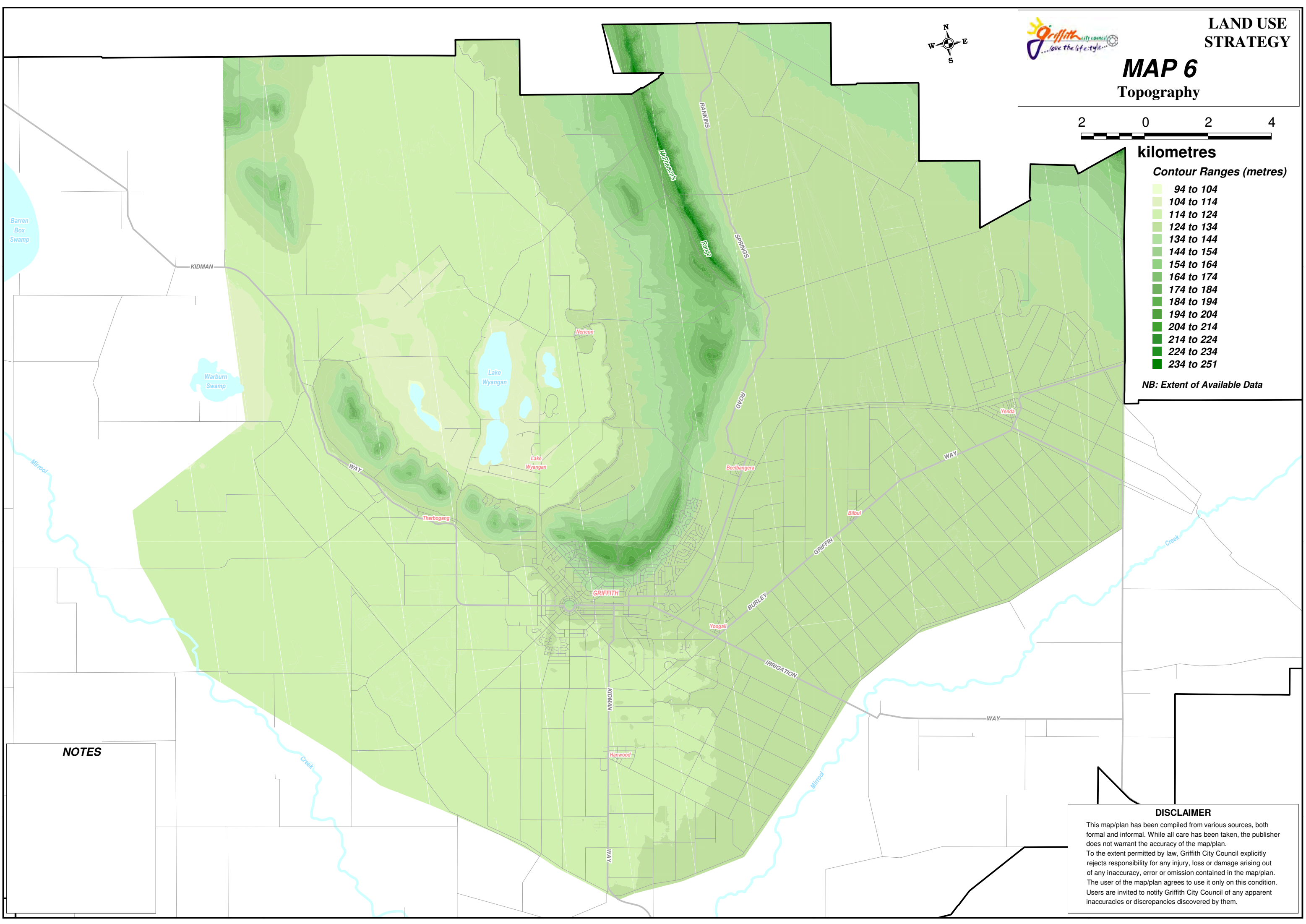


**MAP 6**  
Topography



- kilometres**
- Contour Ranges (metres)**
- 94 to 104
  - 104 to 114
  - 114 to 124
  - 124 to 134
  - 134 to 144
  - 144 to 154
  - 154 to 164
  - 164 to 174
  - 174 to 184
  - 184 to 194
  - 194 to 204
  - 204 to 214
  - 214 to 224
  - 224 to 234
  - 234 to 251

**NB: Extent of Available Data**



**NOTES**

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# MAP 7

## Remnant Vegetation Areas

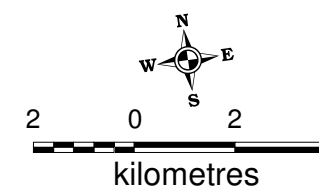
### LEGEND

#### THREAT CATEGORY

- Critically Endangered
- Endangered
- Near Threatened
- Vulnerable
- Least Concern
- Data Deficient

#### OTHER DATA

- Candidate Sites



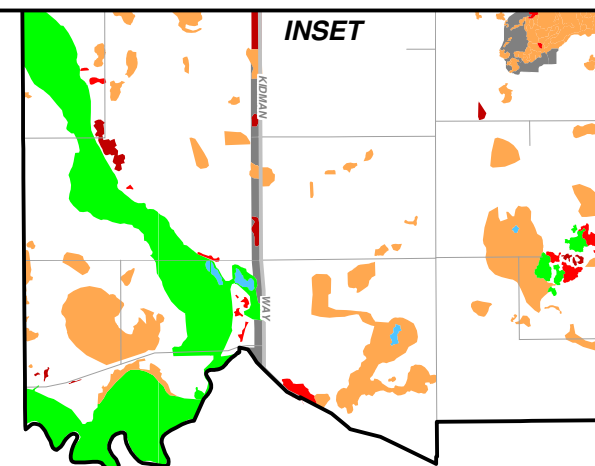
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### NOTES

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### INSET



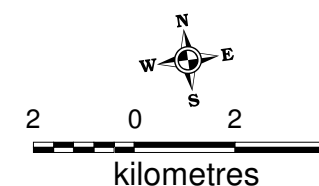


# MAP 8

## Environmentally Sensitive Areas

### LEGEND

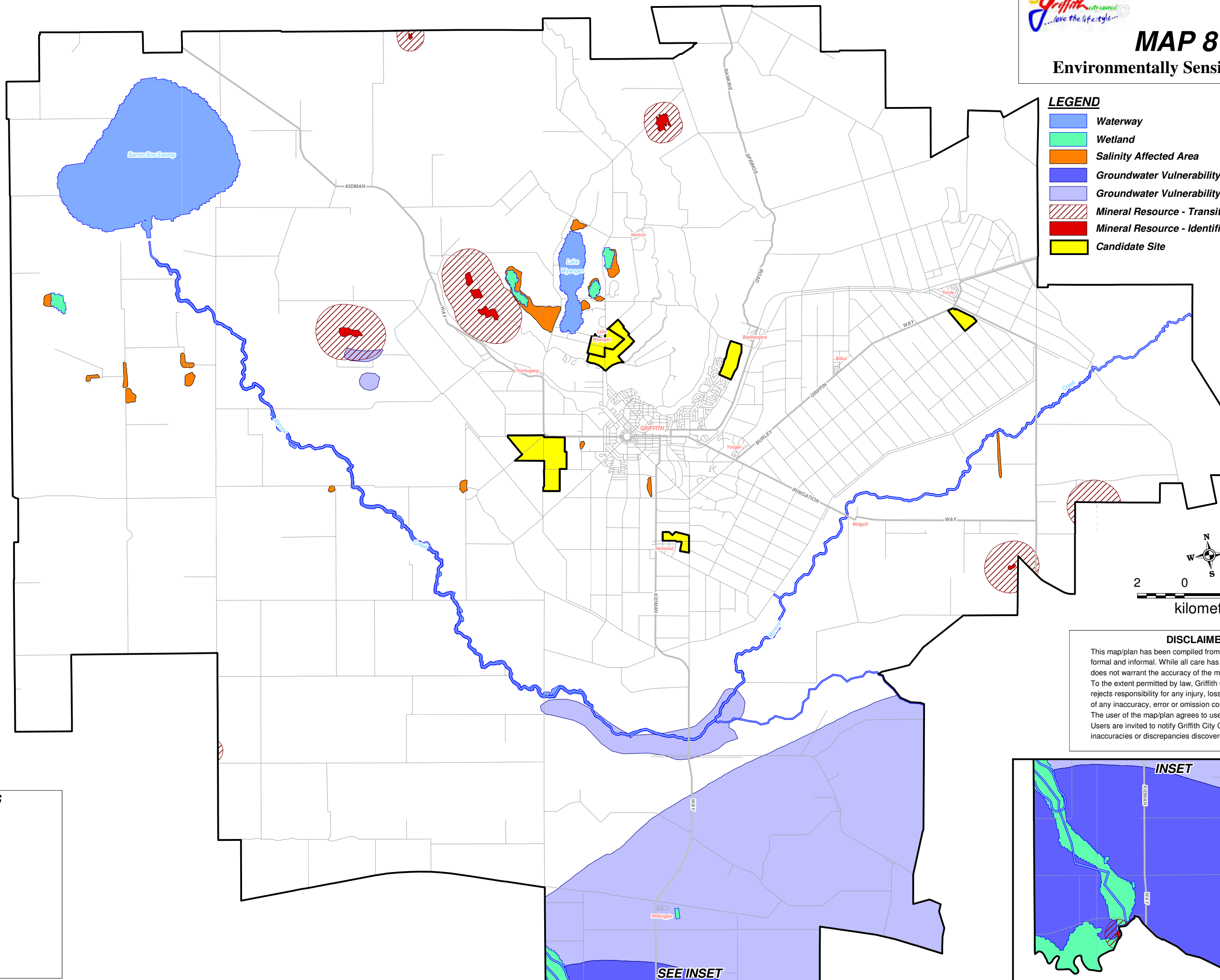
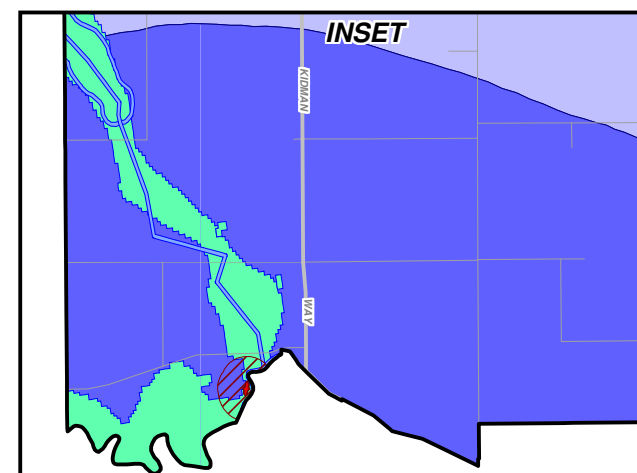
- Waterway
- Wetland
- Salinity Affected Area
- Groundwater Vulnerability - High
- Groundwater Vulnerability - Moderately High
- Mineral Resource - Transition Area
- Mineral Resource - Identified Area
- Candidate Site



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### NOTES







# MAP 9

Terrain - 0.5% Gradient or Less

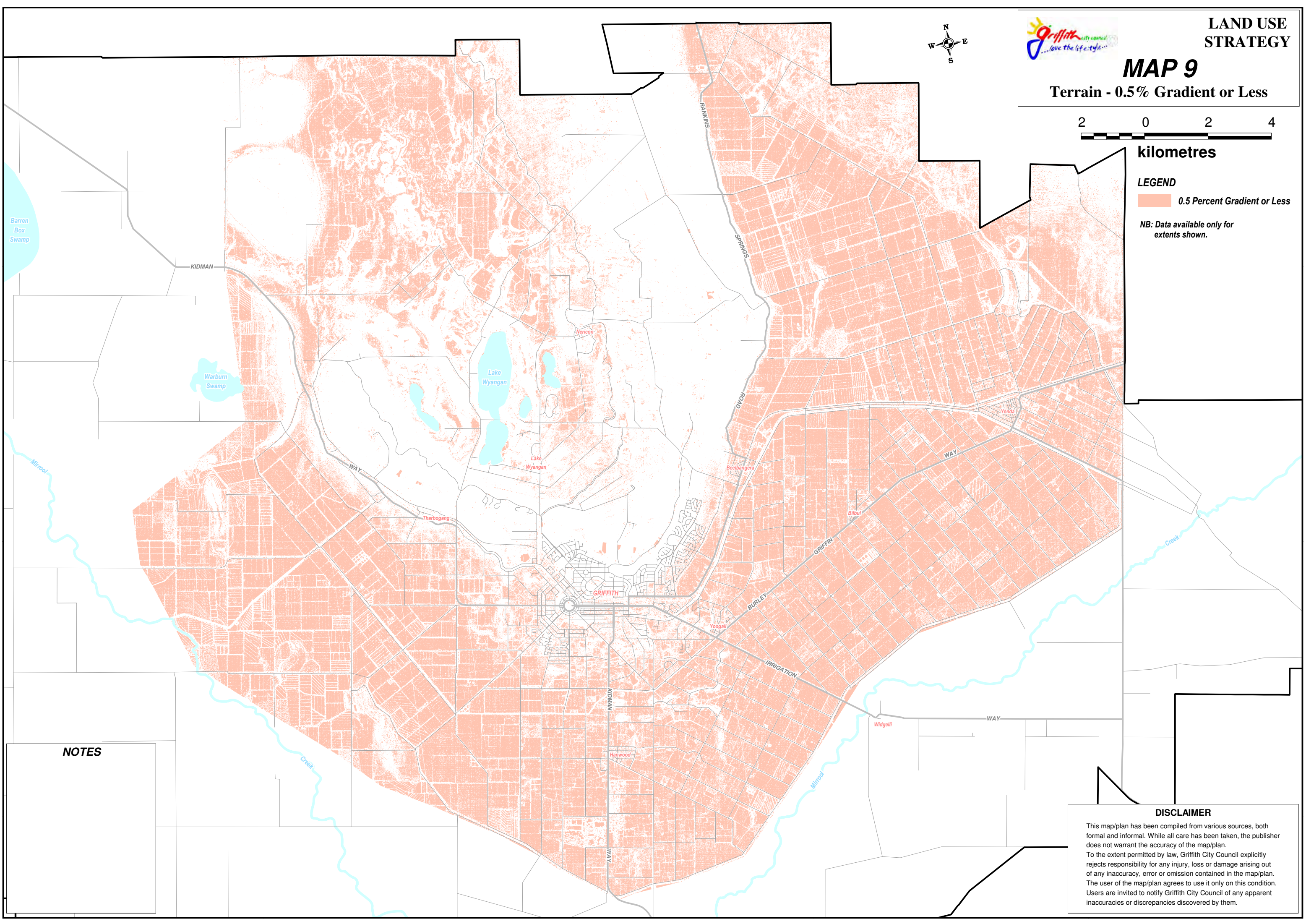


kilometres

LEGEND

 0.5 Percent Gradient or Less

NB: Data available only for  
extents shown.



NOTES

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# MAP 10

Bushfire Prone Land



2 0 2 4  
kilometres

## LEGEND

-  Vegetation Category 1
-  Vegetation Category 2
-  Buffers - 30m & 100m
-  Candidate Sites

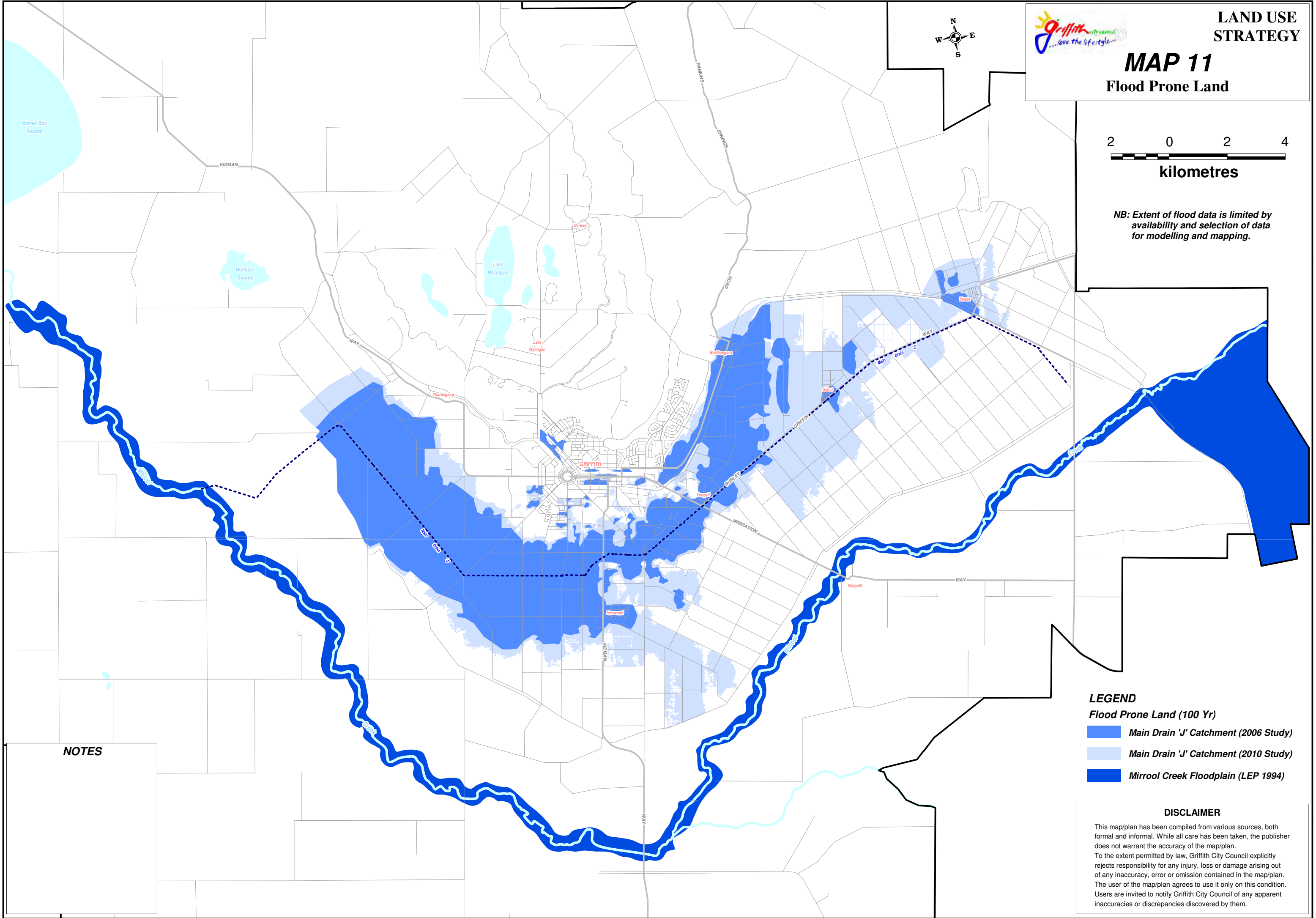
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## NOTES

## INSET

SEE INSET



# MAP 11

Flood Prone Land

2 0 2 4

kilometres

**NB: Extent of flood data is limited by  
availability and selection of data  
for modelling and mapping.**

## LEGEND

**Flood Prone Land (100 Yr)**

- Main Drain 'J' Catchment (2006 Study)
- Main Drain 'J' Catchment (2010 Study)
- Mirrool Creek Floodplain (LEP 1994)

## DISCLAIMER

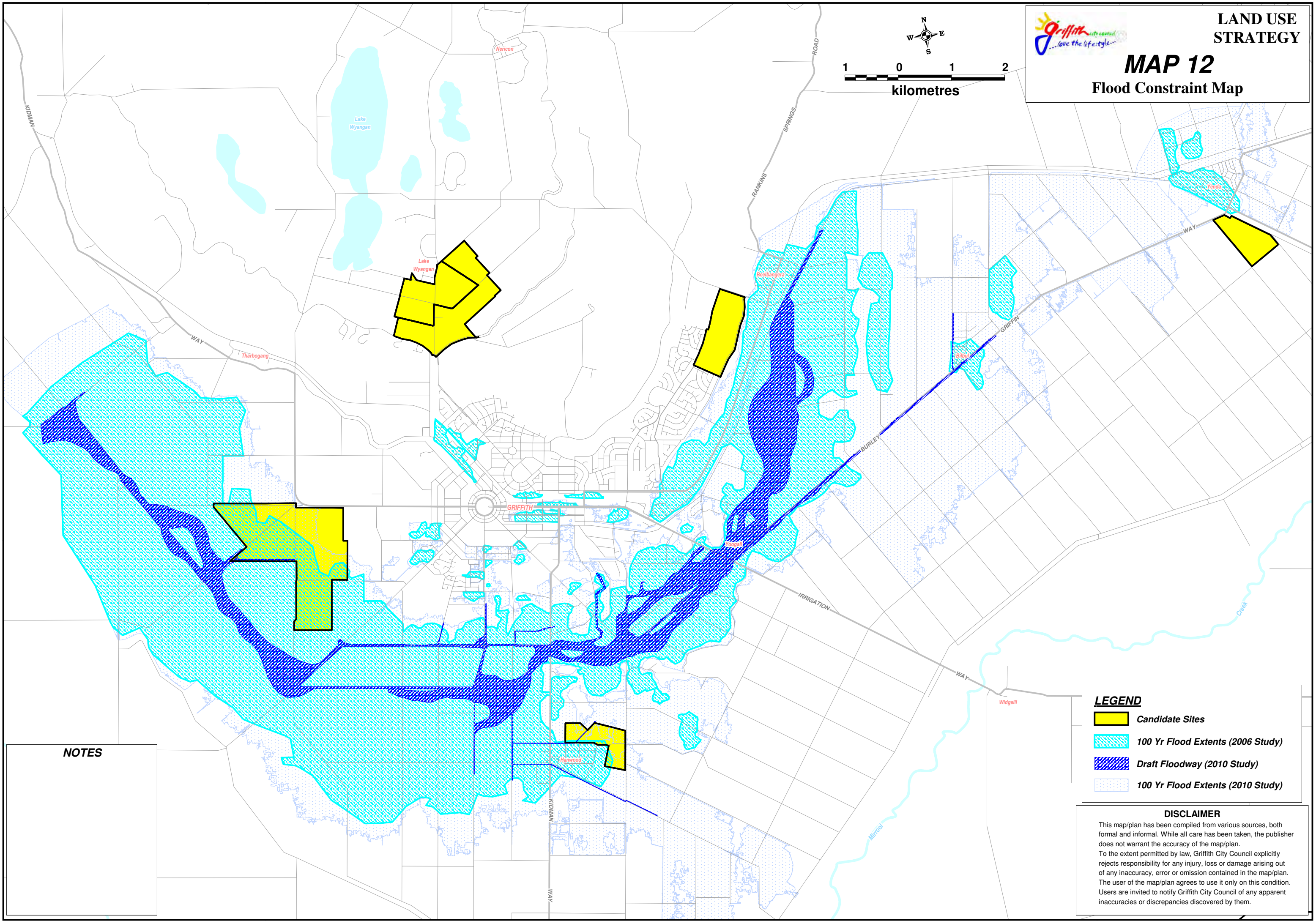
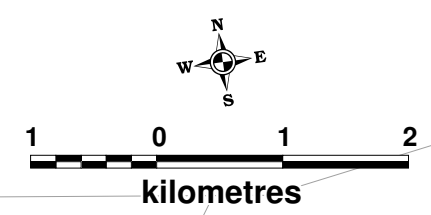
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## NOTES



# MAP 12

Flood Constraint Map



NOTES

**LEGEND**

- Candidate Sites
- 100 Yr Flood Extents (2006 Study)
- Draft Floodway (2010 Study)
- 100 Yr Flood Extents (2010 Study)

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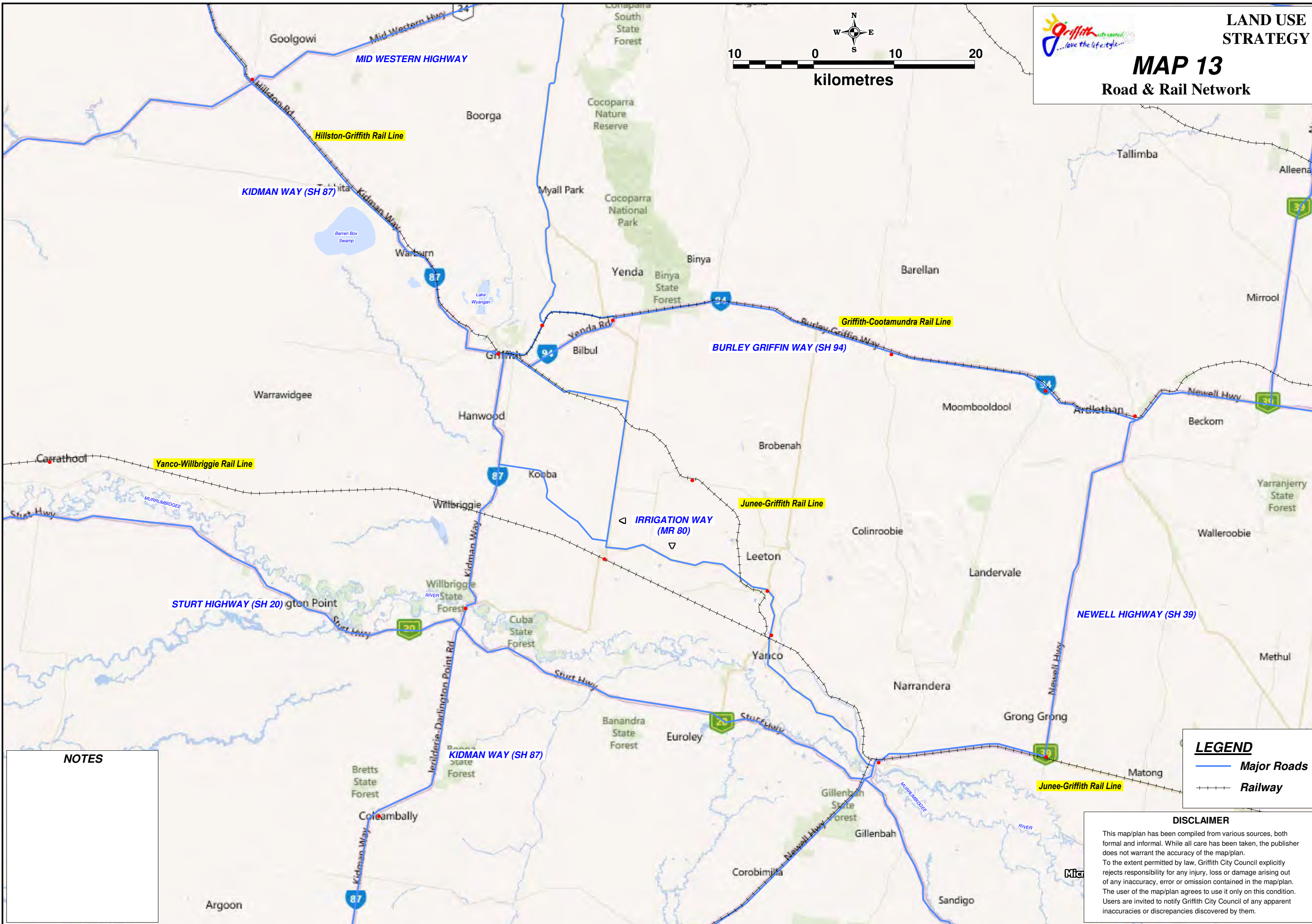
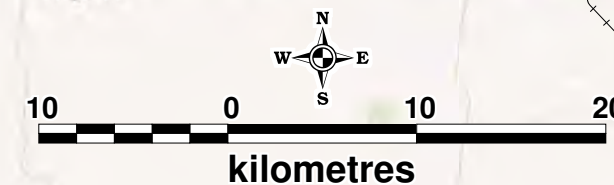
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# MAP 13

Road & Rail Network



NOTES

**LEGEND**

- Major Roads
- Railway

**DISCLAIMER**

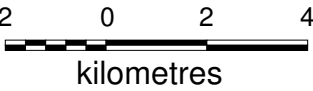
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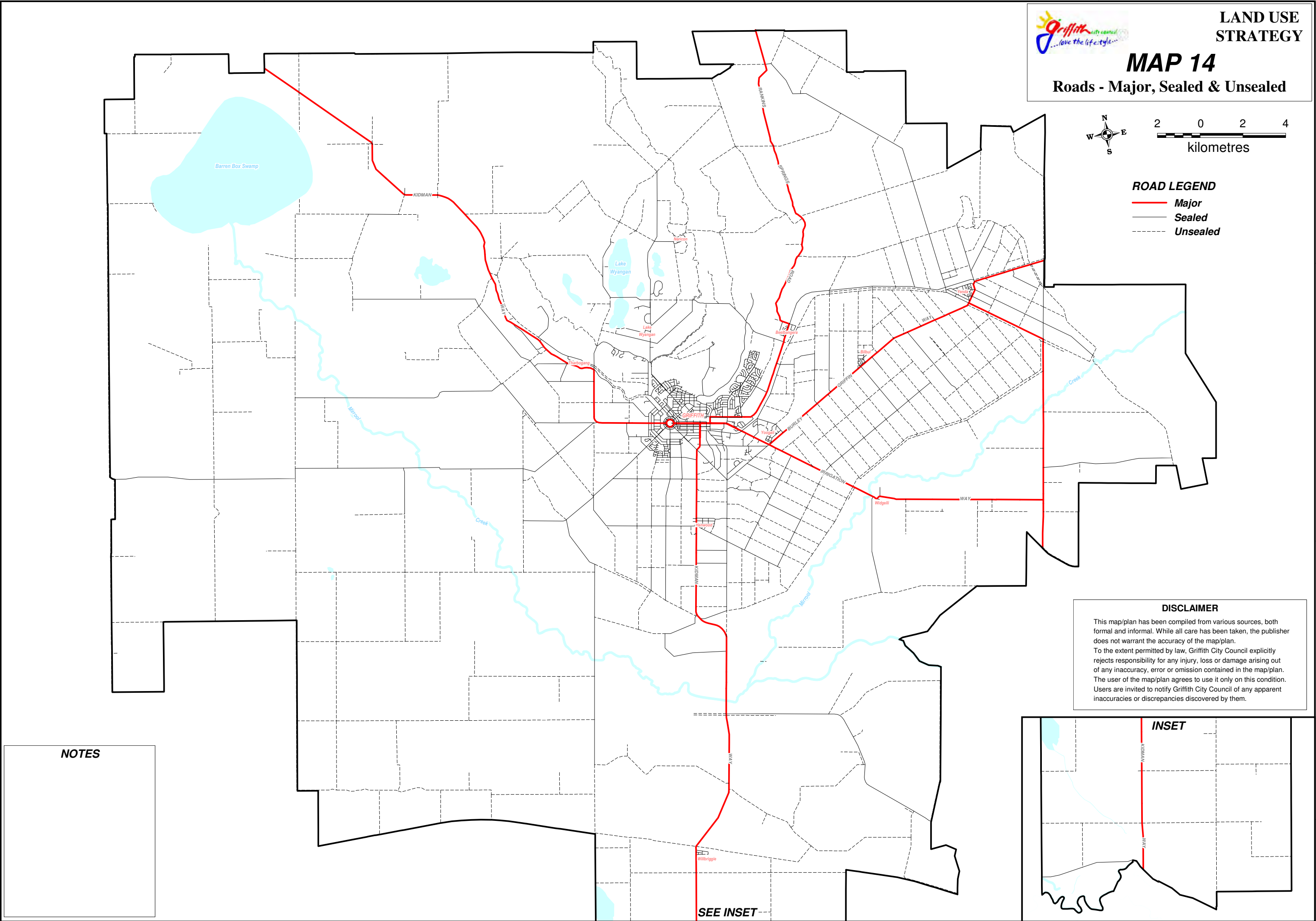
MAP 14

Roads - Major, Sealed & Unsealed



ROAD LEGEND

- Major
- Sealed
- Unsealed

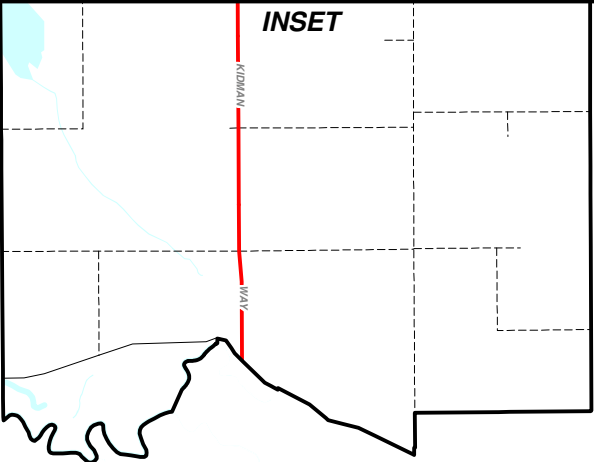


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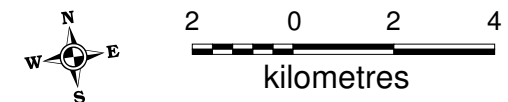
NOTES

INSET



SEE INSET

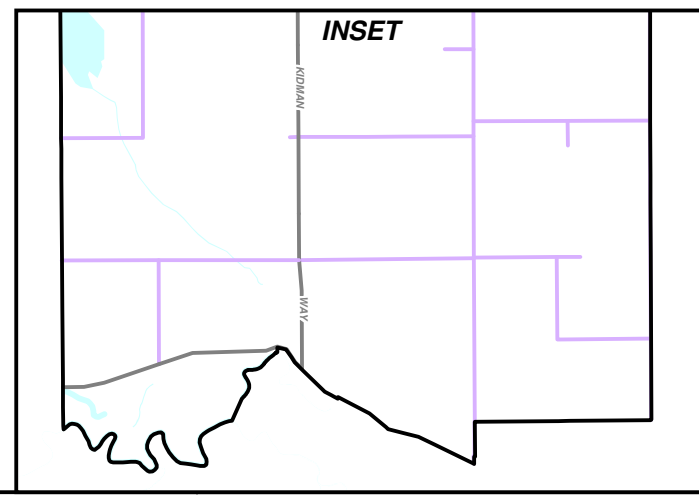




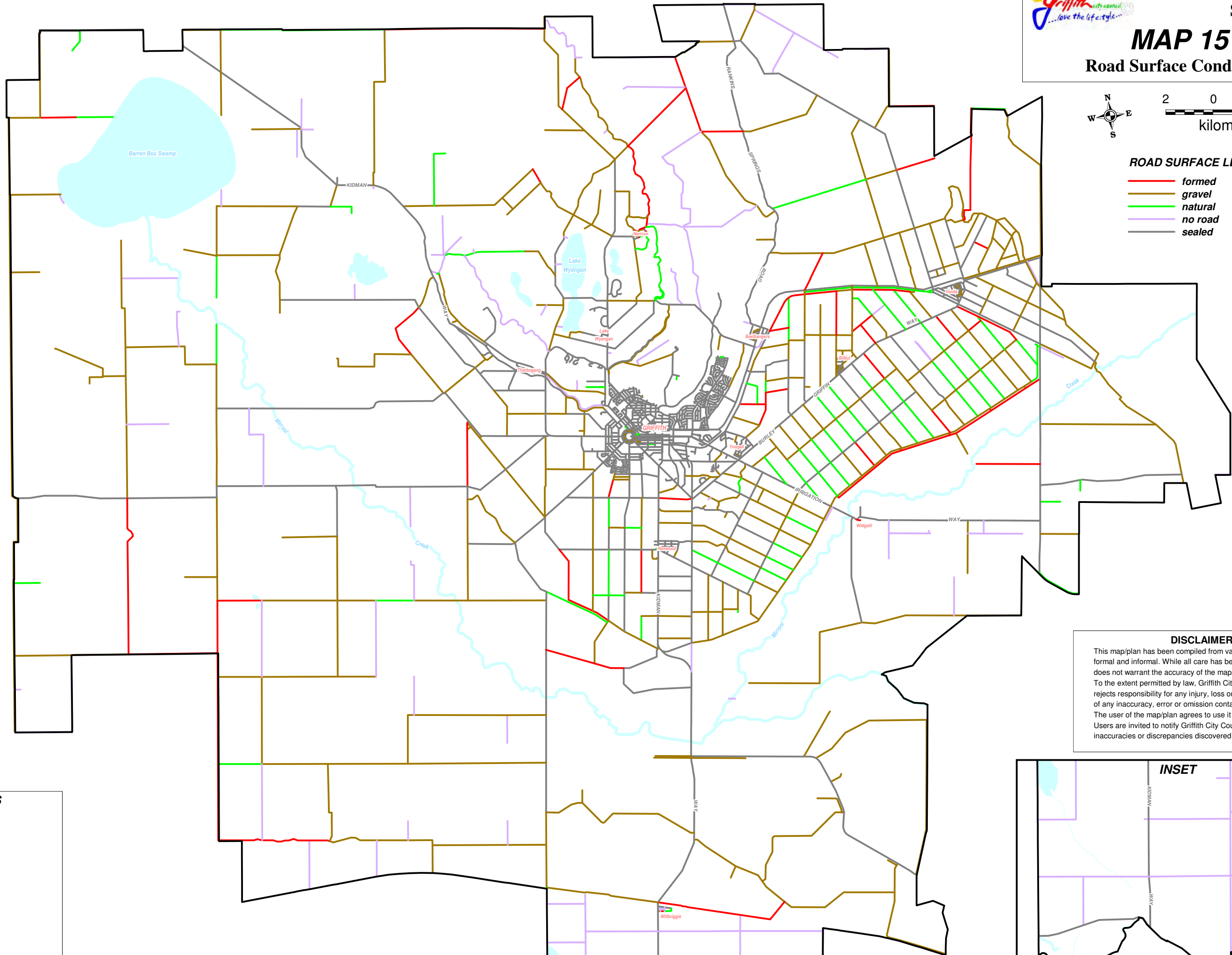
- ROAD SURFACE LEGEND
- formed
  - gravel
  - natural
  - no road
  - sealed

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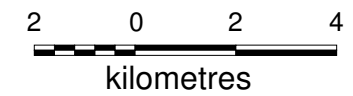
NOTES





# MAP 16

## B-Double & Road Train Routes



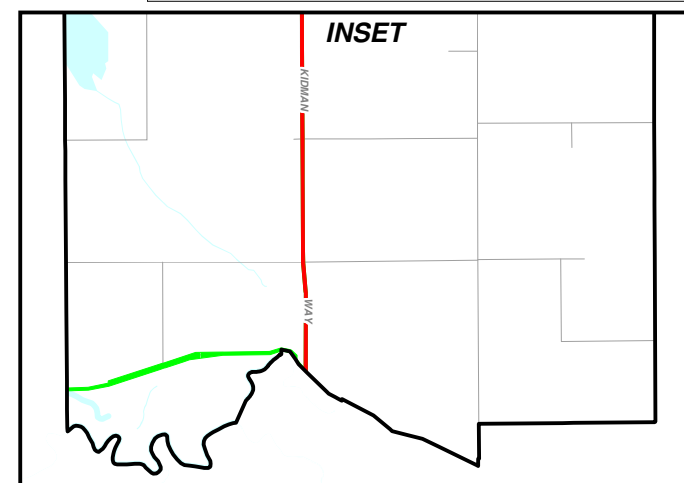
### LEGEND

- B-Double Route
- Road Train Route

### DISCLAIMER

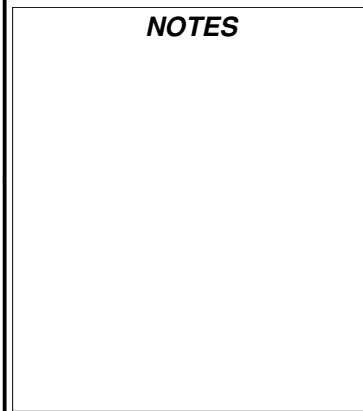
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### INSET



SEE INSET

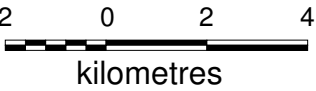
### NOTES





# MAP 17

## Railway Lines & Level Crossings



### LEGEND

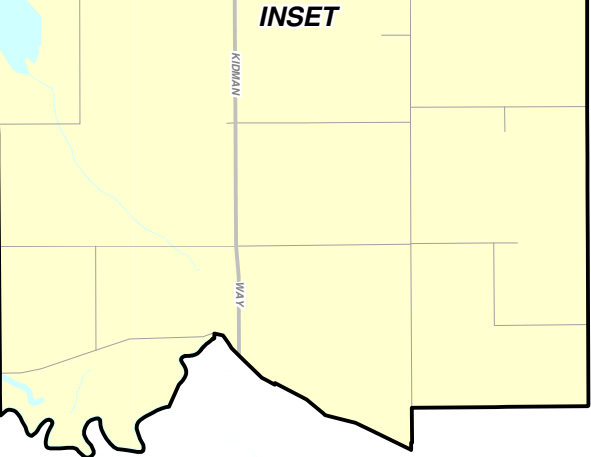
- ===== **Railway Line**
- ◆ **Level Crossing**

NOTES

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### INSET

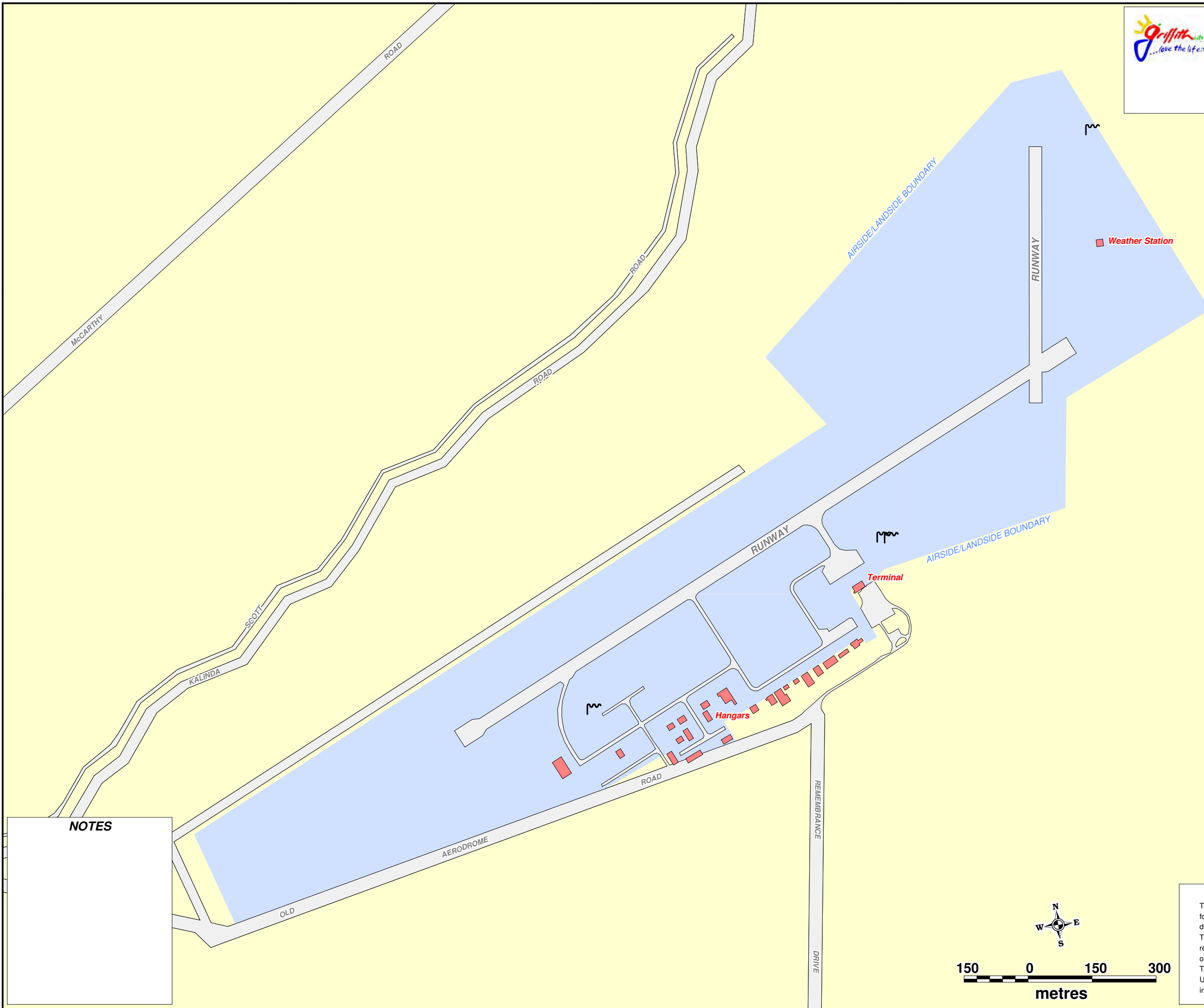


SEE INSET



# MAP 18

Griffith Airport



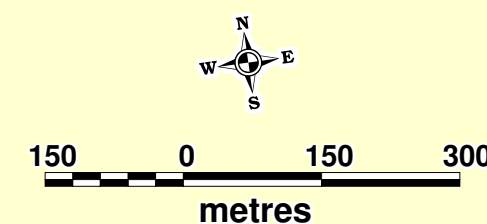
## NOTES

## LEGEND

-  Aerodrome Land
-  Building
-  Wind Sock

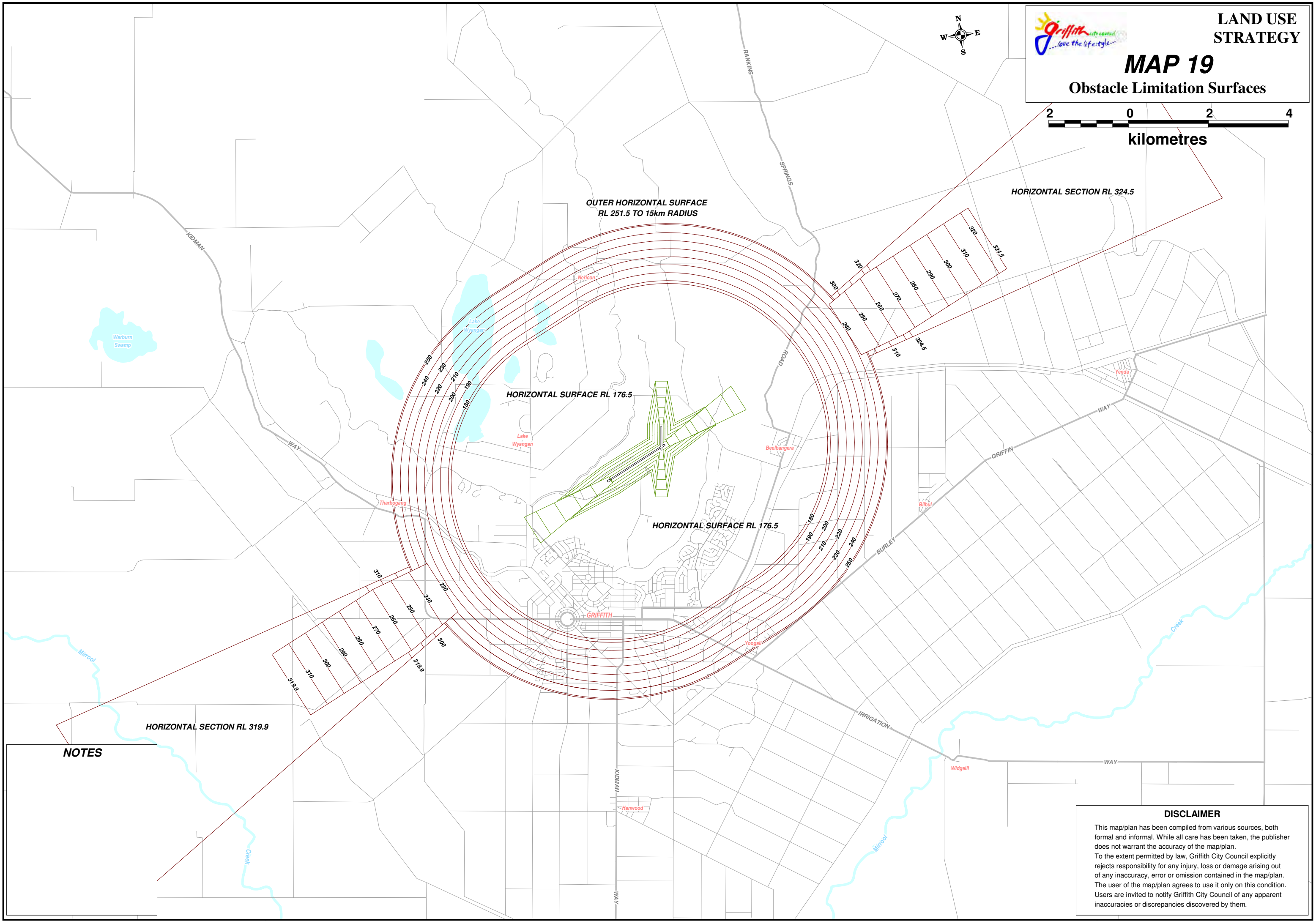
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## Obstacle Limitation Surfaces



## NOTES

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## LEGEND

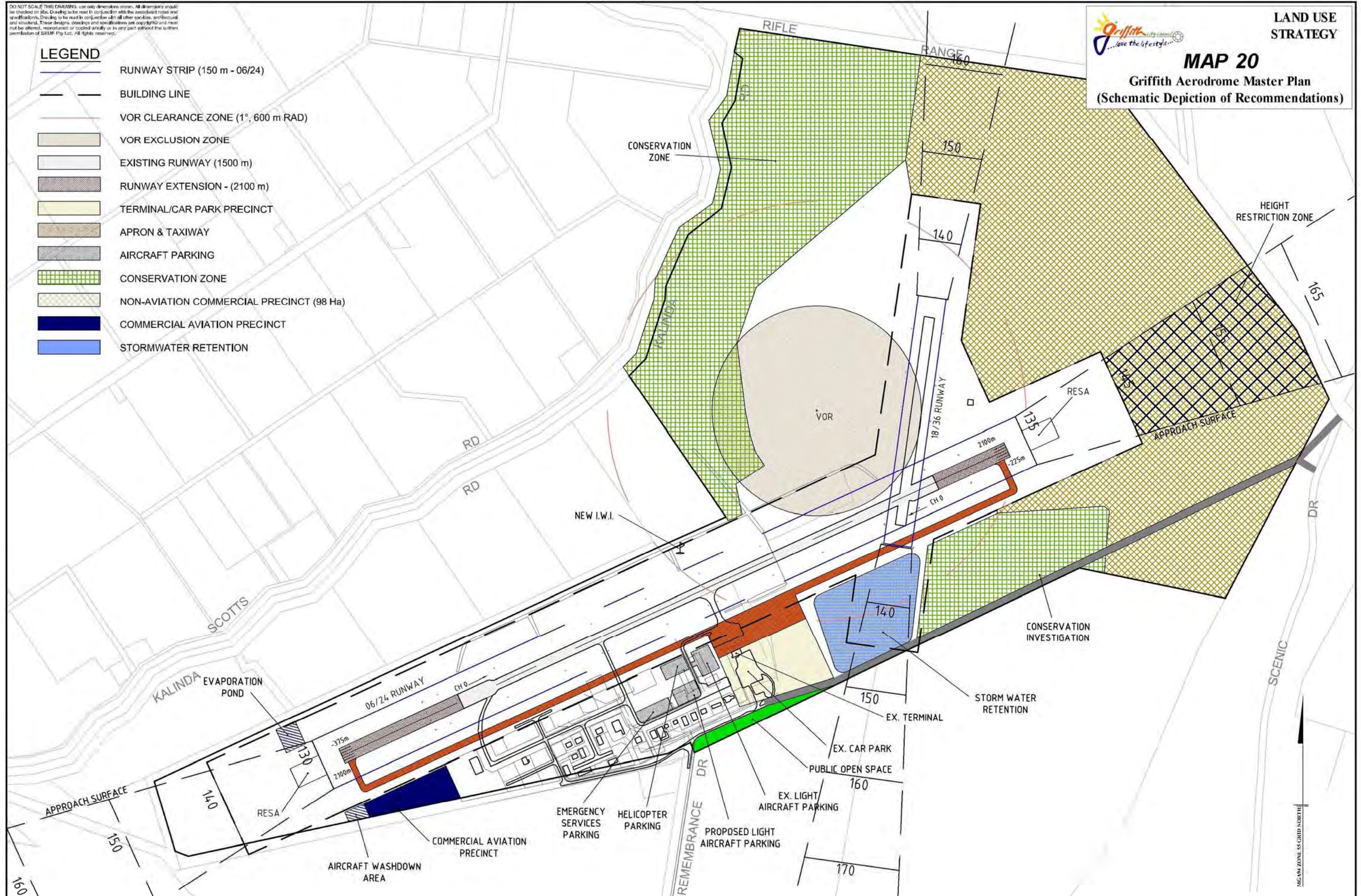
-  RUNWAY STRIP (150 m - 06/24)
-  BUILDING LINE
-  VOR CLEARANCE ZONE (1°, 600 m RAD)
-  VOR EXCLUSION ZONE
-  EXISTING RUNWAY (1500 m)
-  RUNWAY EXTENSION - (2100 m)
-  TERMINAL/CAR PARK PRECINCT
-  APRON & TAXIWAY
-  AIRCRAFT PARKING
-  CONSERVATION ZONE
-  NON-AVIATION COMMERCIAL PRECINCT (98 Ha)
-  COMMERCIAL AVIATION PRECINCT
-  STORMWATER RETENTION



## LAND USE STRATEGY

### MAP 20

Griffith Aerodrome Master Plan  
(Schematic Depiction of Recommendations)

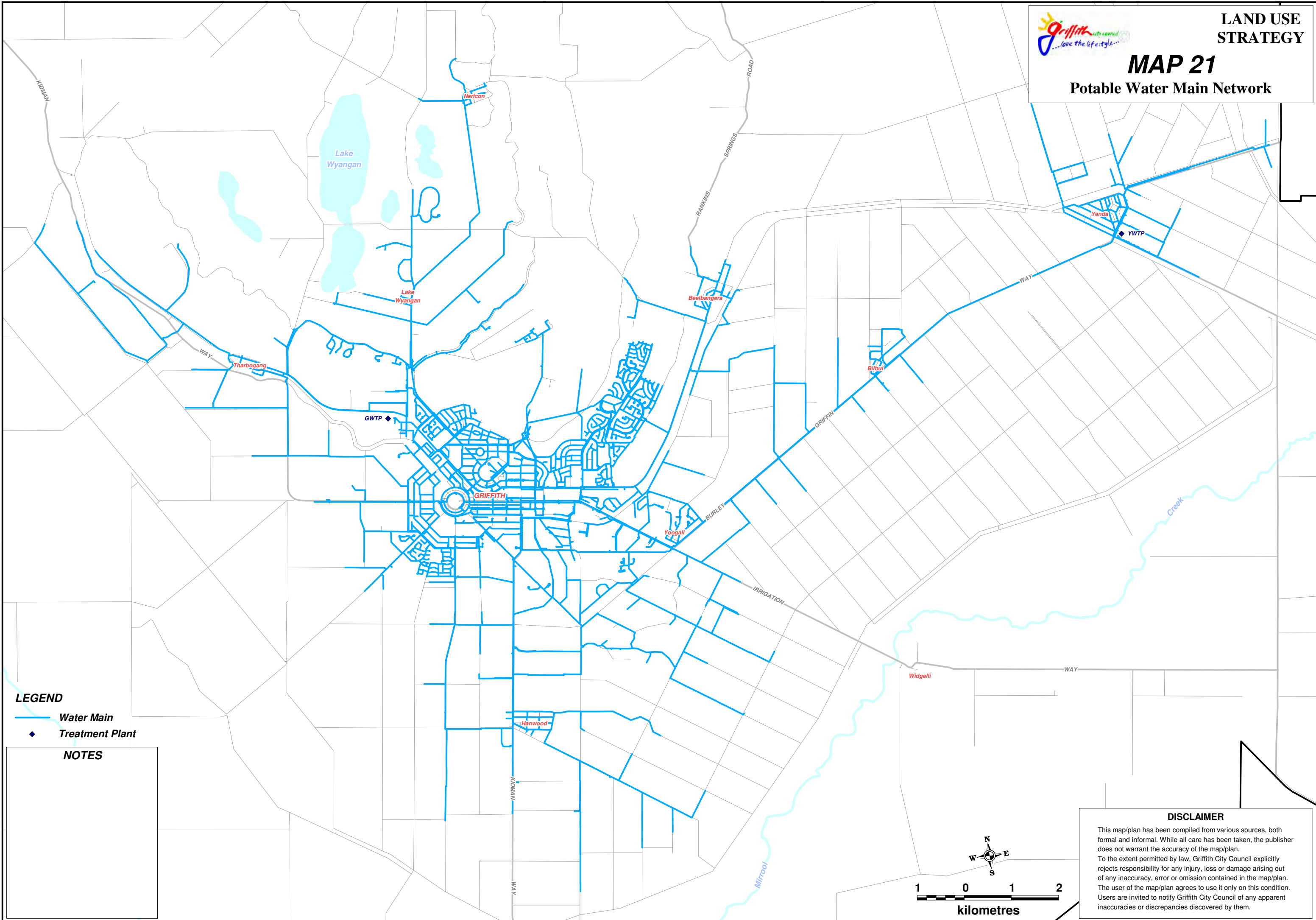






# MAP 21

## Potable Water Main Network



### LEGEND

- Water Main
- ◆ Treatment Plant

### NOTES

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## MAP 22

### Potable & Raw Water Network

0.5 0 0.5 1

kilometres



#### LEGEND

- Potable Water
- Raw Water
- Reservoir

Griffith Water Treatment Plant

Griffith Aerodrome

Dalton Park

14M Res

32M Res

9M Res

Griffith

Yoogali

#### NOTES

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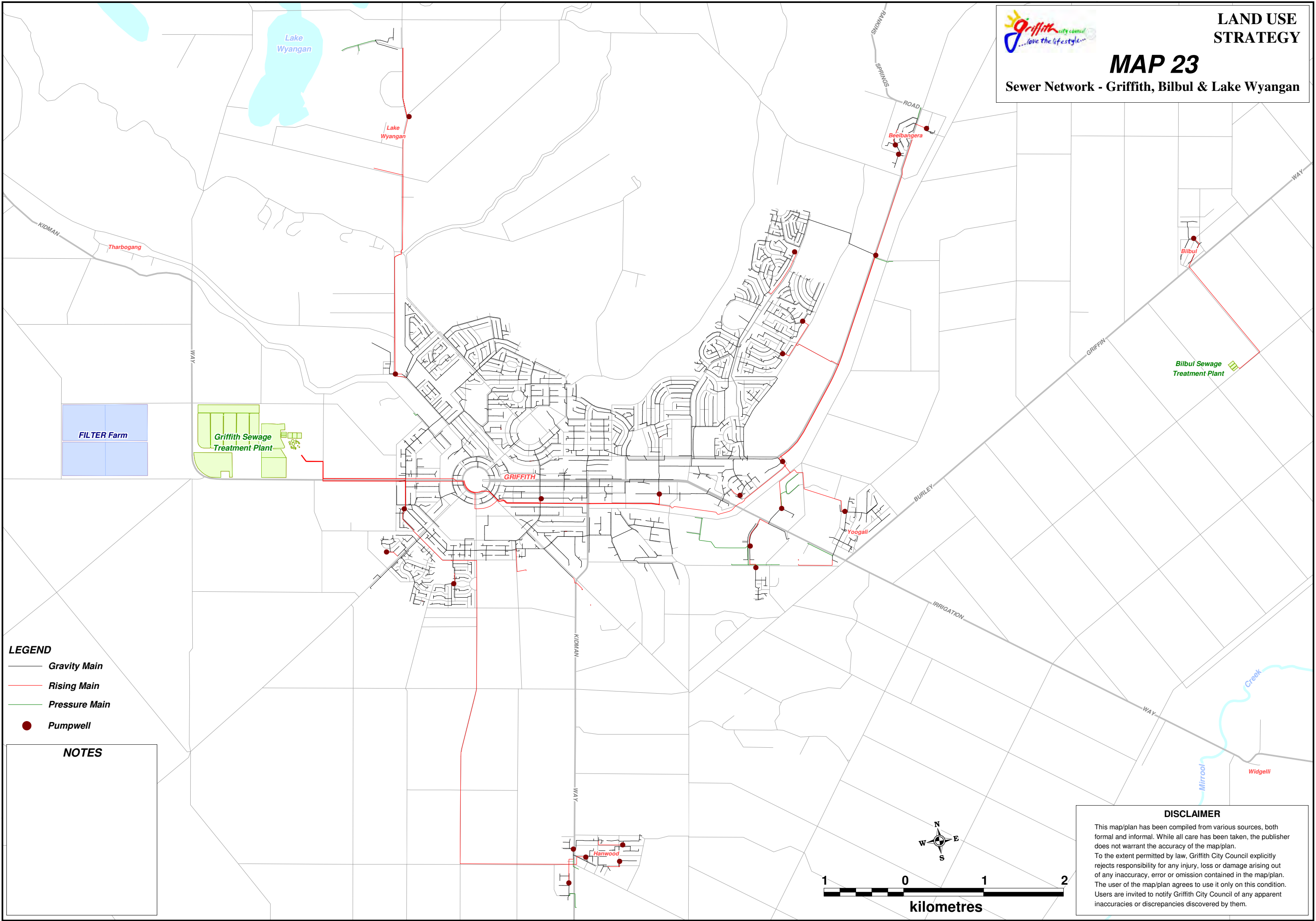
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# MAP 23

Sewer Network - Griffith, Bilbul & Lake Wyangan



**LEGEND**

- Gravity Main
- Rising Main
- Pressure Main
- Pumpwell

**NOTES**

kilometres

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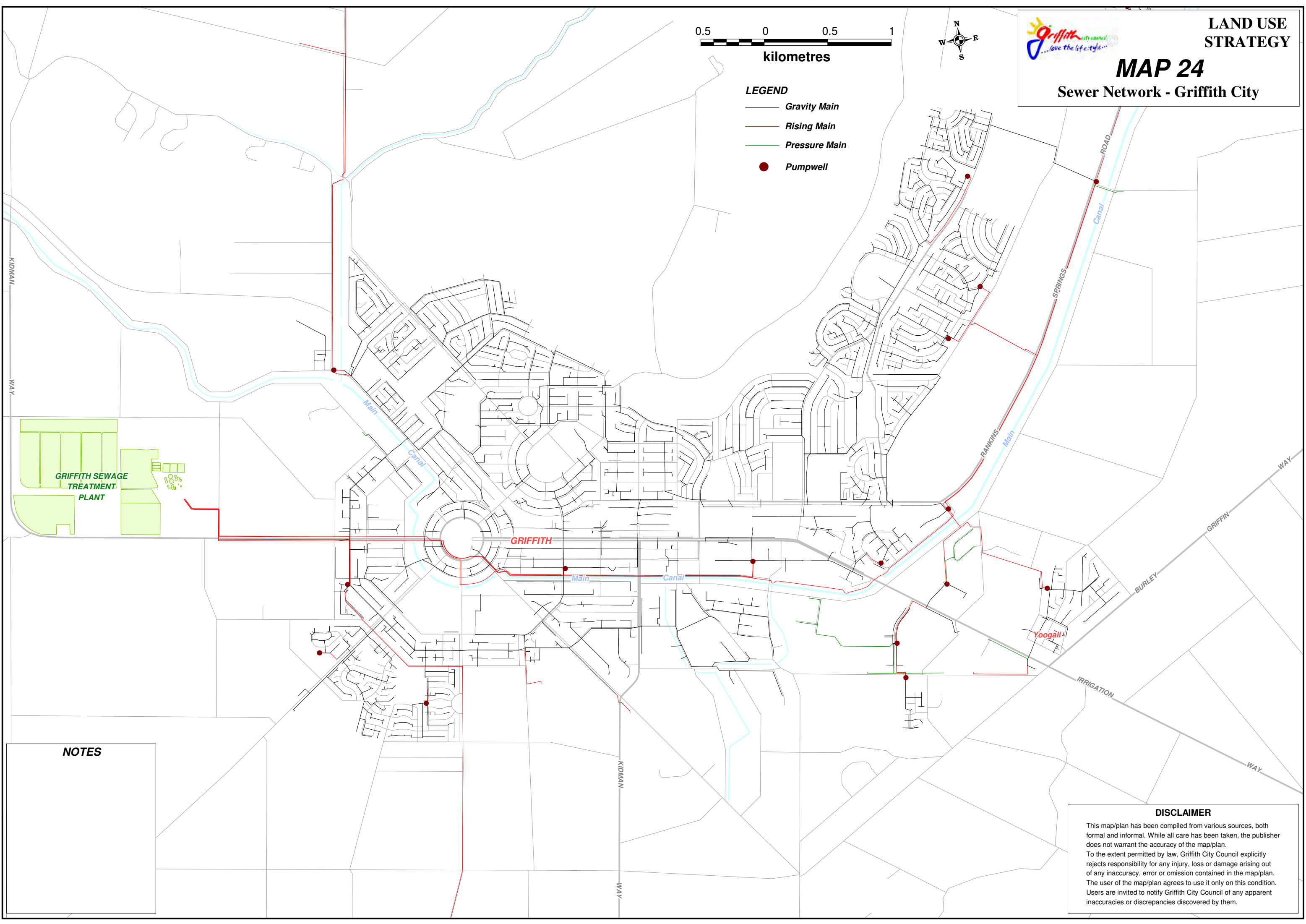
# MAP 24

## Sewer Network - Griffith City



### LEGEND

- Gravity Main
- Rising Main
- Pressure Main
- Pumpwell



### NOTES

### DISCLAIMER

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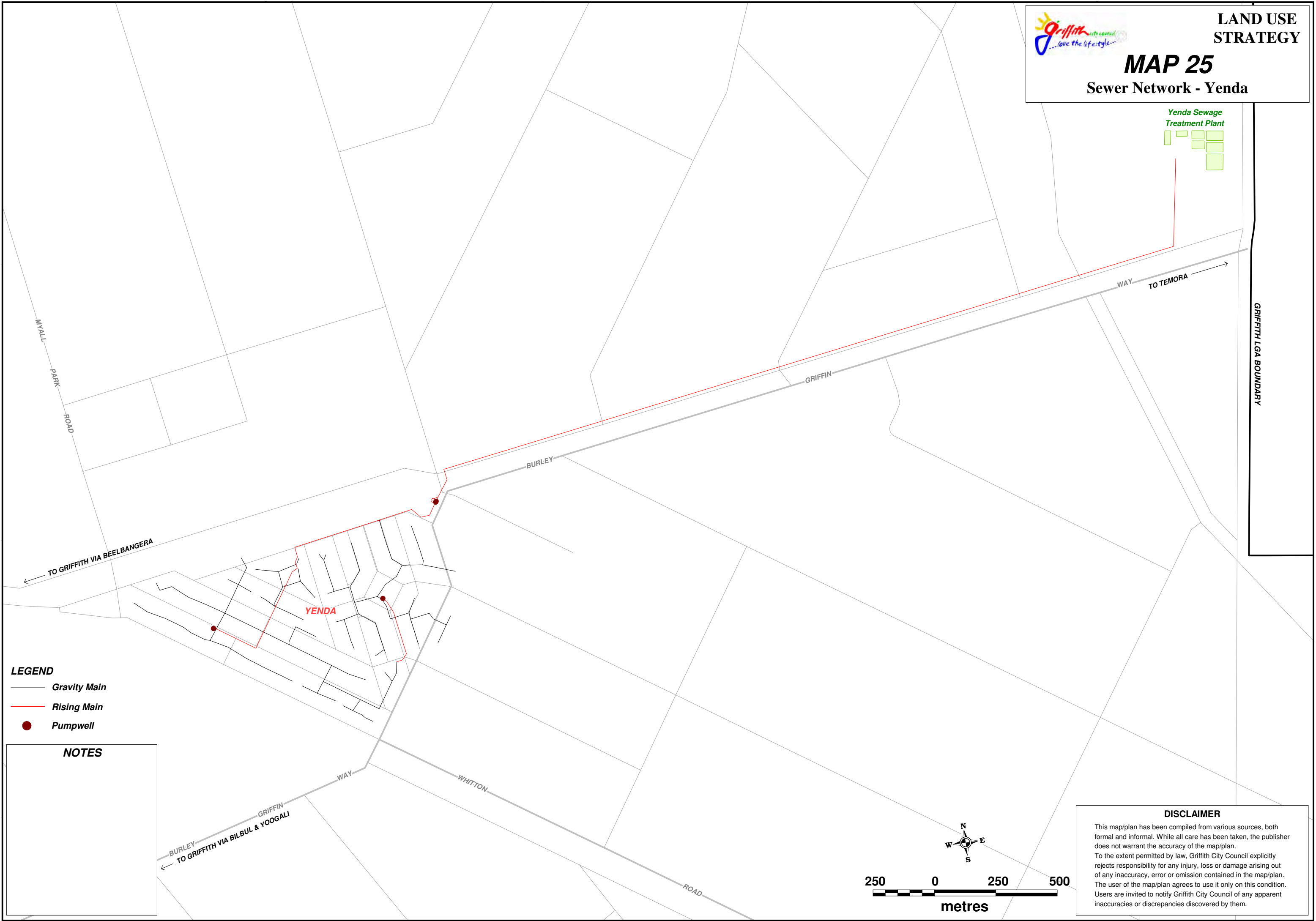
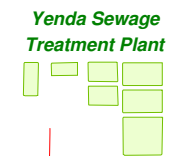
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# MAP 25

Sewer Network - Yenda



**LEGEND**

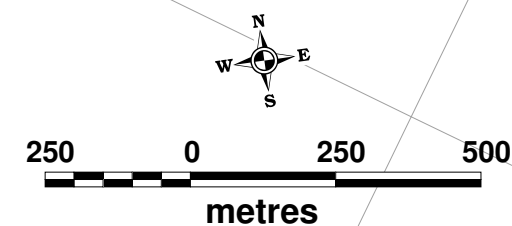
- Gravity Main
- Rising Main
- Pumpwell

**NOTES**

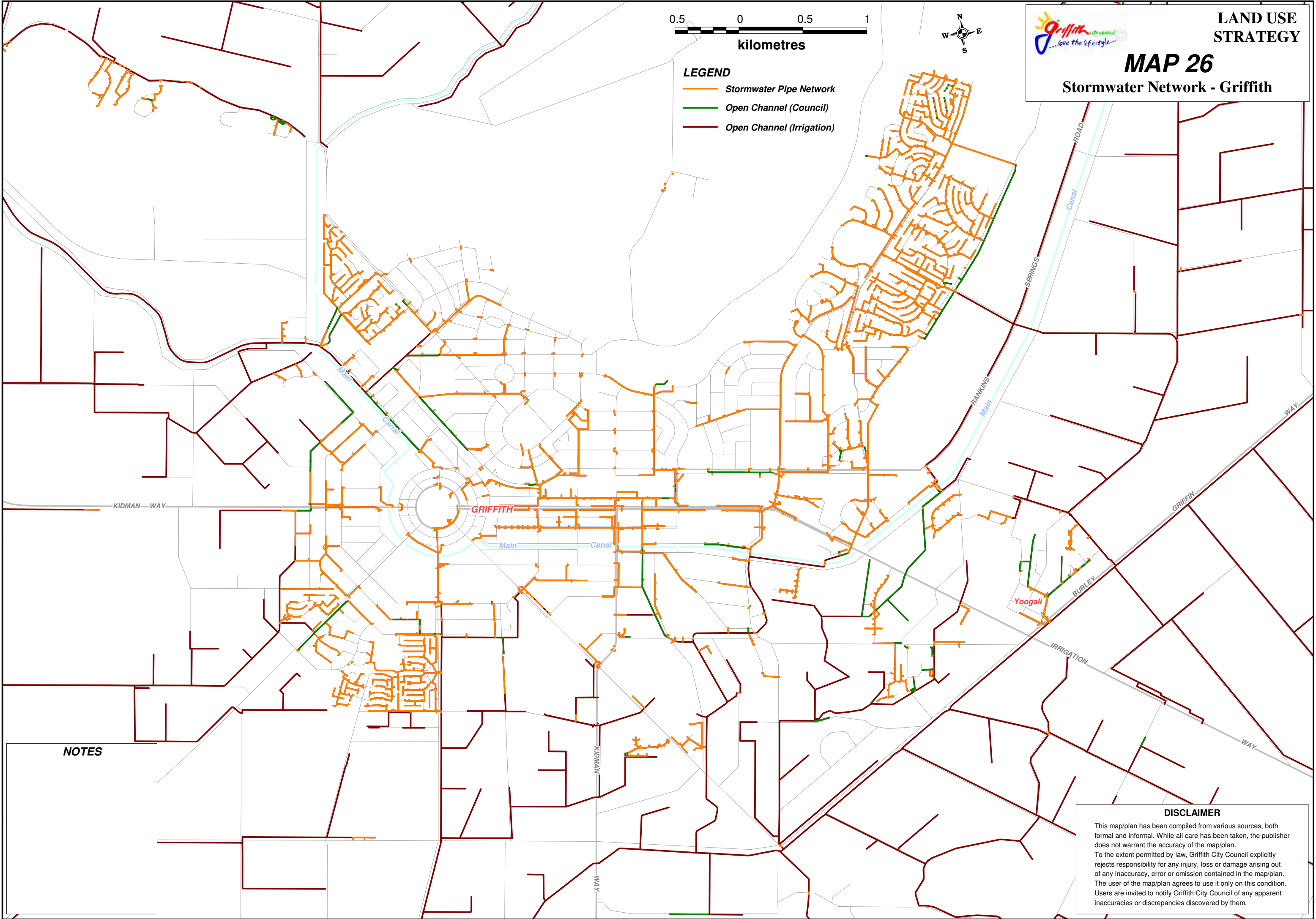
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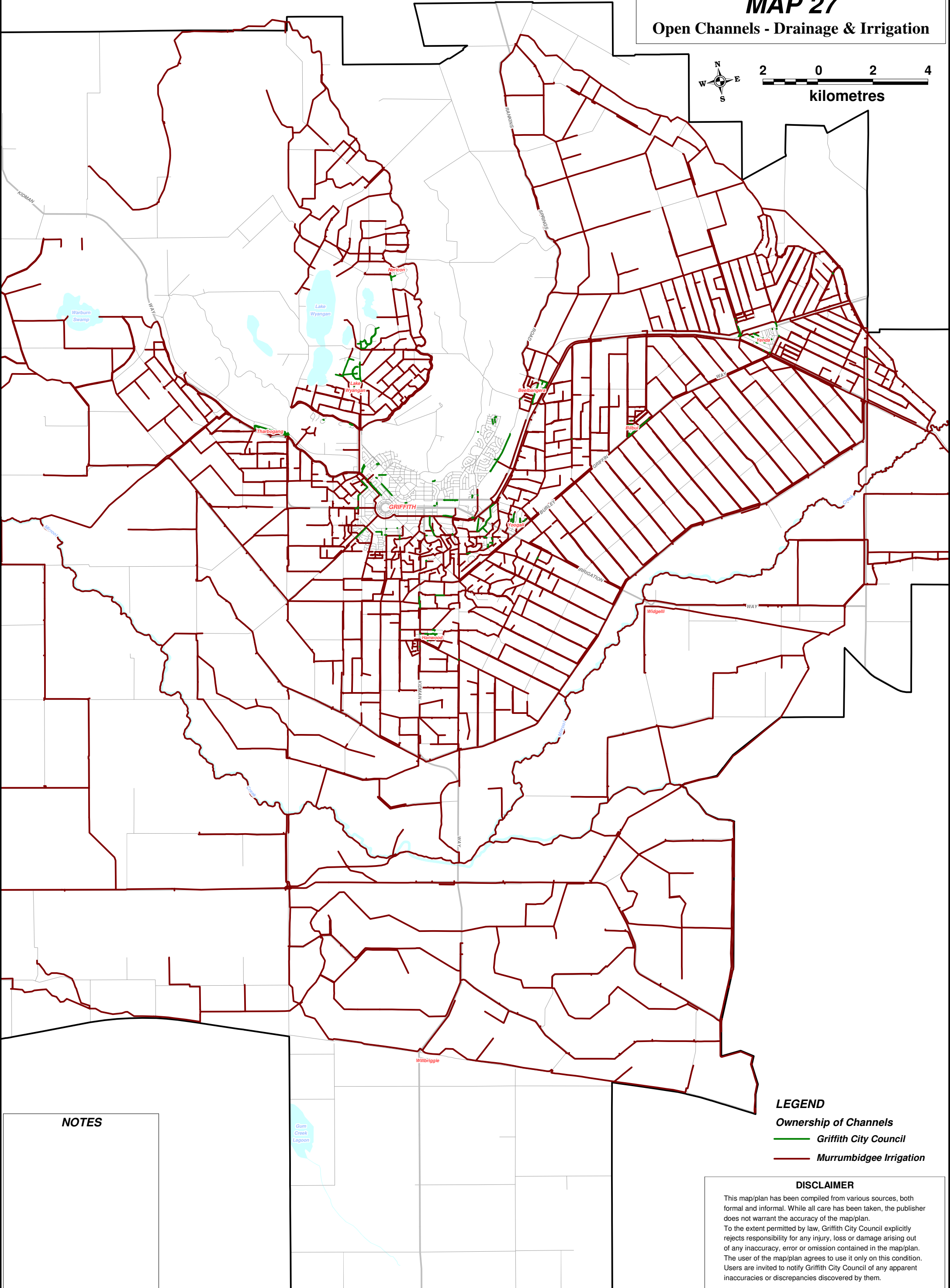






MAP 27

Open Channels - Drainage & Irrigation



NOTES

LEGEND

Ownership of Channels

Griffith City Council

Murrumbidgee Irrigation

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MAP 28

Powerlines & Zone Substations (Griffith LGA)



2 0 2 4

kilometres

LEGEND

- Overhead Powerline
- Underground Powerline
- Zone Substation

NB: This map shows subsets of datasets originally provided to Griffith City Council by Country Energy

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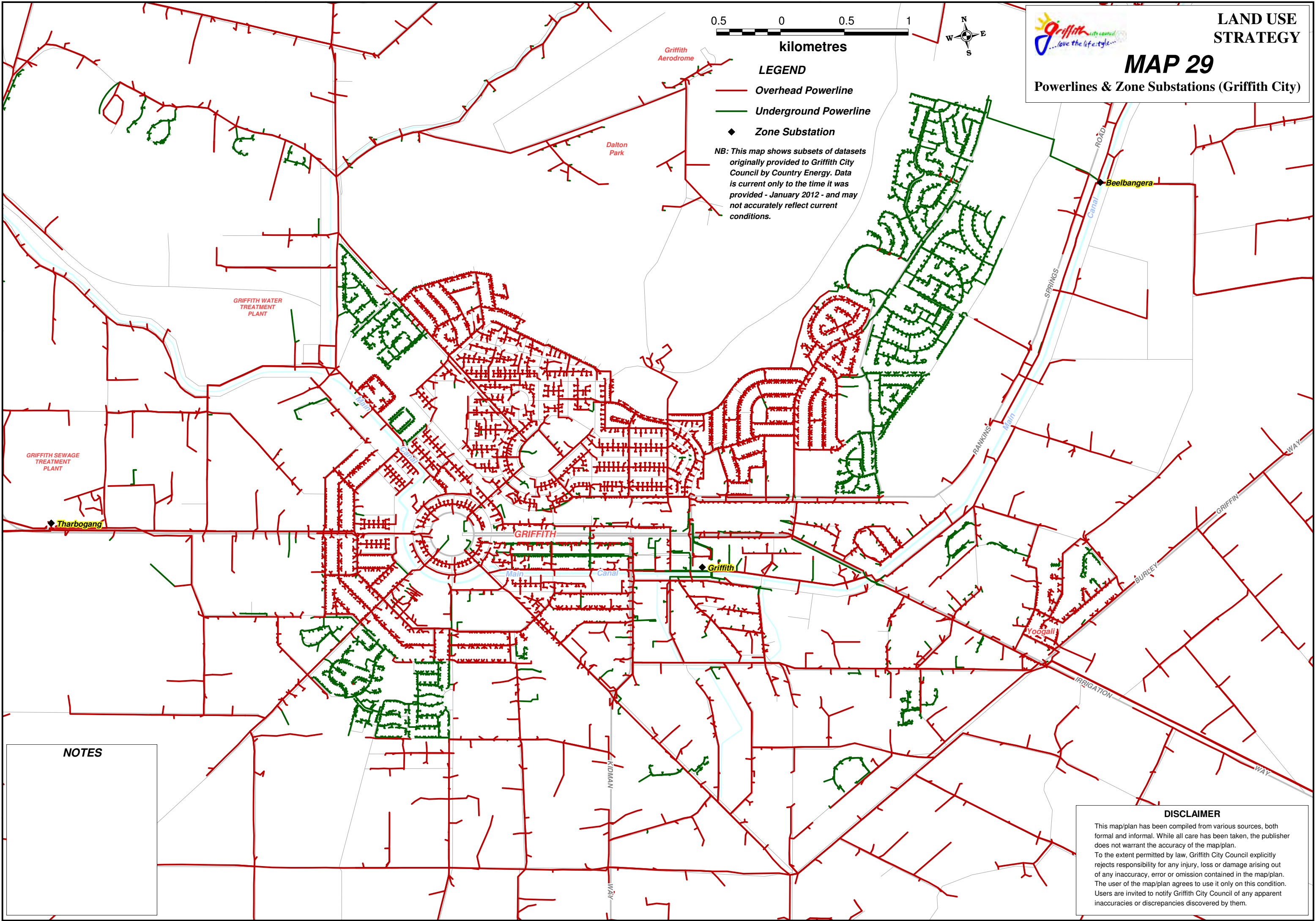
NOTES

INSET

Darlington Point

SEE INSET





# MAP 29

Powerlines & Zone Substations (Griffith City)



## LEGEND

- Overhead Powerline
- Underground Powerline
- Zone Substation

NB: This map shows subsets of datasets originally provided to Griffith City Council by Country Energy. Data is current only to the time it was provided - January 2012 - and may not accurately reflect current conditions.

## NOTES

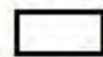
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## Legend

Gas Supply Area



JGN Primary & Secondary Mains

Secondary Main

APA Pipelines (NSW)

APA Pipelines (NSW)



Jemena Gas Networks

Griffith Gas Supply

0 0.5 1 1.5 2  
Kilometres

12 October 2011

Produced by GIS Gas, Assets & Investments  
Jemena Asset Management  
Sydney Olympic Park NSW 2127

LAND USE  
STRATEGY

## MAP 30 Bulk Gas Supply





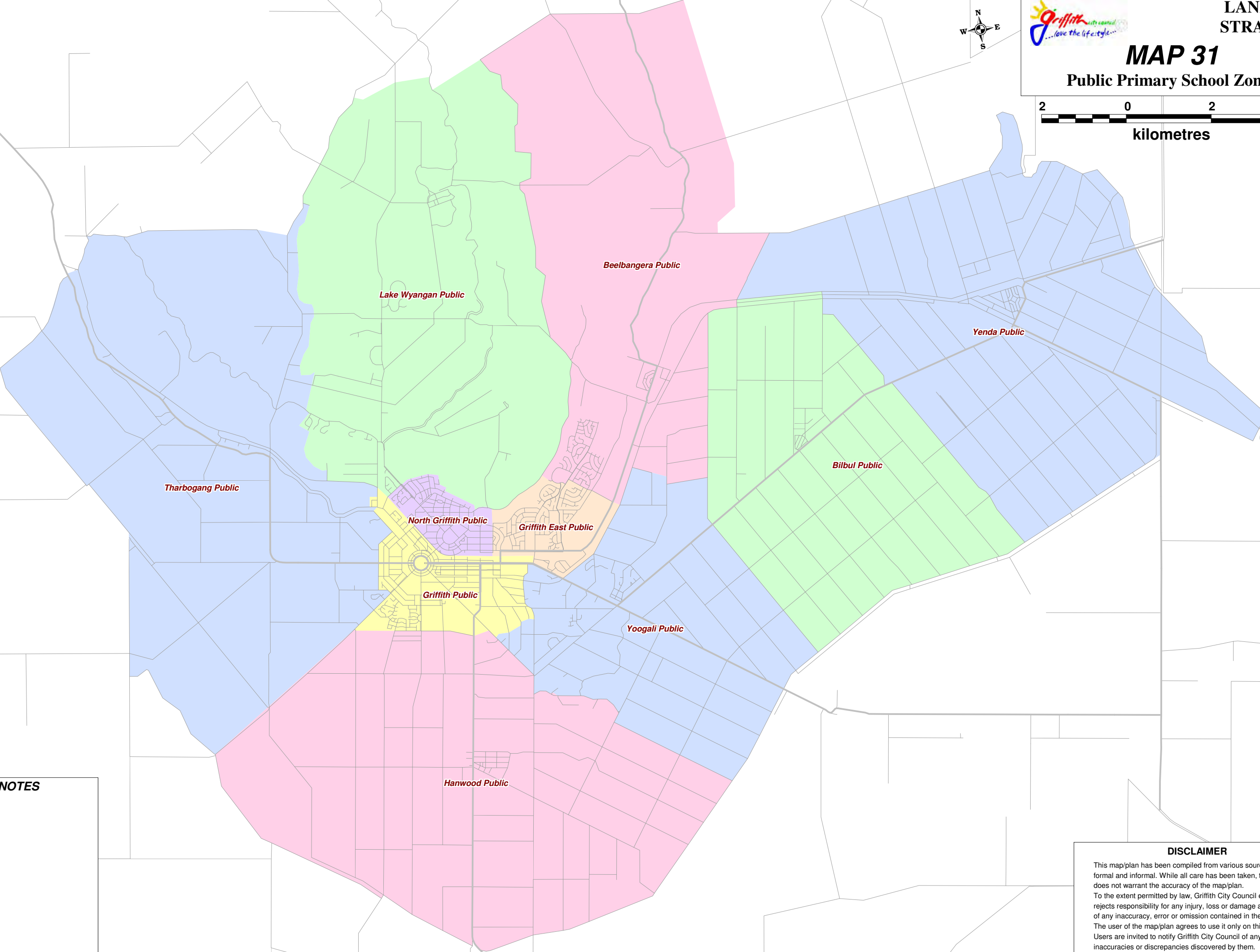


# MAP 31

## Public Primary School Zones



kilometres



### NOTES

### DISCLAIMER

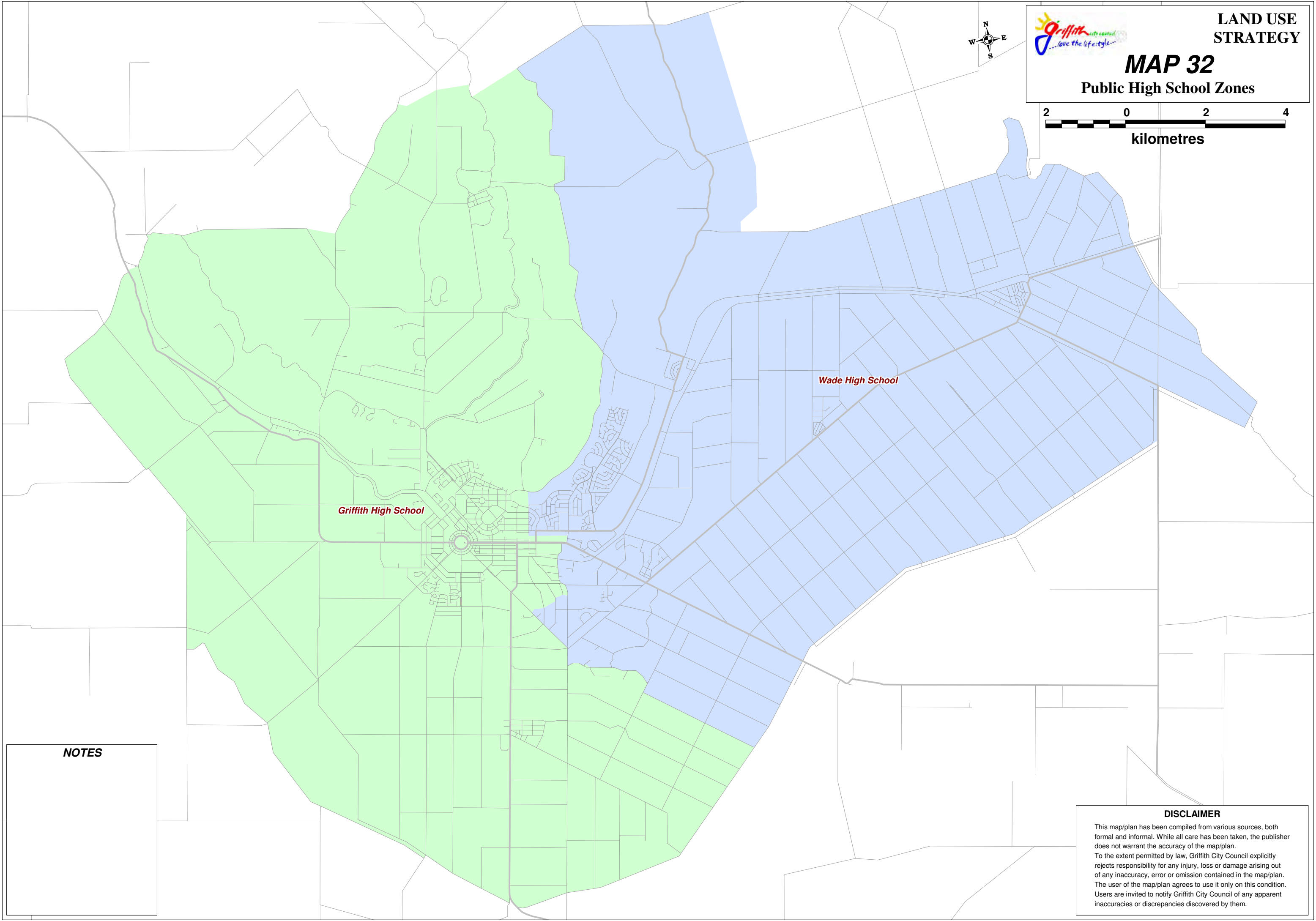
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**MAP 32**  
**Public High School Zones**



**NOTES**

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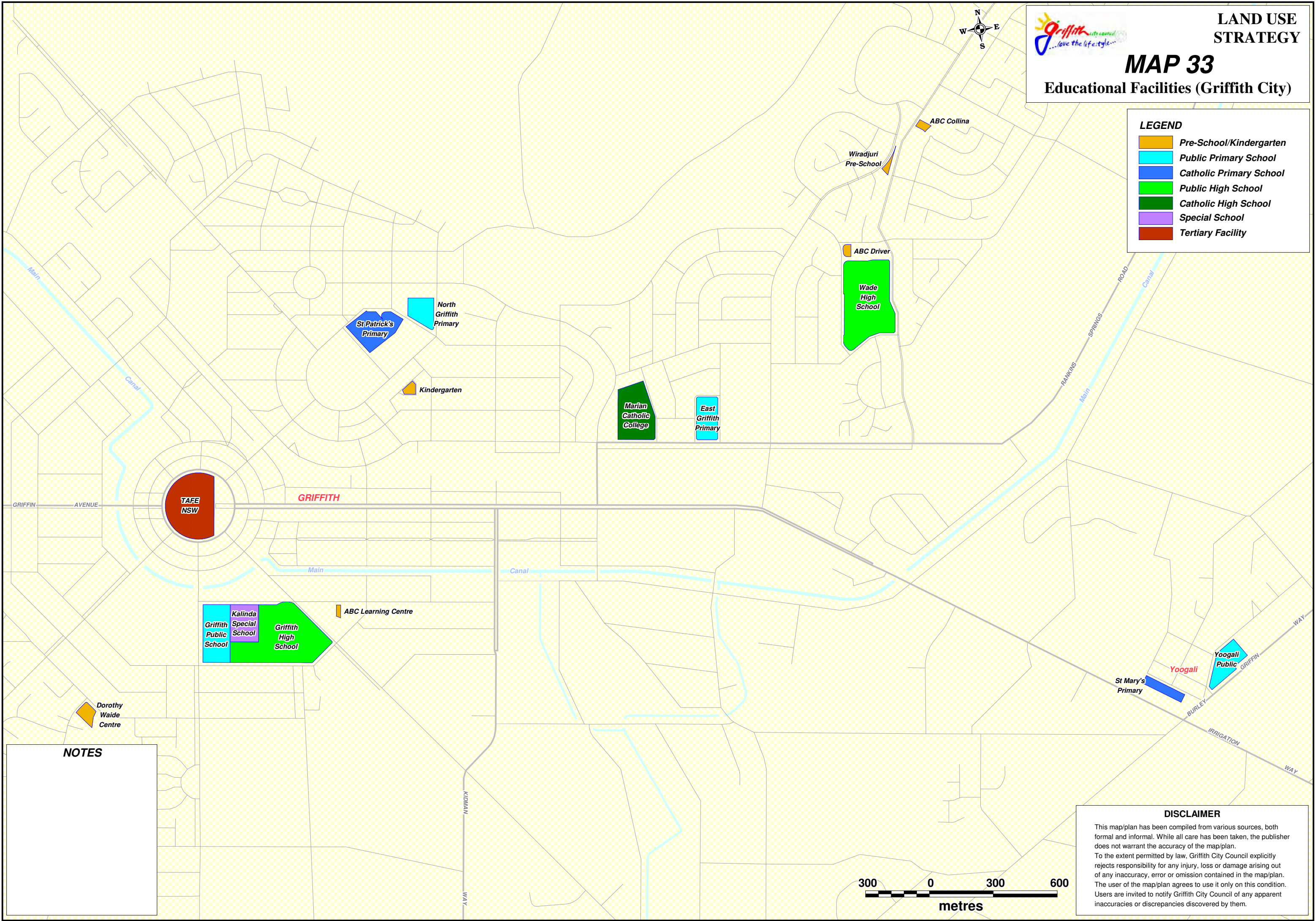


# MAP 33

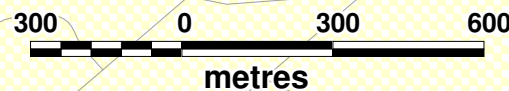
## Educational Facilities (Griffith City)

**LEGEND**

- Pre-School/Kindergarten
- Public Primary School
- Catholic Primary School
- Public High School
- Catholic High School
- Special School
- Tertiary Facility



**NOTES**



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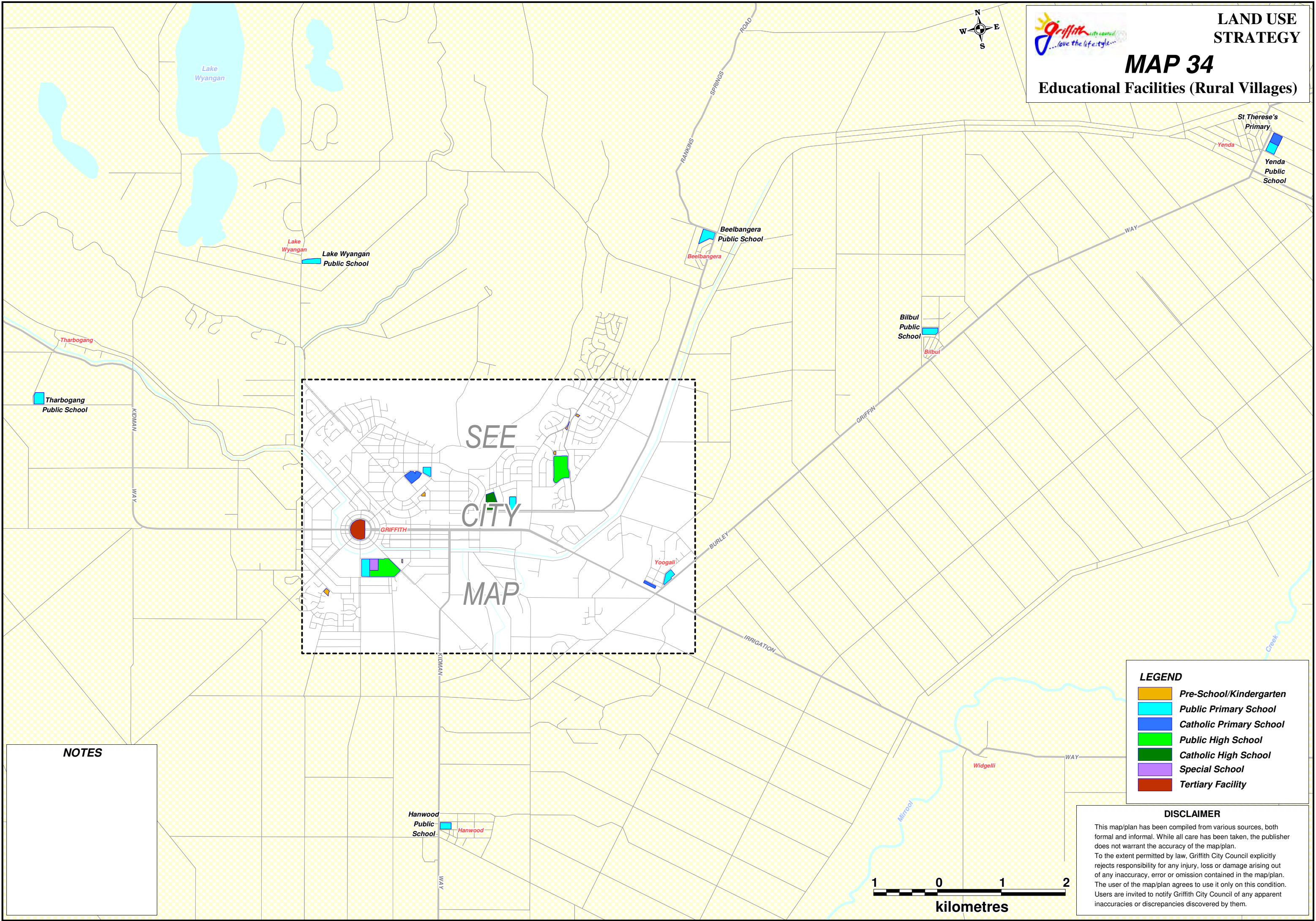
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# MAP 34

## Educational Facilities (Rural Villages)



**NOTES**

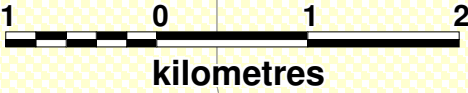
**LEGEND**

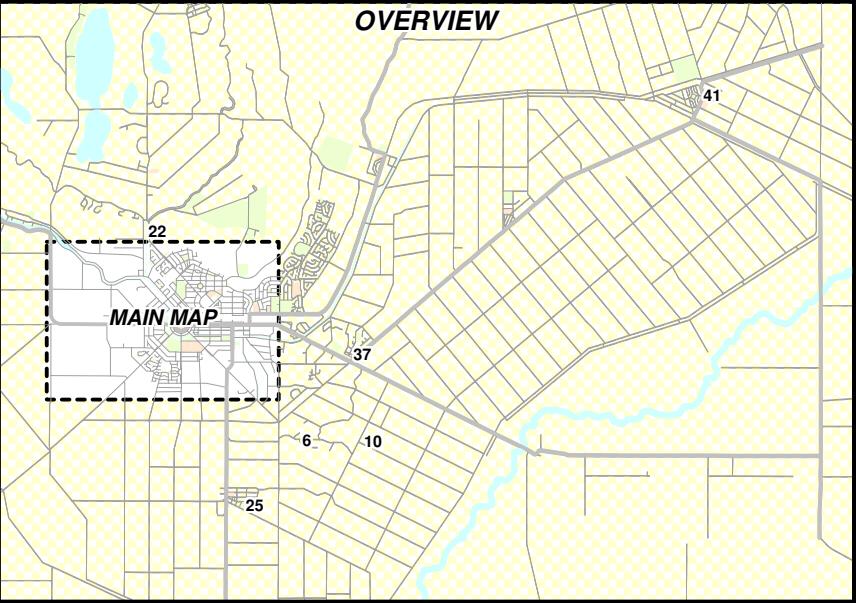
- Pre-School/Kindergarten
- Public Primary School
- Catholic Primary School
- Public High School
- Catholic High School
- Special School
- Tertiary Facility


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**LAND USE  
STRATEGY**

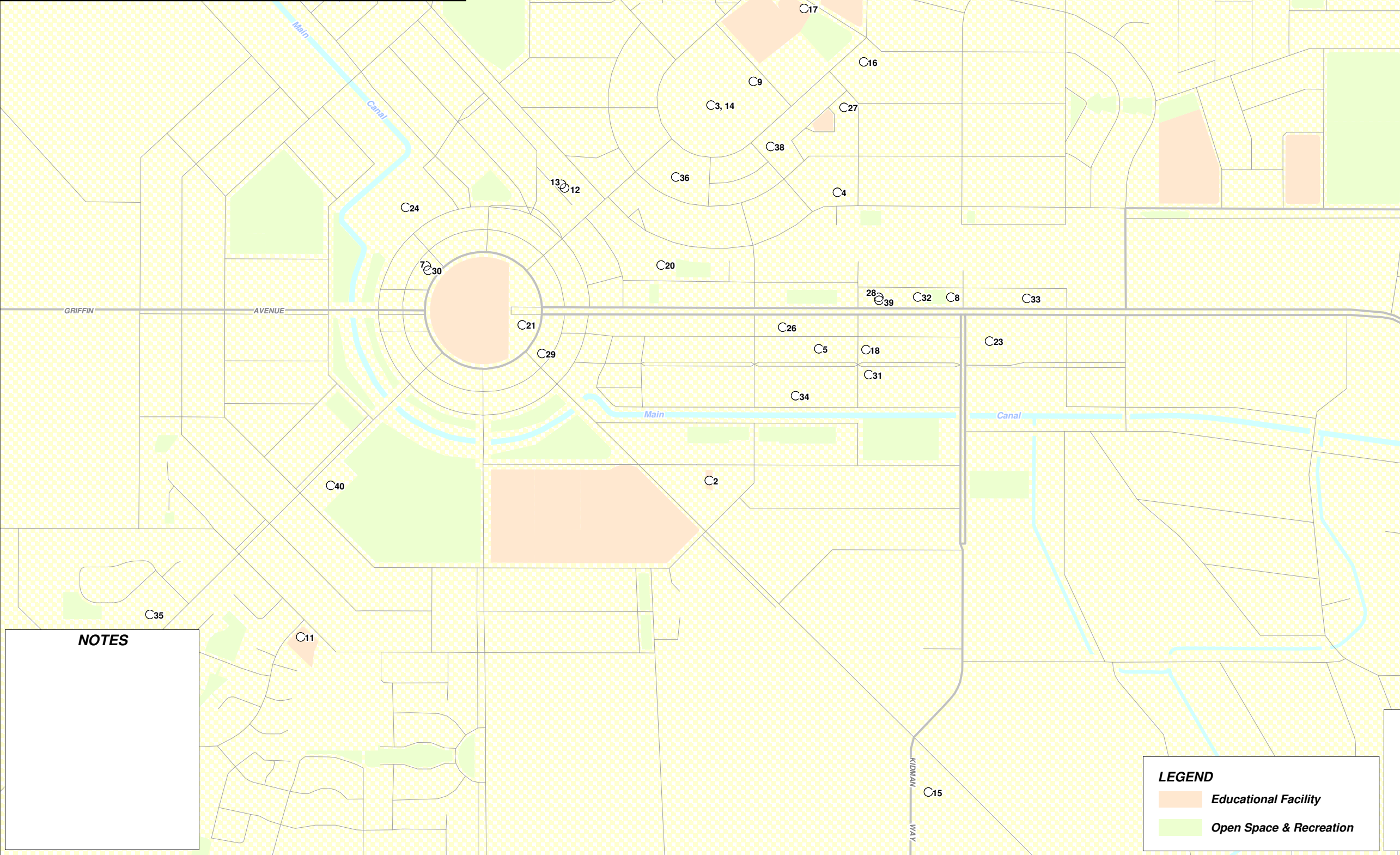
**MAP 35**

Community Facilities

2500250500

metres





- INDEX OF FACILITIES**
- Driver Pre-School
  - Griffith Pre-School
  - Australian Red Cross Blood Service
  - Baptist Hall
  - Centrelink
  - CSIRO Library
  - Cubby House - Griffith Regional Family Services Inc.
  - CWA Hall
  - Dental Clinic
  - Department of Agriculture Conference Rooms
  - Dorothy Waide Centre for Early Learning
  - Griffith Aboriginal Land Council
  - Griffith Aboriginal Medical Service
  - Griffith Base Hospital
  - Griffith Cinema
  - Griffith Dental Surgery
  - Griffith Girl Guides Association
  - Griffith Physiotherapy & Sports Injury Centre P/L
  - Griffith Pioneer Park Museum
  - Griffith Police and Community Youth Club Child Care
  - Griffith Regional Theatre
  - Griffith Scout Association
  - Griffith Visitors Centre
  - Griffith Women's Refuge
  - Hanwood Church Hall
  - Jason's Gym
  - Langunyah House Youth Refuge
  - Library meeting room
  - Masonic Hall
  - Neighbourhood House Community Centre
  - NSW Farmers Association
  - RSL Memorial Hall
  - Salvation Army Red Shield Family Store
  - Senior Citizens Centre
  - Seventh Day Adventist Hall
  - St Alban's Hall
  - St Mary's Hall
  - Uniting Hall
  - Western Riverina Community Library
  - Woodside Hall
  - Yenda Hall

**NOTES**

**LEGEND**

Educational Facility

Open Space & Recreation

**DISCLAIMER**

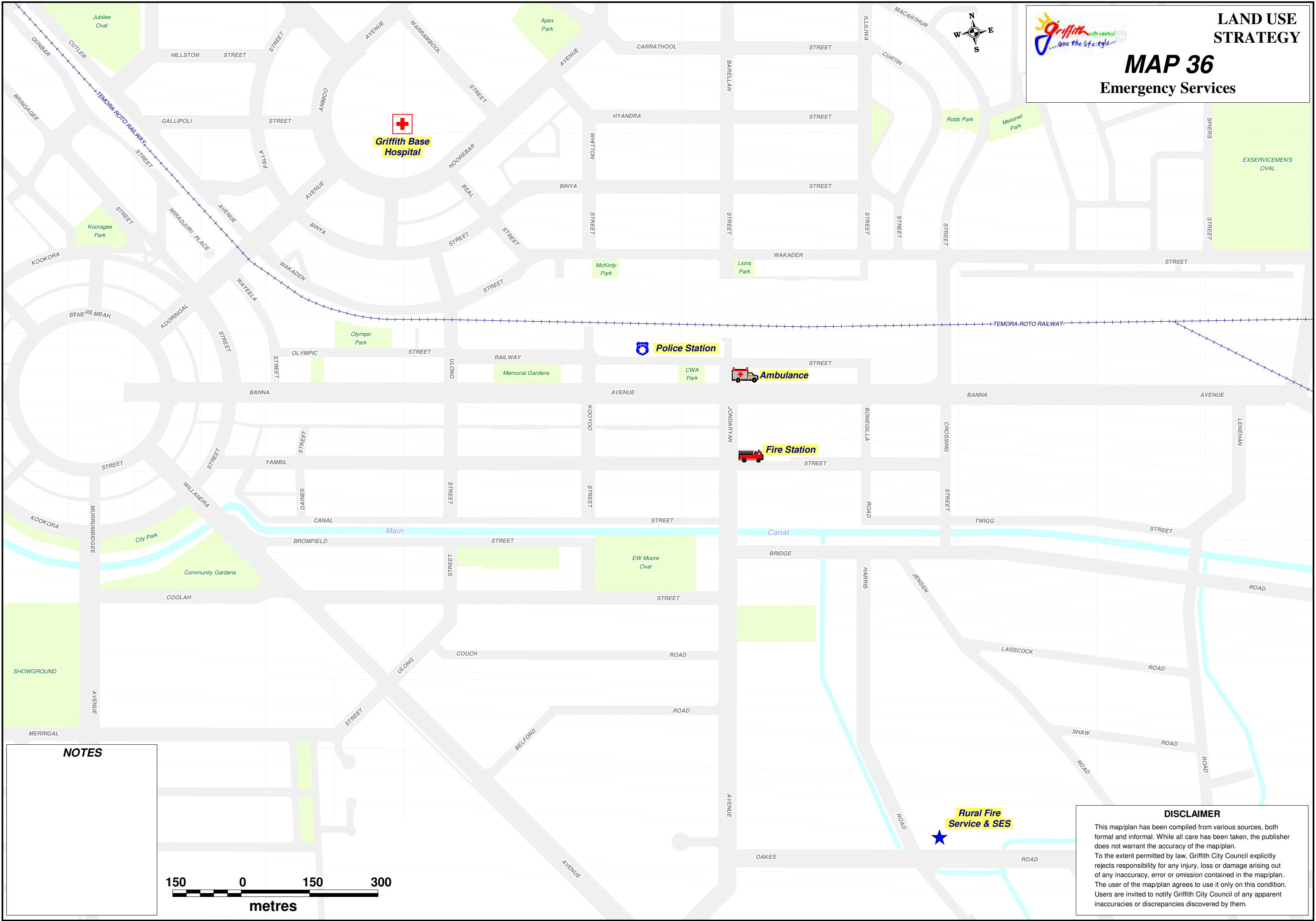
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# MAP 36

Emergency Services



**NOTES**



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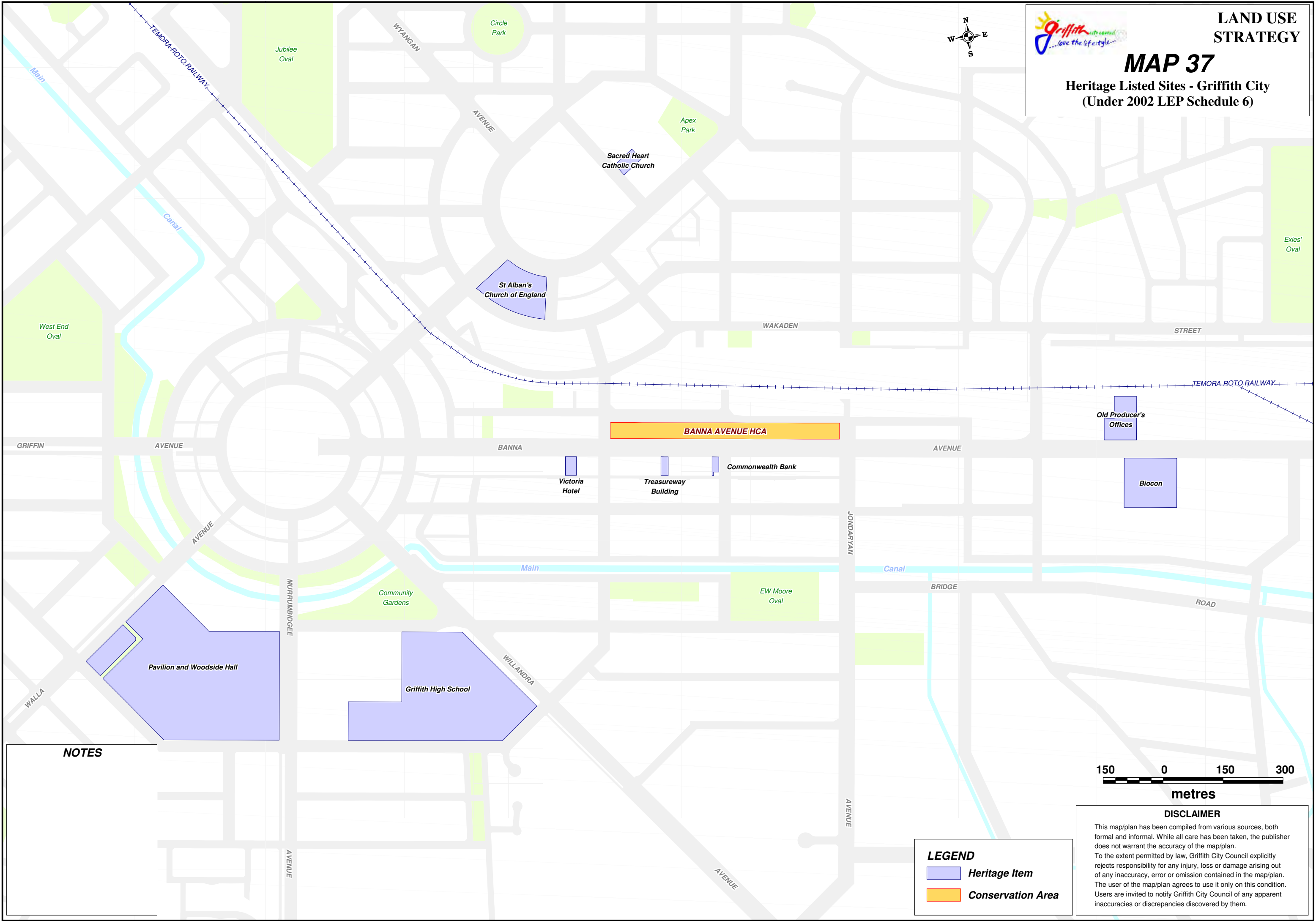
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MAP 37

Heritage Listed Sites - Griffith City  
(Under 2002 LEP Schedule 6)



**NOTES**

**LEGEND**

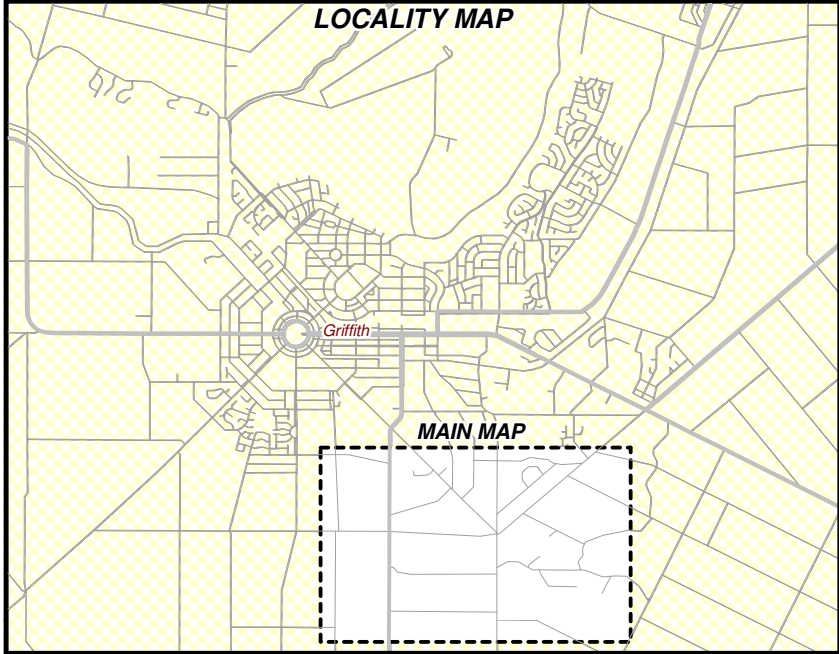
**Heritage Item**

**Conservation Area**

**DISCLAIMER**

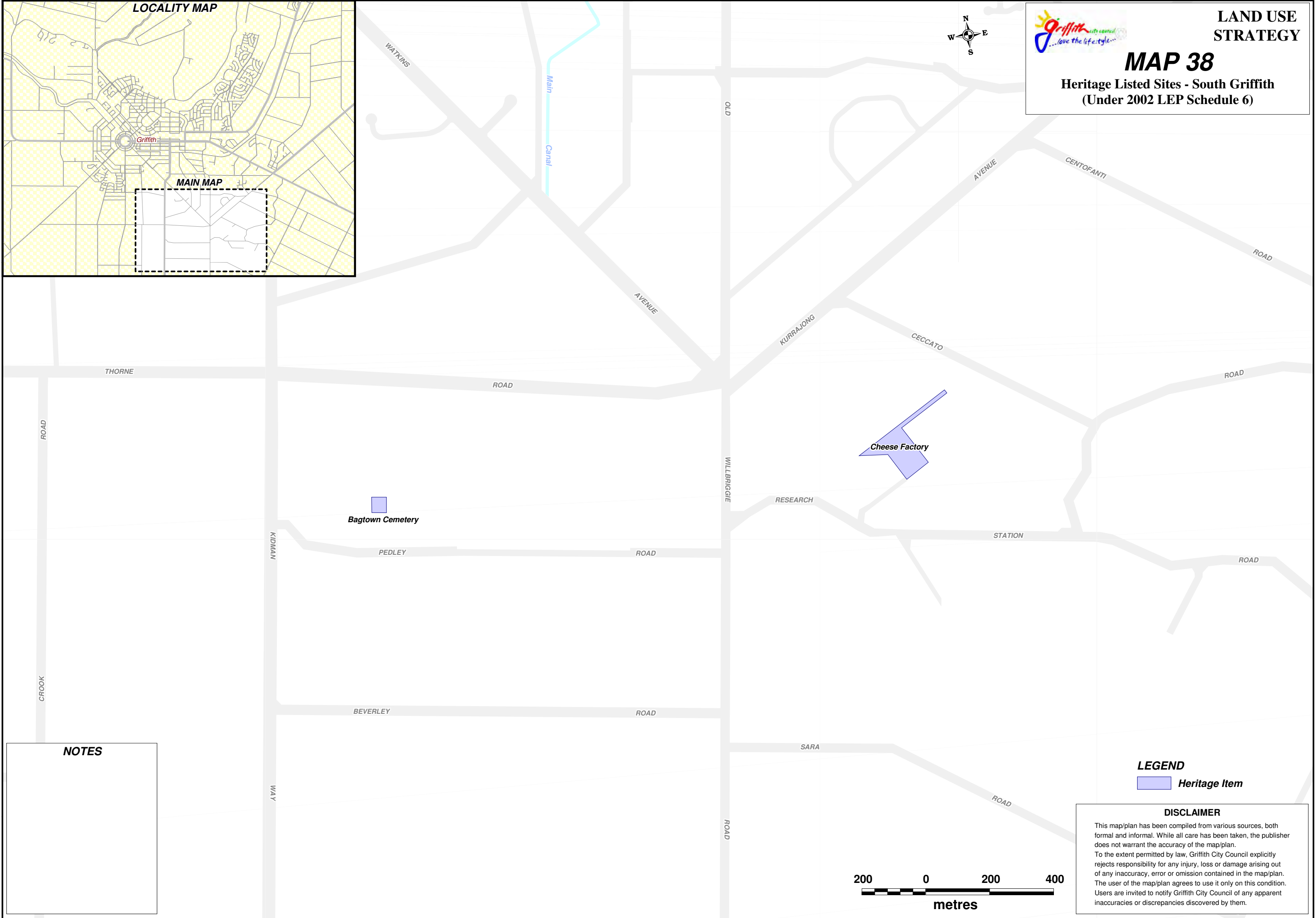
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**LAND USE  
STRATEGY**  
**MAP 38**  
Heritage Listed Sites - South Griffith  
(Under 2002 LEP Schedule 6)



**NOTES**

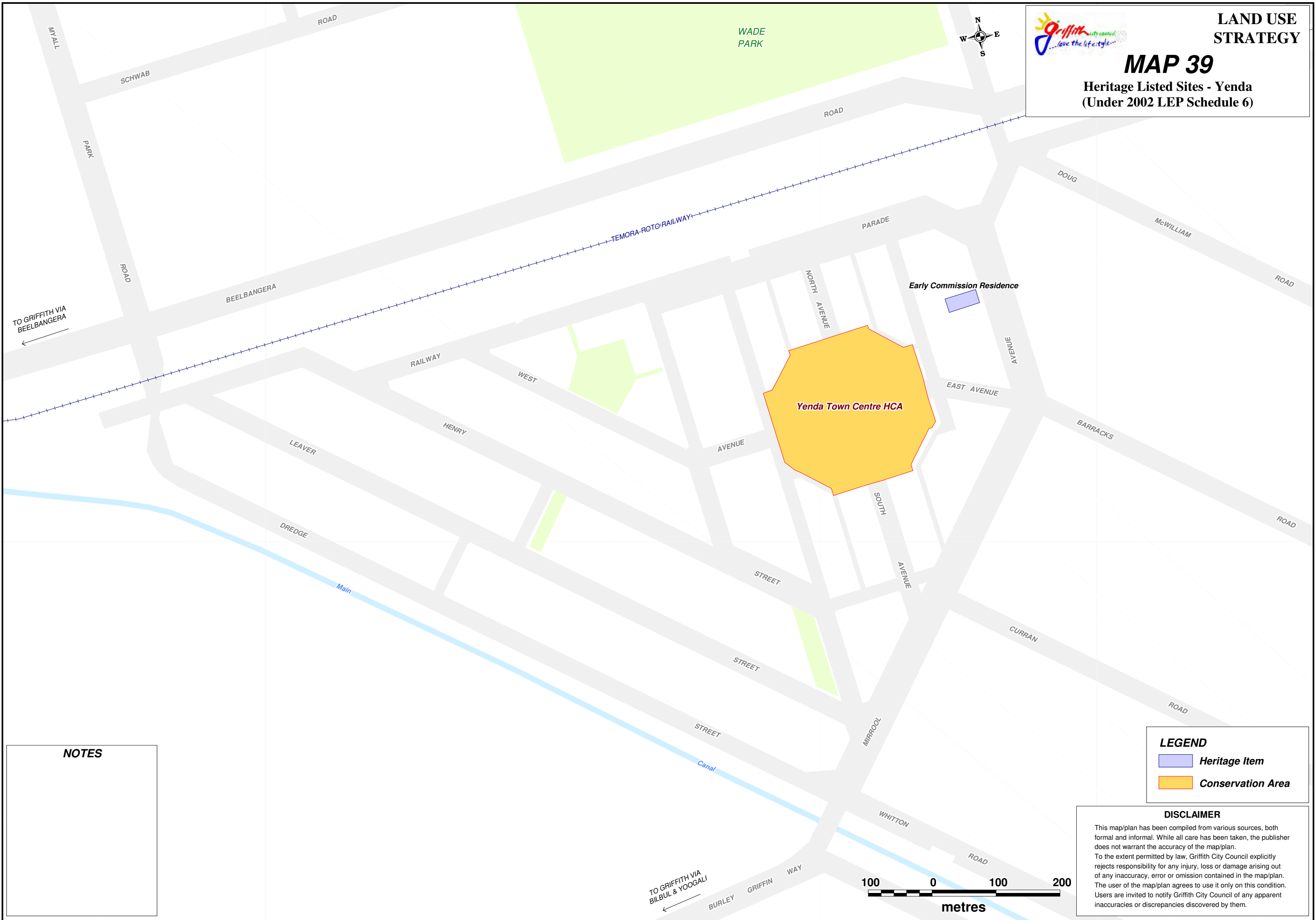
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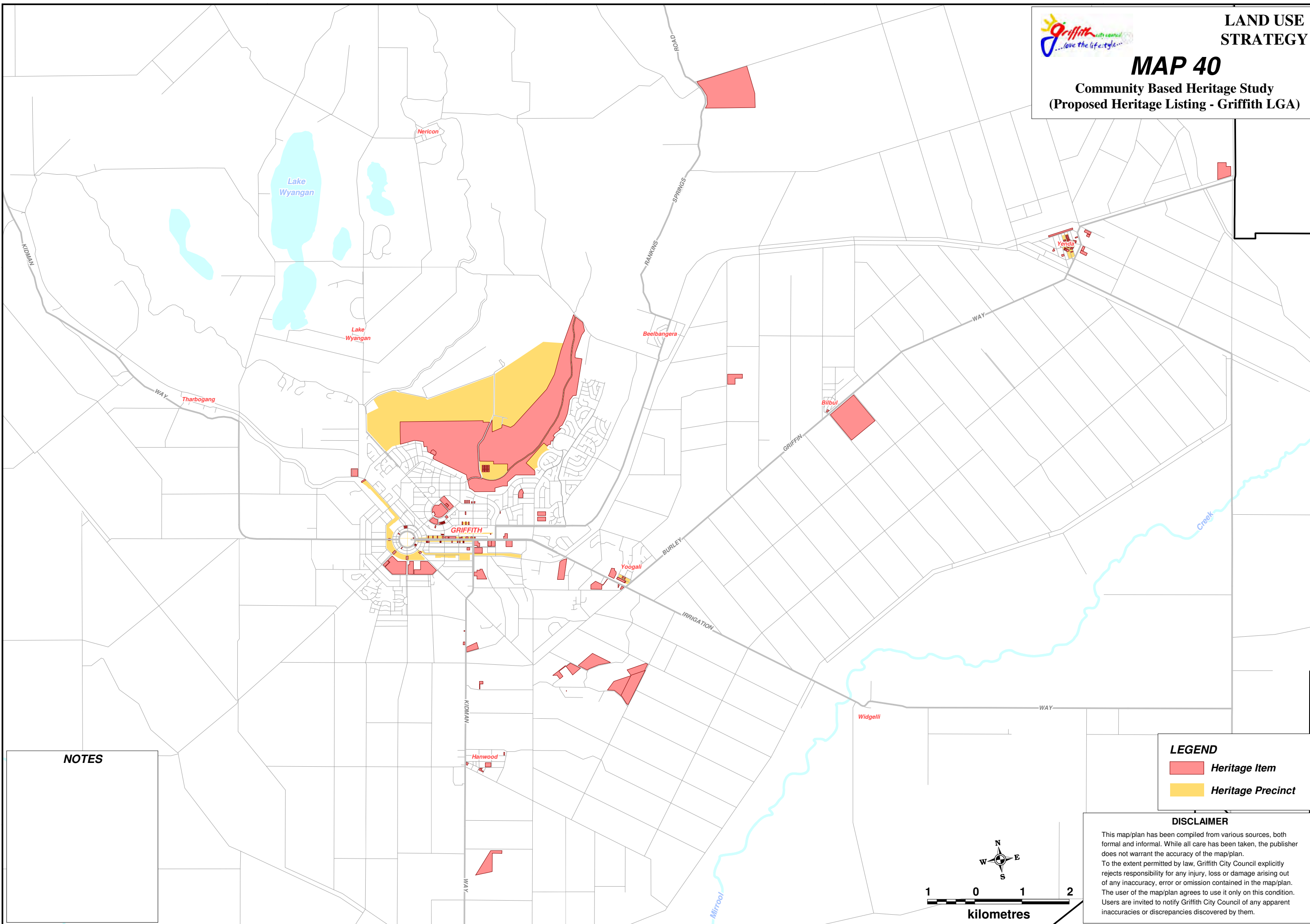
## Heritage Listed Sites - Yenda (Under 2002 LEP Schedule 6)





# MAP 40

Community Based Heritage Study  
(Proposed Heritage Listing - Griffith LGA)



## NOTES

## LEGEND

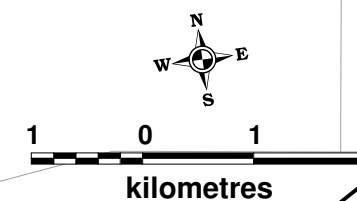
- Heritage Item**
- Heritage Precinct**

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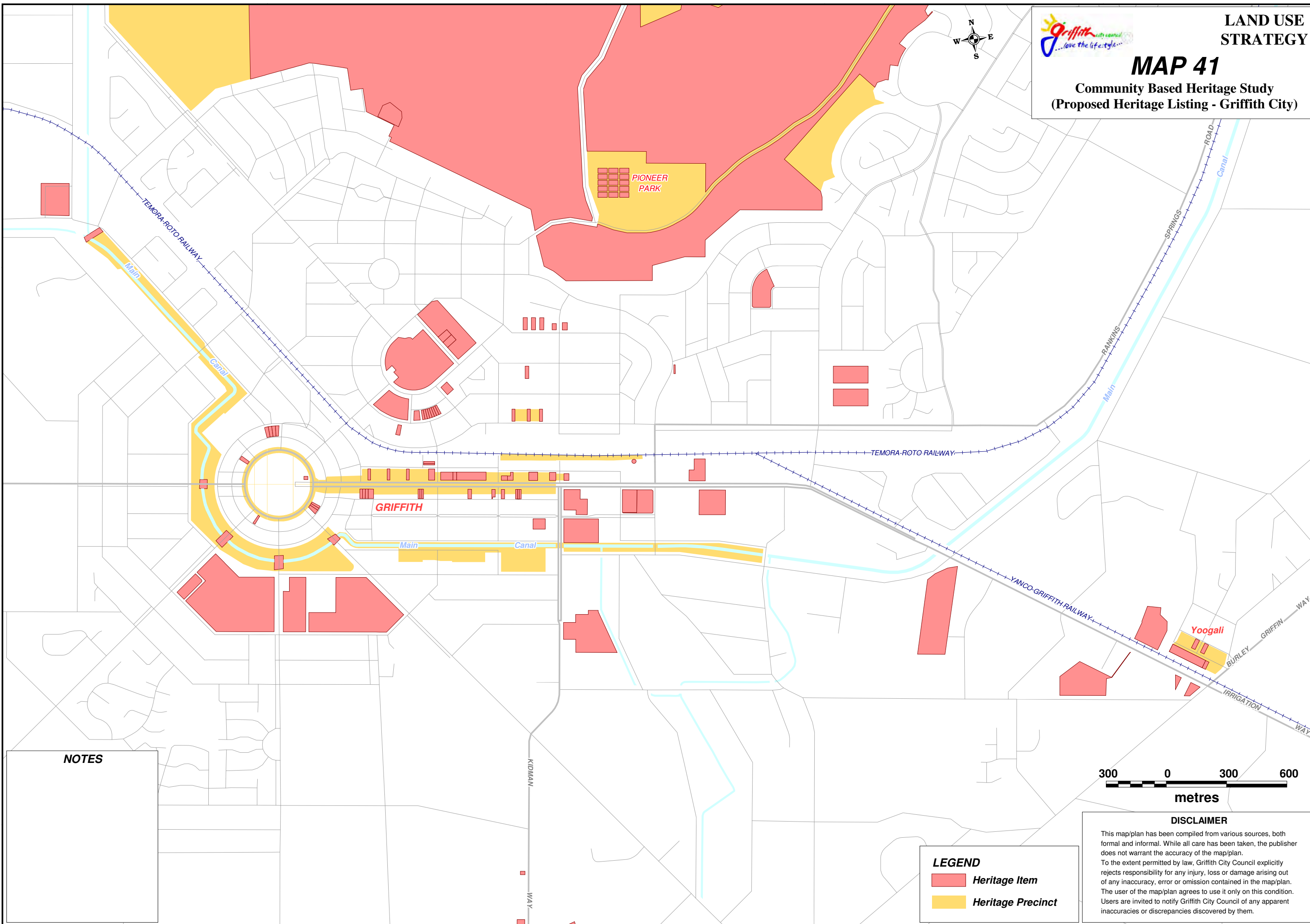
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# MAP 41

Community Based Heritage Study  
(Proposed Heritage Listing - Griffith City)



## NOTES



## LEGEND

- Heritage Item
- Heritage Precinct

## DISCLAIMER

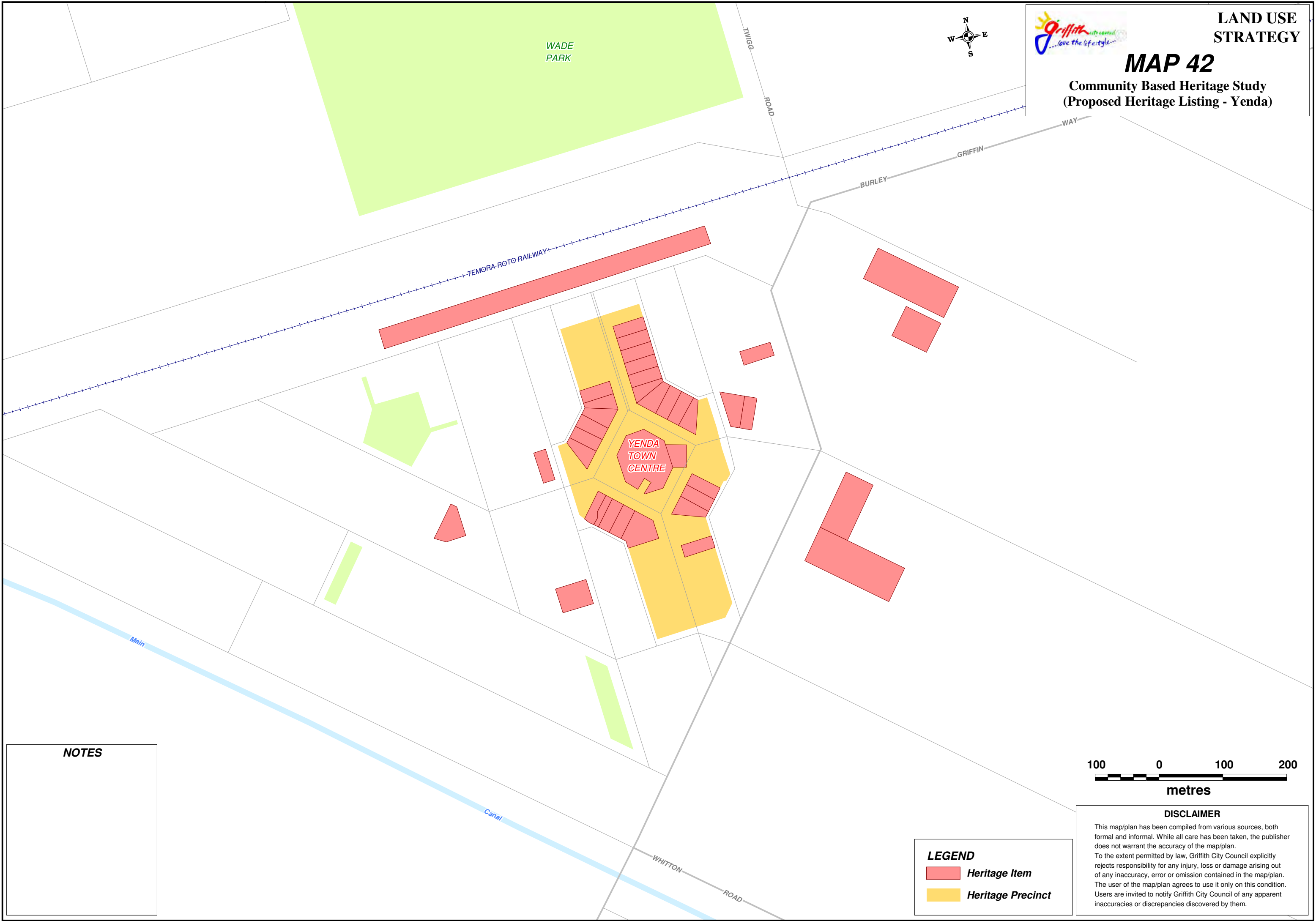
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# MAP 42

Community Based Heritage Study  
(Proposed Heritage Listing - Yenda)



**NOTES**



**LEGEND**

- Heritage Item**
- Heritage Precinct**

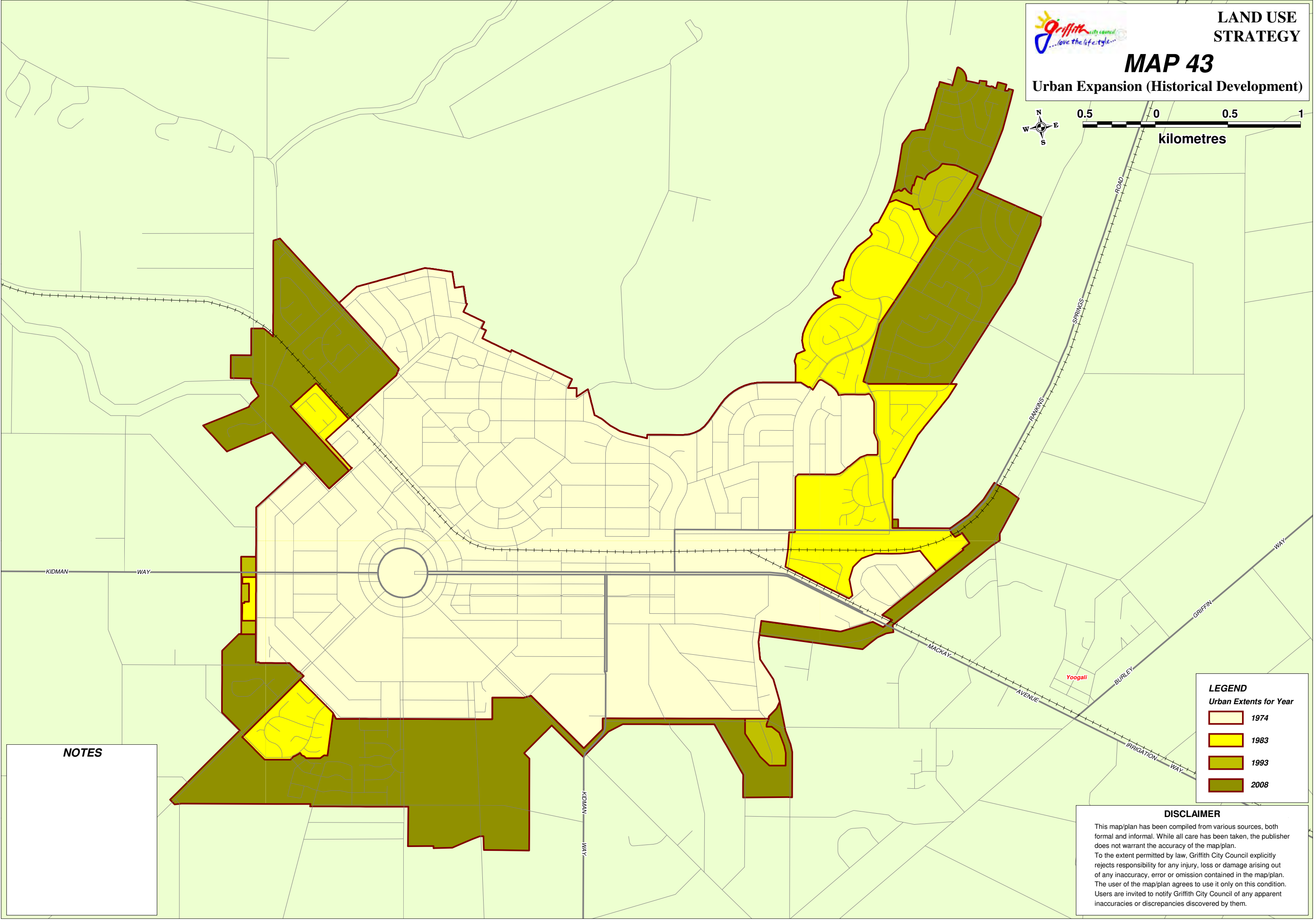
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**NOTES**

**LEGEND**  
*Urban Extents for Year*

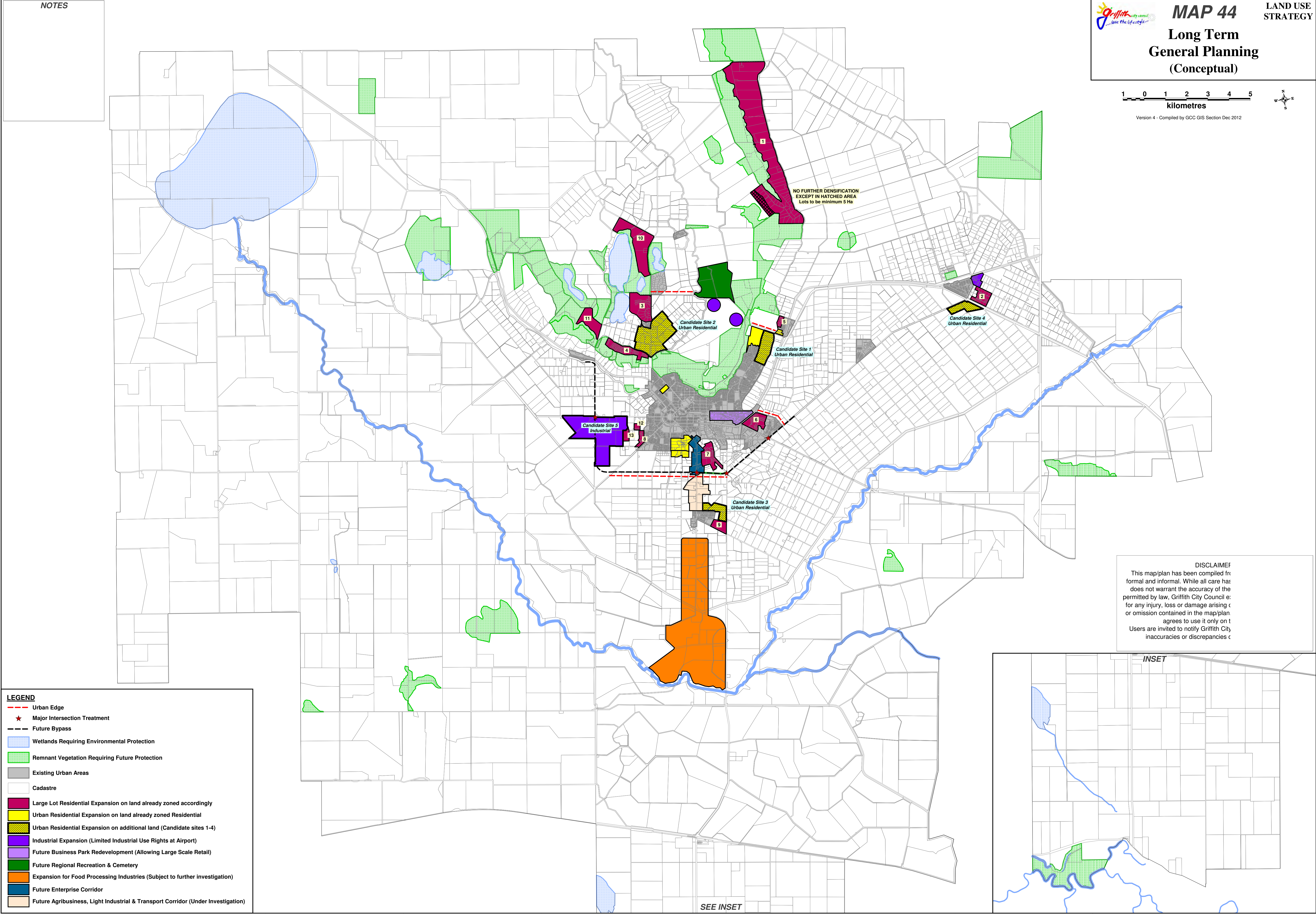
	1974
	1983
	1993
	2008

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LEGEND

Urban Edge

Major Intersection Treatment

Future Bypass

Wetlands Requiring Environmental Protection

Remnant Vegetation Requiring Future Protection

Existing Urban Areas

Cadastral

Large Lot Residential Expansion on land already zoned accordingly

Urban Residential Expansion on land already zoned Residential

Urban Residential Expansion on additional land (Candidate sites 1-4)

Industrial Expansion (Limited Industrial Use Rights at Airport)

Future Business Park Redevelopment (Allowing Large Scale Retail)

Future Regional Recreation & Cemetery

Expansion for Food Processing Industries (Subject to further investigation)

Future Enterprise Corridor

Future Agribusiness, Light Industrial & Transport Corridor (Under Investigation)

The inset map, labeled "INSET", provides a detailed view of a specific area shown in the main map. It shows a grid of land parcels with various colored overlays, including green hatched areas for remnant vegetation and blue areas for wetlands. The inset map is located in the bottom right corner of the main map.

SEE INSET



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## Part C

# Long-range General Planning

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## Summary of main constraints

Prior to proceeding with the long-range general planning stage of this strategy it is necessary to summarise the most important constraints identified during the collation of background data.

This section is not intended as a detailed analysis of the identified constraints, but rather attempts to highlight the most obvious constraints in order to provide the reader with a better understanding for some of the main principles underlying land use planning for Griffith.

### Flood prone land

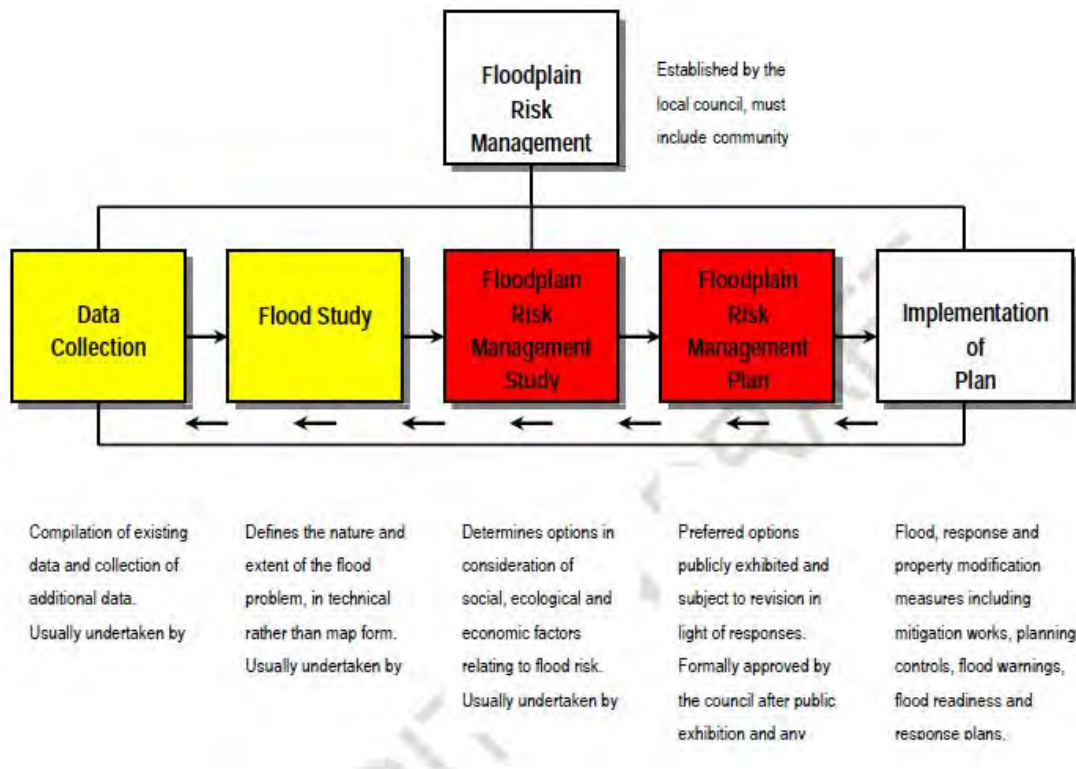
During 2005 the NSW State Government issued a new Flood Prone Land Policy. In response to this policy Council and the Griffith Floodplain Risk Committee have commenced work on preparing a Floodplain Risk Management Study & Plan for Griffith.<sup>1</sup>

The process for implementing the state-wide Flood Prone Land Policy involves four stages:

- Firstly, a flood study is required to determine the nature and extent of flooding potential
- Secondly, a floodplain risk management study is required to identify and evaluate management strategies for the floodplain
- Thirdly, a floodplain risk management plan will be drafted (and adopted) that outline the benefits and costs of flood-related works, as well as potential funding opportunities
- Lastly, the plan needs to be implemented – involving construction of adopted works and implementation of non-structural (e.g. planning) measures to help ensure that new development is compatible and responsive to the flood risk

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<sup>1</sup> The content of this section is derived from an information brochure “Floodplain Risk Management Study and Plan” published during October 2008 by Griffith City Council in conjunction with Patterson Britton & partners Pty Ltd



In late 2011, Council adopted the Floodplain Risk Management Study and Plan. The study area extended from the town of Yenda downstream to the confluence of Main Drain 'J' and Mirrool Creek and included the villages of Yoogali, Yenda, Hanwood, Beelbangera and Bilbul as well as the City of Griffith. The study/plan set out to accomplish the following:

- Identify and evaluate management options (structural and non-structural) for the floodplain in terms of their capacity to reduce existing and potential future flooding problems;
- Provide information on flood behaviour and flood hazard, so that community aspirations for future land use can be assessed; and
- Provide a framework for revisions to planning instruments such as Local Environmental Plans (LEPs), so that land use controls are consistent with Flood risk and flood hazard.

Floodplain and flow path mapping was prepared as part of the study/plan. The preparation of this strategy has taken into consideration this mapping (refer to Map 43) and the findings of the study/plan. More specifically this strategy has utilised the study/plan and associated mapping in the selection of candidate sites for future residential growth (refer to Section 'E'). It was clear that the floodplain and floodway of the critical storm event will in the future limit the growth of some urban areas including Collina and Yoogali. The study / plan conclude with a number of important planning and structural recommendations which will guide Council through the implementation stage of the Flood Prone Land policy, including:

## Planning Recommendations

- PL1. The Main Drain 'J' floodplain floodway extents and flood storage areas be adopted by Council and included in the Local Environment Plan (LEP).
- PL2. The relevant clauses in Council's LEP should be updated to reflect the latest standard clauses for flood prone land, which has been agreed to by the relevant stage government agencies.
- PL3. The Flood Planning Area Map (refer Figures 26A – 26H) be adopted by Council and included within the draft LEP document.
- PL4. The draft Flood Liable Lands Development Control Plan is considered for formal adoption as Council's flood policy.
- PL5. Council's draft On-site Stormwater Detention Policy, which has been updated for the Griffith Floodplain Risk Management Study, be considered for formal adoption by Council.
- PL6. The Memorandum of Understanding, which has been developed to define Council's and Murrumbidgee Irrigation's responsibilities in regard to ownership, maintenance and upgrade of drainage channels, is adopted by both organisations.
- PL7. Subsequent to PL6, Council and MI should modify their maintenance schedules to adhere with the MoU.
- PL8. A Community Education and Flood Awareness program be implemented for the emergency response precincts, including the preparation and distribution of a
- Flood Safe brochure, preparation and display of a flood information poster and convening an annual information sessions.
- PL9. Flood evacuation centres are nominated for Yenda and Hanwood. The next amendment to the Griffith Local Flood Plan identifies the new flood evacuation centres.
- PL10. The next amendment to the Griffith Local Flood Plan incorporates the flood warning data for Yoogali relative to flood observations at Yenda and Beelbanger.
- PL11. The potential to install an automatic water level recorder within DC 'TJ', in the area downstream of the Yenda Subway be investigated. If considered feasible, installation of the recorder should proceed.
- PL12. The potential to record real time rainfall in the upper Main Drain 'J' catchment be investigated. If considered feasible, proceed with installation of the gauge.
- PL13. Existing Section 149 certification for flood prone properties in the study area be reviewed. Where necessary, Section 149 certificates be updated and re-issued to contain up-to date flood data and information.

Griffith City Council is committed to ensure that all of the above recommendations are implemented for the study area. The study did not take into consideration the Lake Wyangan area. However, a further flood study has been prepared and is expected to be adopted by Council in 2012 for the Lake Wyangan area. The mapping and data from the draft study was also used in the selection of candidate sites in Section 'E'.



## Fragmented urban form

In terms of land use, Griffith has a severely fragmented urban landscape, with pockets of industrial , agricultural and commercial activity interspersed with residential settlement.

This gives rise to a relatively high level of land use interface, sometimes manifesting in incidents of real or perceived land use conflict. This in turn places an unreasonable burden on Council's environmental staff to mitigate and resolve land use interface or incidents as a result of a high level of land use interface.

One of the primary aims of this strategy will be to attempt to initiate a slow process of reform in this regard. The primary catalyst for reform being consolidation of land uses and avoiding any further unnecessary sprawl and dispersion of uses – in particular uses with an industrial or processing component.

## Land use interface

Land use interface in its own right justify separate mention as a constraint of land use development in Griffith. As already mentioned, Griffith has a relatively high level of land use interface. This is mostly due to the high incidence of viticulture related industries in the LGA and the food processing based nature of Griffith's primary industries. Land use conflict may be the direct result of the land use as such e.g. odour impacts of a food processing facility in the vicinity of residences; but may also be a result of indirect practices associated with certain land uses, e.g. the noise impact of frost fans used by horticultural farmers, or the potential of spray drift as a result of aerial or land-based application of agricultural chemicals and pesticides.

The long-term general planning proposed in this strategy should strive to limit, reduce, or mitigate impacts of conflicting land uses in the same locality.

## Infrastructure limitations

Infrastructure supply is limited in terms of its cost effectiveness, i.e. the cost of providing infrastructure should be justified in terms of the number of households or potential economic return.

Infrastructure should normally be provided with the rationale of lifecycle cost recovery, i.e. cost of infrastructure should be justifiable in terms of the ability to recover it during the expected lifecycle of the development. Alternatively, the cost of infrastructure should be justifiable by potential economic return to the community – such is the case for infrastructure provided for commercial or industrial developments.

In general terms, and under most circumstances the cost to provide infrastructure may only be considered by Council if the cost effectiveness, in terms of cost recovery or in terms of likely

economic return for the wider community can be clearly demonstrated. If the cost-effectiveness of infrastructure cannot be clearly demonstrated, the cost thereof shall be for the proponent or developer.

### Limited environmental lands

Pristine environmental land or land with remnant vegetation is extremely limited in the Griffith local government area. These lands are mainly limited to bushland along McPherson Range and limited smaller pockets around Lake Wyangan, closer to the Murrumbidgee River to the south and a small portion of the Binya Forest to the north-east. Other patches of remnant vegetation are widely dispersed across the shire but mostly limited to small pockets of roadsides (**refer to Map 7**). Limited environmental lands and wetlands of value are found along Mirrool Creek and in the Lake Wyangan catchment. Barren Box Swamp can be described as a noteworthy and significant wetland system, but is effectively an artificially maintained wetland managed by Murrumbidgee Irrigation.

In terms of land use the occurrence of environmental lands can be deemed as a constraint since it limits development potential in the vicinity of such land. It is however important to acknowledge that environmental land in itself is not a constraint, but an asset. To the contrary, it is a goal of this strategy to increase the area of land zoned or allocated for environmental protection.

### Bushfire prone land

Bushfire prone land occurs along McPherson Range, although fairly limited compared to other shires. Due to the potential hazardous interface with urban development, it should still be deemed as a constraint to urban expansion. (**refer to Map 10**)

### Topography

Most of Griffith is located on extremely flat terrain, which makes servicing expensive due to the lack of natural gradient. The lack of a gradient more than 0.5% makes infrastructure provision unlikely without expensive pump stations and other related expenses. Local stormwater management is also further complicated and expensive due to the lack of sufficient gradient. Large portions of the urban fringe have a gradient less than 0.5%. (**refer to Map 6**) In general terms, these areas are best avoided with future expansion to limit unnecessary infrastructure costs.

### Other constraints

Other constraints include, but are not limited to:

- Airport related constraints - Noise contours (ANEF) & Obstacle Limitation Surfaces ;
- Physical impediments posed by irrigation channels;
- High water table in certain known localities;
- Areas of known high salinity;

- Main roads and associated traffic impacts; and
- Railway and associated (noise and traffic) impacts

## Strategic demand

### Future residential settlement

As outlined in Part B, future demand for residential settlement is to accommodate a total population ranging between 32,452 and 38,026 by 2033, or a total population ranging between 33,3540 and 40,687 by 2038.

In order to determine the future demand for residential settlement, it is necessary to translate the estimated additional future population in terms of additional households and in turn translate it to demand for land for settlement.

The estimated additional population until 2033<sup>2</sup> is 12,847 which equates to an additional (4758) households by 2033 – on average based on 2.7 per household.

The historical ratio of land release for urban residential<sup>2</sup> and rural residential (large lot residential) is on average 6:1. Although this ratio is unlikely to change significantly in the future, due consideration of trends in other regional centres indicate that there may be a very slow but decrease in the demand for larger lots over time. (This needs to be monitored more closely with future updates and revisions of this Strategy). Historically rural residential lots were generally typified as lots larger than one acre, and seldom less than 3,000m<sup>2</sup>. For the purpose of this strategy the ratio is accepted as stable for the foreseeable future. Based on this assumption the implication is that (793) future households are likely to reside on larger lots (i.e. lots greater than 2,000m<sup>2</sup>) and the remaining (3965) future households are likely to reside on smaller conventional 'urban-type' lots. In Griffith conventional urban lots may range between 650m<sup>2</sup> and 1,100m<sup>2</sup>. For forecasting purposes the following average lot sizes are suggested:

- Urban lots (including villages) : 750m<sup>2</sup>
- Large lots (old 'rural residential') : 3000m<sup>2</sup>

Based on the above average lot sizes (including an allocation for roads, reserves and open spaces of 25% for urban lots and 20% for large lots) the following total area of un-constrained and serviceable land is required to provide in the estimated additional demand for 2033:

Urban lots (including villages)	297 Ha x 25% = (371 Ha)
Large lots ('old' rural residential)	238 Ha x 20% = (285 Ha)

---

<sup>2</sup> Including residential lots in villages

## Future non-residential expansion

It is far more difficult, if not impossible, to quantify the demand for non-residential expansion, as it is largely dependent on market forces and are furthermore greatly influenced by advances in technology. Considering growth patterns over time does however give some guidance regarding a strategic response based on supply and demand.

In addition, analysis of background information such as the economic and infrastructure study undertaken by URS for Griffith City Council and trends in other regional areas highlighted the following trends and issues for consideration in the drafting of this strategy:

- Advances in technology-driven enterprises places a higher premium on smaller serviced commercial and semi-industrial lots. This includes sites that are highly accessible from main roads, to the CBD, and accessible to technology infrastructure e.g. wireless broadband coverage;
- Food processing facilities are likely to place a high future demand on land on the urban fringes of Griffith. These facilities require good access to main roads, and services;
- 'Wet' industries and livestock processing are more likely to cause land use conflict due to odour issues;
- Demand for both 'wet' and 'dry' food processing is likely to increase significantly due to advances in processing technology and the increasing regional role of Griffith;
- The most likely port of export is Melbourne;
- A shortage of larger industrial sites with ready access to services and accessible for larger vehicles has been identified;
- A slight overprovision of smaller industrial sites and highway service sites is evident in the relatively high percentage of vacant zoned land.<sup>3</sup> This can also be ascribed to other factors, such as monopolising effects;
- Industrial land is highly fragmented and distributed across the shire, which in turn increase land use interface and the likelihood of land use conflict; and
- Due to the redevelopment of Griffith Airport a range of service-industries and storage facilities is likely to seek future settlement in the vicinity of the airport.

## Need for environmental protection

Currently approximately 3.74% of Griffith<sup>4</sup> is covered by zones that provide varying degrees of environmental protection. This particularly low percentage of environmental lands is consistent

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<sup>3</sup> Almost 20% at the date writing

with the nature of agricultural intervention in the area. These areas are mostly concentrated around Scenic Hill, McPherson Range and wetlands.

A recent survey of remnant vegetation indicated that the current zones do not provide protection for various areas where remnant vegetation is found. Mirrool Creek is similarly acknowledged as 'environmentally sensitive' under the current LEP, but does not have zoning protection per sé.

Large tracts of agriculturally degraded land also require more extensive protection from further degradation.

Griffith City Council is furthermore currently in the process of extending landfill and quarry operations at the western landfill site. These extensions justify environmental offsets which can be met in part by zoning of land for enhanced environmental protection.

A more detailed sustainable environment strategy will be a separate project in the foreseeable future, however, for the purpose of this strategy an interim target is to increase land zoned for environmental protection to more than 5%.

This can be achieved by including Mirrool Creek as a zoned watercourse, extending the areas along McPherson Range as land zoned for environmental management and by including significant portions of remnant vegetation as land zoned for environmental conservation and environmental management.

## Strategic response

### Urban expansion including villages (Urban Residential)

#### Locality

As a strategic response it is attempted to provide balanced opportunities for urban expansion, not just limited to urban Griffith, but also providing equivalent opportunities at three villages, i.e. Lake Wyangan, Hanwood and Yenda, being deemed as centres for future growth. Candidate sites are indicated on maps in Part E for each local area with a specific number allocated to each candidate site. A table containing a ten point selection criteria is included in Part E to justify the selection of candidate sites.

#### Role and function

Urban Residential lots present the bulk of the residential component in Griffith. The role and function of Urban Residential Areas is to provide opportunities for low, medium and high density residential development including associated land uses such as limited retail, community facilities,

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<sup>4</sup> 6,139Ha covered by 7-type zones e.g. 7(v), 7(w), 7(c)



and recreation etc. subject to compatibility with the amenity of the area regarding issues such as scale, height, and usage and traffic generation.

## Supply

This land supply analyses focuses on land for low and medium density and includes land for single dwelling, dual occupancy and multi – dwelling housing developments. Certain areas have been identified where high density residential development would be encouraged, these areas are close to the Central Business District and indicated on the Griffith Local Area Planning map. Supply of land for low density residential development is based on 750m<sup>2</sup> lot sizes.

The following land is relatively free of constraints and reasonably accessible to services:

Land zoned Residential in terms of GLEP 2002			
Area Description	Total Area	Total area developed	Area available
Extension of Collina up to Rifle Range Road (west of Clifton Boulevard)	48 Ha	0 Ha	48 Ha
Extension of South Griffith (adjoining Murrumbidgee Estate)	94 Ha	7 Ha	87 Ha
Extension of land corner of Ortello St and Wyangan Ave	8 Ha	0.35 Ha	7.65 Ha

Proposed additional parcels of land			
Extension of Collina up to Rifle Range Road (west of Citrus Road east of Clifton Boulevard)  <u>Candidate Site 1</u>	79 Ha	0 Ha	79 Ha
Expansion of Lake Wyangan village  <u>Candidate Site 2</u>	244 Ha	0 Ha	244 Ha
Expansion of Hanwood village (to west)  <u>Candidate Site 3</u>	67 Ha	0 Ha	67 Ha

Expansion of Yenda village (to south) <b><u>Candidate Site 4</u></b>	54 Ha	0 Ha	54 Ha
<b>Total of existing Residential zoned land</b>	<b><u>150Ha</u></b>	<b><u>7.35 Ha</u></b>	<b><u>142.65 Ha</u></b>
<b>Total of Proposed additional parcels of land</b>	<b><u>444 Ha</u></b>	<b><u>0 Ha</u></b>	<b><u>444 Ha</u></b>
<b><u>Combined total of zoned and additional parcels of land</u></b>	<b>594 Ha</b>	<b>7.35Ha</b>	<b>586.65 Ha x 75% = <u>440 Ha</u></b>

### Calculation Method

To estimate a potential Lot yield only 75% of the total area is considered in order to allow 25% for roads and other associated amenities.

### Demand

The total estimated demand for urban residential lots is approximately 371 Ha to provide for an estimated 3965 House holds.

### Strategic Response

The above provision of 440 Ha **(which includes land already zoned and additional land as set out in the above table)** satisfies the requirement of 371 Ha of land for urban (and village) residential expansion and could if needed provide for an additional 920 households.

It is however important that Rifle Range Road be deemed as an 'urban edge' for the expansion of Collina, in order to ensure effective infrastructure delivery and that other existing users of infrastructure (including roads) not be impacted unreasonably.

Similarly to the south Stafford Road can be deemed as an urban edge for residential development.

In the longer term, Lake Wyangan catchment is deemed as the primary future expansion area for urban residential development, with expansion of the existing village being the most logical first step. It is expected that in the long term, urban expansion will develop to the south along Boorga Road, eventually only separated from north Griffith (Citrus Grove) by the environmental greenbelt formed by Scenic Hill joining McPherson Range – with Wyangan Avenue providing a critical transport link.

## Large lot expansion (Rural residential)

### Locality

The different areas are indicated on the accompanying map and labelled 1 to 18 in relation to the following table. In general, rural residential zoned areas are scattered randomly around Griffith. The areas include parcels of land zoned for Rural Residential in terms of the GLEP2002 as well as parcels approved for Rural Residential Development after the GLEP2002 came into operation. No additional land to this is indicated.

### Role and function

Rural residential lots contribute positively to the variety of residential life style choices within the Griffith area and provides residential opportunity within a rural setting with all the infrastructure amenities associated with conventional urban residential lots. As indicated in Part B of this document rural residential lots represent +/- 16.5% of the residential component and are regarded as a significant part of the urban residential component.

### Supply

The following table represent the current supply of Rural Residential land as reflected in the 2002 Griffith LEP Zoning Map as well as additional Rural Residential Land approved by Council since the introduction of the 2002 Griffith LEP. The map attached hereto indicates the position of the areas zoned Rural Residential as well as the land additionally approved by Council.

LAND ZONED RURAL RESIDENTIAL GLEP 2002				
Map Indication No.	Area Description	Total Area	Total area developed	Area available
1	Portion of McPherson Range North of Griffith Includes larger farming lots	320Ha	275Ha	45Ha (Only for lots of min. 5Ha)
2	Land situated East of Yenda	46.3 Ha	9.6 Ha	36.7 Ha
3	Pelican Shores & Fawcett Drive	110.3 Ha	58 Ha	52.3 Ha
4	Mallinson Road Lake Wyangan	63 Ha	45 Ha	18 Ha

5	Beelbangera	16.5 Ha	2.7 Ha	13.8 Ha
6	Yoogali	59 Ha	33 Ha	26 Ha
7	Watkins Avenue	64 Ha	28.7 Ha	35.3 Ha
8	Walla Avenue	15 Ha	4Ha	11Ha
9	Hanwood	29 Ha	1.2Ha	27.8Ha
<b>Additional Land Already Approved by Council for Rural Residential</b>				
10	Northern Foreshore of Lake Wyangan	181 Ha	0Ha	181Ha
11	Lakes Road 2 Annex (Bets Development)	70.4 Ha	0Ha	70.4Ha
12	Snaidero Road	15.3 Ha	2.6Ha	12.7Ha
13	Spencer Road	8.4 Ha	2.8Ha	5.6Ha
<b>TOTAL of areas 2 to 13</b>		<b>578Ha</b>	<b>187.6Ha</b>	<b>390.4Ha x 80% = 312.32Ha</b>

### Calculation Method

To estimate a potential Lot yield only 80% of the total area is considered in order to allow 20% for roads and other associated amenities.

### Demand

The demand on land for Rural Residential development has been addressed earlier in Part C and it was indicated that at least 266 Ha would be needed which includes 20% to accommodate road infrastructure.

### Saturation Percentage and Strategic Response

For purposes of this calculation the Portion of McPherson Range North of Griffith has been ignored due to the fact that this area would only provide a maximum of 9 additional 5Ha lots not comparable with the rest of the subject land where the average lot size could be a minimum of 3000m<sup>2</sup> for calculation purposes as indicated earlier in Part C.

Above mentioned indicates a saturation percentage of only 32.4% of existing Rural Residential land. The remaining 67.6% or 312.32 Ha provides an additional 90Ha more than the estimated need of 222.3 Ha. This calculates to an additional 240 Rural Residential Lots.

In addition to the above mentioned over supply of Rural Residential lots within Griffith City Council, there are other reasons to consider before creating additional further rural residential areas. The provision and long term maintenance of infrastructure and services required for dispersed Rural Residential development is less economically viable compared to urban residential development. These services include water and sewer, road infrastructure, public transportation (school bus etc.), and community facilities and open space (parks):

#### Impact on services

Water and sewer services – Rural Residential areas required more water and sewer mains for fewer lots. Therefore, repairs and main replacement costs are higher per user for Council. Also, for maintenance purposes, council staff has to bring equipment from the depot in the city centre out to rural residential areas for maintenance and construction purposes.

Road Infrastructure – fewer vehicles use the roads in Rural Residential areas, however there is a perception that the roads should be to the same standard as in urban areas. More road infrastructure is required for fewer residents. Also, council staff is required to bring equipment from the depot in the city centre out to rural residential areas for maintenance and construction purposes.

Public Transportation – There is a further distance to travel to and from the city centre to transport children living in Rural Residential areas to school. A larger portion of the population is dispersed areas of the city makes public transportation un-economical.

Community Facilities and Open Space (parks) – The maintenance of park space in Rural Residential areas is more costly as equipment must travel from the city centre and additional petrol and employee time is required as compared to urban areas.

Considering the present saturation percentage of Rural Residential lots and the added costs associated with creating or expanding Rural Residential areas, it is proposed that no further land be made available for rural residential development at this point in time.

## **Non-residential expansion**

### **CBD and commercial expansion**

The CBD is primarily deemed as the subject of a separate strategy, i.e. The CBD Improvement/Enhancement Strategy. This strategy is primarily concerned with the most appropriate zones for the CBD and fringe areas to the CBD. From a land use point of view it is important to acknowledge four key elements of the CBD and the fringe to the CBD. These key elements are summarised as follows:

- Firstly, it is important to acknowledge the commercial retail core of the CBD extending up to Crossing Street. It is necessary to ensure that the commercial core is contained as a compact retail core.



- Secondly, it is important to acknowledge the developing civic and mixed use character to the east. This should be further enforced by encouraging a mixed-use character. This may include large scale commercial development or re-development, based on merit.
- Thirdly, it is important to acknowledge and strengthen the mixed use character found on the northern and southern fringes of the CBD area, i.e. Wakaden Street to the north and Coolah Street to the south. These areas are likely to play a major role in providing land for medium density residential opportunities and semi-commercial activities close to the CBD. These lands would provide for appropriate locations to extend the CBD for primarily commercial purposes in the future if demand required.
- Fourthly, infill development and intensification of existing businesses in the CBD is achievable. There are existing vacant sites in the CBD still to be developed for commercial / mixed use developments. Also, several buildings are single storey structures which have the potential to be converted into two storeys permitting additional commercial space, offices, or apartments on the first floor. Controls relating to floor space ratio and height requirements for such redevelopments are expected to be included in a Comprehensive Development Control Plan for Griffith and also within the potential zoning of the lands in the CBD.

It should also be noted that a large area of land within the CBD, at the corner of Banna Avenue and Jondaryan Avenue was previously zoned for “Special Uses – Recreation and tourism”. These lands are expected to be used in the future and subsequently zoned for commercial purposes. The lands are 1.2 hectares and have the potential to be developed for to include a number of commercial tenancies.

The commercial lands around Kookora Street at the top of Banna Avenue are highly underutilised and there is potential for further infill development and intensification in this area. However, businesses appear to be hesitant to invest in this area in recent years.

To the east of Crossing Street, commercial activities has a varied nature, and the area is in a clear stage of transition from its previous industrial character to a semi-industrial character with some more obvious properties currently vacant or in a state of neglect or redevelopment, interspersed with commercial enterprises and business aimed at commuting and through traffic, e.g. fast food chains, motels and service stations. From a land use point of view it is important to acknowledge that this area (in particular Mooreville) does not exhibit a pure industrial character anymore, but is more inclined to a commercial character with smaller ‘high value’ service industries. Given the current state of land use interface, particularly along Wakaden Street, it is encouraging to observe the gradual decline of ‘higher impact’ general industries, succeeded by smaller service industries and semi-commercial enterprises.

The ongoing transition of Mooreville should be encouraged in conjunction with ‘Business Park’-type development and technology and service inclined businesses.

## Urban Fringe

An important change in the LEP Standard Template entails the removal of ‘general expansion’-zones, ‘rural mixed use’-zones, and ‘investigation’-zones. These zones previously formed that basis of fringe zones in the 2002 LEP, however it will not be available for use in the future template. The new LEP template in practice limits fringe uses to ‘rural small holdings’ (RU4).

The advantage of the ‘rural small holdings’ –zone is that it creates a consistent and virtually seamless zone of transition between residential zones and other land uses that could potentially cause land use conflict, such as industrial land uses and more extensive agricultural and horticultural uses. This approach also enforces a more defined and clearer succession/transition of land uses. The ‘rural small holdings’ –zone also provides for a zoning alternative and low impact use of land that is fairly highly constrained, e.g. flood liable land.

In this context ‘rural small holdings’ –zones can be applied to the western fringe of Griffith as a buffer between urban residential areas and industrial areas and the sewerage treatment plant. ‘Rural small holdings’ –zone can also be applied to South Griffith as a gradual transition between horticultural farms and residential land uses. Similarly it can be applied on the south-eastern fringe (north-west of Kurrajong Road) to allow low impact development but prohibit/discourage any further densification in this area which is flood liable land.

Lastly, it should be mentioned that the ‘rural small holdings’ –zone provides for a ‘soft’ urban edge with a gradual transition of agricultural or industrial uses, whilst still enforcing the rural character of Griffith.

## Highway Service (Enterprise corridor)

Two enterprise corridors exist on the main entrance gateways to Griffith.

The most significant being the corridor on the Kidman Way approach between Griffith and Hanwood. During 2005/06 a joint study undertaken by a consultant on behalf of Griffith City Council and RTA identified several future options and treatments for this corridor. The most significant being the staged widening of the corridor from single lane to double lane standard to accommodate the significant heavy vehicle traffic flow on this corridor. (On average 10 B-double vehicles pass through this corridor per hour, and is even more pronounced during seasonal peaks.)

During 2007 a spot rezoning application was lodged for the rezoning of properties fronting Kidman Way to accommodate a Regional Transport Servicing Centre, including an improved RTA inspection centre. The centre will provide a much needed and valuable regional transport node that will primarily focus on heavy vehicle transport. The application has been approved and Council are awaiting a DA application.

The corridor is intersected by Thorne Road, which has been proposed as the southern bypass for Griffith in the previous strategy, GS 2030. The southern bypass is still supported as such in this strategy, and the construction of a link between Kurrajong Road and Thorne Road coinciding with

major intersection treatment at both ends is proposed as a first stage. Construction of such a first stage will in itself significantly reduce heavy vehicle through traffic using MacKay Avenue, Oakes Road and Jondaryan Avenue. In view of this it is important that no further significant development south of Thorne Road be permitted along this corridor prior to the completion of stage one of the proposed bypass. This excludes the proposed Regional Transport Service Centre which has already been approved in principle, and which will be justified in terms of the service it provides at a regional scale. Thorne Road will therefore be an 'urban edge' in as far as the expansion of the corridor between Griffith and Hanwood is concerned.

### Industrial Uses

The most important strategic response this strategy can make in terms of future industrial uses is to start a process of consolidating industrial land uses to gradually reduce the fragmented form of industrial land uses in Griffith.

The previous strategy (GS 2030) identified land between Ross Road and Irrigation Way for a future freight terminal and associated uses. This option is not deemed economically viable anymore due to issues with access from Irrigation Way, realignment of the railway and the lack of gradient which makes the land expensive to service and fairly flood prone. As part of the Council's flood management program, the option to realign the Leeton-Griffith Railway has been considered as a possibility that can also act as a 'levee-bank' for the Yoogali area in the case of a flood event. This option is however currently deemed as not being practically implementable and economically unviable. However, should this option be reconsidered in future, the possibility of rezoning the subject land to other uses, including industrial, may be reconsidered.

In order to contain land use interface and potential land use conflict it is proposed through this strategy to contain existing industrial development north of Oakes Road, with the exception of a small pocket of existing industrial uses (including A&G) south-west of the Oakes Road Willbriggie Road intersection.

Given the fast changing character of Mooreville it is suggested to further encourage and enforce the changing nature by responsive zoning e.g. 'Business Park'. Mooreville will therefore gradually change from an industrial character to a semi-commercial and service industry area over time. Retail business and shops should however not at all be encouraged in this area in order to preserve the retail trade character of the CBD and to protect the CBD from leakage of retail activity. To enforce this principle, (as part of the development application procedure) business should demonstrate why they cannot or should not be located within the CBD prior to Council considering to allow a business to establish in this area. The most desirable long term outcome is defined as a multipurpose service and technology park.

Future industrial uses will be focused and encouraged to expand on the western fringe of Griffith, where larger properties are available that are relatively accessible in terms of infrastructure and transport. Approximately 468Ha of relatively unconstrained land is available for this purpose in the medium to long term. This future release will furthermore require the completion of the second

stage of the southern bypass route, i.e. constructing a link between Thorne Road and Kidman Way on the western side of Griffith. This will also require major intersection treatment of the intersection of Bromley Road and Kidman Way.

A small selection of specialist light industrial properties can be provided at Griffith Airport as identified in the recent Master Plan. A study with regard to design and viability of such a proposal is currently underway at the time of writing of this strategy.

The only other significant new industrial area to be developed is located on the north-eastern edge of Yenda, and is primarily intended to be ancillary to and in support of Casella Wines and the winery industry in general, but may also include transport related services.

**A more detailed analysis** of the Industrial area with certain planning proposals is attached as an annexure to this study.

### Food Processing and Wineries

Food processing enterprises should ideally be located with easy access to Kidman Way to facilitate easy access to and from providers.

The most logic locality for future food processing enterprises is south of Hanwood, where a number of larger operators are already located. Since most food processing enterprises has some impact in terms of odour this locality has the advantage of limiting the impact to surrounding rural dwellings, but in general not impacting on urban areas.

All food processing facilities, however small, should be required to demonstrate its environmental impact – in particular waste and effluent treatment and discharge, prior to consideration by Council.

In terms of the new LEP template, it is important to take note that the zoning 'Rural Industry and Employment' has been deleted from the new standard template, and that food processing facilities and wineries will in general terms be accommodated under the zone 'Primary Production' – which is also the same zone utilised for most agricultural activities. It is therefore not an option anymore to allocate or earmark land for food processing or larger wineries by means of zoning. In this regard it is therefore imperative that the strategy be particularly specific about desired localities for food processing facilities and larger wineries.

In general terms it is proposed that all food processing medium and large food processing facilities are located south of Hanwood (preferably south of Murphy Road) but north of Mirrool Creek.

Smaller food processing facilities may be considered elsewhere outside of a normal urban setting, with the exception of industrial zoned sites west of Griffith Sewage Treatment Plant where it may be considered in an urban setting subject to consideration of its potential impact in terms of, effluent, waste, odour, noise and traffic generation.

Expansion of existing wineries, i.e. expansion of the volume of crush, may be considered on a merit basis with due consideration of its environmental impact – in particular waste and effluent treatment and discharge, noise pollution, odour pollution and vehicle access issues.

### Environmental Protection

Following the local area planning process outlined in Part E, and to a lesser extend in Part D, proposed environmentally zoned land has been increased to 7.49% of the Shire thereby effectively doubling the extend of land protected by environmental zones under a future LEP.<sup>5</sup>

This process entailed more detailed identification and mapping of remnant vegetation, and increased protection to natural watercourses.

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<sup>5</sup> 12,286.5Ha proposed to be covered by E-type and W-type zones under the new LEP template



# Part D

## Functional Planning

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## Functional plans as strategic response

Functional plans are supplementary plans that address single topics covering the entire planning area. Functional plans will mostly relate to infrastructure (including transport infrastructure) and the natural environment, but may also include other specific topics such as heritage.

Functional plans usually stand alone and usually assess the current situation, state goals and define objectives and strategies in general terms. The purpose of this part is therefore to briefly address areas for which functional plans should be developed. Similar to Part B, this part should be deemed as continuously developing and subject to review and supplementing of existing information and strategies with new updated information and strategies with increasingly more specific outcomes.

The spectrum of topics are indeed wide and varied, however in order to focus Council's resources it is deemed appropriate to limit functional planning to the following topics, subject to further review:

- Infrastructure Development and Maintenance Plan
- Floodplain Risk Management Study & Plan
- Bushfire Prone Land
- Heritage

These topics will be briefly discussed and in future monitored to determine the impact thereof on land use patterns and tendencies in Griffith.

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## Infrastructure Development and Maintenance Plan

The purpose of the IDM is to attain an understanding of inputs required for new infrastructure and for the maintenance of key infrastructure in the medium term (10 years) as well as the long term (30 years).

The IDM would seek to identify capital works that may be required in the longer term as a result of:

- Insufficient capacity
- Inability to meet the levels of service
- Poor condition requiring replacement
- A combination of the above factors

It is proposed to develop the IDM according to three sequential phases:

- Phase 1 being the establishment of a services framework – defining the required location, type and level of service to be delivered by Council.
- Phase 2 entails an assessment of the ability of existing infrastructure to deliver the required services – subsequently developing a capital works and maintenance program.
- Phase 3 will comprise the drafting of a financial plan with a funding strategy – incorporating an assessment of rates to be levied to meet the expected level of service.

The proposed IDM Plan will be critical to future land use as it will directly determine Council's priorities in terms of the provision of servicing infrastructure.

### Recommendation

It is recommended that the development of the IDM Plan be treated as a priority and that the recommendations and adopted strategies of the IDM be systematically integrated to the Land Use Strategy.

## Floodplain Risk Management Study & Plan

During 2005 the NSW State Government issued a new Flood Prone Land Policy. In response to this policy Council and the Griffith Floodplain Risk Committee have completed work on preparing a Floodplain Risk Management Study & Plan for Griffith.<sup>1</sup>

The process for implementing the state-wide Flood Prone Land Policy involves four stages:

Firstly, a flood study has been prepared to determine the nature and extent of flooding potential

Secondly, a floodplain risk management study has been prepared to identify and evaluate management strategies for the floodplain

Thirdly, a floodplain risk management plan has been adopted that outline the benefits and costs of flood-related works, as well as potential funding opportunities

Lastly, the plan needs to be implemented – involving construction of adopted works and implementation of non-structural (e.g. planning) measures to help ensure that new development is compatible and responsive to the flood risk (ongoing). The floodplain risk management plan and study concluded with the following recommendations:

- PL1. The Main Drain 'J' floodplain floodway extents and flood storage areas be adopted by Council and included in the Local Environment Plan (LEP).
- PL2. The relevant clauses in Council's LEP should be updated to reflect the latest standard clauses for flood prone land, which has been agreed to by the relevant stage government agencies.
- PL3. The Flood Planning Area Map (refer Figures 26A – 26H) be adopted by Council and included within the draft LEP document.
- PL4. The draft Flood Liable Lands Development Control Plan is considered for formal adoption as Council's flood policy.
- PL5. Council's draft On-site Stormwater Detention Policy, which has been updated for the Griffith Floodplain Risk Management Study, be considered for formal adoption by Council.
- PL6. The Memorandum of Understanding, which has been developed to define Council's and Murrumbidgee Irrigation's responsibilities in regard to ownership, maintenance and upgrade of drainage channels, is adopted by both organisations.
- PL7. Subsequent to PL6, Council and MI should modify their maintenance schedules to adhere with the MoU.
- PL8. A Community Education and Flood Awareness program be implemented for the emergency response precincts, including the preparation and distribution of a
- Flood Safe brochure, preparation and display of a flood information poster and convening an annual information sessions.
- PL9. Flood evacuation centres are nominated for Yenda and Hanwood. The next amendment to the Griffith Local Flood Plan identifies the new flood evacuation centres.

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<sup>1</sup> The content of this section is derived from an information brochure "Floodplain Risk Management Study and Plan" published during October 2008 by Griffith City Council in conjunction with Patterson Britton & partners Pty Ltd

- PL10. The next amendment to the Griffith Local Flood Plan incorporates the flood warning data for Yoogali relative to flood observations at Yenda and Beelbanger.
- PL11. The potential to install an automatic water level recorder within DC 'TJ', in the area downstream of the Yenda Subway be investigated. If considered feasible, installation of the recorder should proceed.
- PL12. The potential to record real time rainfall in the upper Main Drain 'J' catchment be investigated. If considered feasible, proceed with installation of the gauge.
- PL13. Existing Section 149 certification for flood prone properties in the study area be reviewed. Where necessary, Section 149 certificates be updated and re-issued to contain up-to-date flood data and information.

Griffith City Council is committed to ensure that all of the above recommendations are implemented for the study area. The study did not take into consideration the Lake Wyangan area. However, a further flood study has been prepared and is expected to be adopted by Council in 2012 for the Lake Wyangan area.

## Recommendation

It is recommended that implementation of the Floodplain Risk Management Study and Plan be closely monitored and participated in by planning staff, and that the recommendations and adopted strategies of the study and plan be systematically integrated to the Land Use Strategy and updated Local Environmental Plan.

## Bushfire prone land

A bushfire prone area is an area of land that can support a bushfire or is likely to be subject to bushfire attack. Bushfire prone areas are identified on a bushfire prone lands map which have been prepared for most councils across NSW. The map identifies bush fire hazards and associated buffer zones within a local government area.

Bushfire prone land maps are prepared by local councils across the State of NSW and are certified by the Commissioner of the NSW Rural Fire Service (RFS). New development on areas identified as bush fire prone are subject to the development and planning controls of '*Planning for Bush Fire Protection 2006*' and must be designed to improve the survivability of the development and the occupants that are exposed to a bush fire hazard.<sup>2</sup>

Council currently has a bushfire prone land map (refer to Map 10)

This map is annually reviewed and updated in collaboration with RFS representatives, and regularly submitted to the NSW RFS Commissioner for certification.

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<sup>2</sup> Extract from RFS (NSW) website [www.rfs.nsw.gov.au/dsp\\_content.cfm?cat\\_id=1052](http://www.rfs.nsw.gov.au/dsp_content.cfm?cat_id=1052) accessed on 24/08/2009



The upkeep of the bushfire prone land map is critical for future land uses in the vicinity of bushfire prone areas.

## **Recommendation**

It is recommended that the current arrangement of regular review of the bushfire prone land map in collaboration with RFS be maintained, and that the Land Use Strategy be updated accordingly on a regular basis.

It is furthermore recommended that bushfire specific requirements be incorporated in a future new LEP and comprehensive DCP – in collaboration with RFS.

## **Heritage**

Griffith currently has limited sites listed for heritage protection. Schedule 6 of the current LEP (GLEP 2002) lists two heritage conservation areas and twelve local heritage items two sites has since been listed on the State Heritage Register namely Hermit's Cave. and Yoogali Catholic Church.

## **Recommendation**

In order to strengthen the relatively limited heritage base it is proposed that a final list be compiled by Council's Heritage Advisory Committee and submitted for listing as part of a new LEP.

It is furthermore proposed that a specific part dealing with heritage conservation be developed as part of a new comprehensive DCP.

# Part E

## Local Area Planning

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## About this part

This part is structured according to the localities as identified in Part B and on **Map 4**.

Each locality is provided with a locality description, and a brief description of the natural environment and the role and function the locality plays within the larger planning area.

Thereafter the most obvious constraints and opportunities, if any, in the locality are listed and broad Strategic Principles is addressed as a brief forecast is made of anticipated future land use patterns and trends. The submissions received for each Local area are listed for easy reference to the submission analyses document.

This part is not intended to be a detailed analysis of each locality, and future applications received in each locality should still be assessed on merits according to the unique characteristics of the locality and immediate environment, with due consideration of likely environmental impacts and the availability and viability of infrastructure and services.

- The section is concluded with an assessment of sites for future development in terms of a set of criteria.
- The Local area plans referred to as “Future Land Uses Maps” is attached to the back of this section.

## Beelbangera

### Locality Description

Beelbangera village is situated north west of Griffith approximately seven kilometres from the central business district of Griffith. The area consists of the village of Beelbangera and a number of irrigation farms along Rankins Springs Road and the western part of Fowler Road. The topography is generally flat east of Rankins Springs Road, but increases in slope towards the west with McPherson Range forming a watershed between the north-western part of the locality and the remainder thereof.

The village is separated into two distinctive parts by Beelbangera Road and the Griffith-Cootamundra railway line.

### Natural Environment

Limited occurrence of remnant vegetation is found along Rankins Springs Road and Beelbangera Road. Significant remnant vegetation is found in the north-western part of the area as part of the McPherson Range which has high value scenic attributes.

### Role and Function

The role and function of Beelbangera within the broader planning area can be summarized as follows:

- The residential component provides alternative accommodation within a village orientated setting. The village of Beelbangera consists of approximately 100 dwelling units in an urban setting with larger lots adjacent to the western side and to the east opposite Beelbangera Road.
- The educational facility or primary school forms an integral part of education within its designated area.
- Economic activities include the convenience shop and service station which serves both the local residents and also picks up trade from travellers using the Rankin Springs road as well as the connection road to Yoogali. Farming activities, packing sheds and the distillery (Tarac) make up the rest of the activities. Tarac is the only distillery within the broader area.
- Main infrastructure includes part of Rankins Springs Road, Beelbangera Road, and part of Rifle Range Road (all B double routes). Minor roads include sealed roads within the village and gravel roads providing local access to irrigation farms (see map 10). Other infrastructure includes the Griffith-Cootamundra railway line, the main supply channel and open channel irrigation/drainage network supporting the agriculture activities, potable water network, and sewer network connected to Griffith and electricity supply by Country energy.



- Recreational facilities include various shooting ranges, sporting facilities and a public park with play equipment.

## Constraints

Some more obvious constraints to future development are:

- High-order intersection (Rankins Springs Road and Beelbangera Road)
- Impacts of distillery activities
- Limited services capacity

## Opportunities

- Limited opportunities for infill development in Beelbangera village.
- Parts of McPherson Range offer scenic value to the area.

## Broad Strategic Principals

### ***(Read this section with “Future Land uses for Beelbangera” Map)***

Taking into consideration the role and function of the area as well as identified constraints and opportunities the broad Strategic Principals should focus on the following.

- Further extension of the village area should not be encouraged. The Rural Residential Supply and Demand Analyses indicate that a further 13.8 Ha could be developed into larger Rural Residential lots in the area already zoned accordingly.
- Retain and maintain all existing recreational facilities.
- Retain all areas indicated as areas with landscape value and high conservation value.
- Expansion of the existing distillery should only be allowed in a north eastern direction in order to maintain the required 500m buffer zone between this facility and the village area.

## Selection Criteria for Candidate Sites

Not applicable

## Submissions Received

Two submissions were received from the area. The submissions are listed as site No 50 & 51 in the submission analyses and on the submission locality plan attached to the strategy.

## Benerembah

### Locality Description

Benerembah is situated south west from Griffith approximately twenty kilometres from the central business district of Griffith. The area consists of a number of irrigation farms and limited grazing areas towards the south. The topography is flat with no high rising areas evident.

### Natural Environment

Very limited remnant vegetation exists in the area with a few distinctive clumps of trees being the only significant natural vegetation in the area. Mirrool creek which drains water to Barren Box Swamp wraps around the north eastern corner of the area. Some remnant vegetation occurs along the creek banks and within the creek itself.

### Role and Function Benerembah

Benerembah's role and function is limited to agriculture which is supported by an open channel irrigation network and other related infrastructure supporting the farming families. The area is one of the least populated areas with distinctive larger farms with approximately 20 farm dwellings. Economic activity in the area is limited to farming activities supported by the cannel system.

The road network is mainly gravel with no sections sealed. Lockhart and Coppard Road could be ranked as the most important access roads in the locality on the basis that both give direct access to Kidman way (see map 14).

### Constraints

The fact that it is one of the least populated areas may lead to lower prioritisation of infrastructure investment.

### Opportunities

- Irrigation farming opportunities
- Relatively good access to Kidman Way
- Access to crop storage facilities (next to the Temora Roto Railway line)

## Broad Strategic Principals

*(Read this section with “Future Land uses for Benerembah” Map)*

- Consistent with current land use pattern.

## Selection Criteria for Candidate Sites

Not applicable

## Submissions Received

No submissions were received.

## Bilbul

### Locality Description

Bilbul is situated east of Griffith along the Burley Griffin Way approximately ten kilometres from the central business district of Griffith. The area consists of the village of Bilbul, irrigation farms (mainly viticulture) and two prominent wineries – De Bortolli Wines and Beelgara Estate. The topography is flat with no outstanding natural features.

The area is dominated by Burley Griffin Way intersecting the locality and Mirrool Branch Channel Road situated in the south-east of the area.

### Natural Environment

Virtually no remnant vegetation or natural attributes remains in the locality.

### Role and Function

The role and function of Bilbul within the broader planning area can be summarized as follows:

- The residential component provides alternative accommodation within a village orientated setting. The village of Bilbul consists of approximately 112 residential lots and approximately 75 farm dwellings
- The educational facility or primary school forms an integral part of education within its designated area.
- Economic activities include a small retail outlet, two large wineries and agriculture.

- Main infrastructure includes part of Burley Griffin Way (B double route). The rest of the roads consist of local roads of which some are sealed but the majority are formed and unsealed roads offering access to individual farm lots from the main roads (see map 15). Other infrastructure includes the open channel irrigation/drainage network with a large water storage facility supporting the agriculture activities, potable water network, sewer network with treatment plant and electricity supply by Country energy.
- Recreational facilities include a park with play equipment in the village area.

## Constraints

Some more obvious constraints to future development are:

- High-order road intersecting the area, i.e. Burley Griffin Way, with related access and heavy vehicle issues
- Impacts of winery activities
- Accessibility of certain parts to the east and associated limited services capacity
- The Griffith Flood Management Study indicates that a significant portion of agricultural land in the western section is situated within the identified flood path and is therefore subject to development control measures set out in the applicable Development Control Plan.

## Opportunities

- Established large wineries likely to expand significantly in future, with associated job opportunities.
- Area is still relatively close to urban areas of Griffith, enabling workers to commute to and from places of employment – reducing need to expand current village.
- Established infrastructure for economic development, i.e. effluent treatment plants for wineries and water mains reticulation along Burley Griffin Way.
- Direct access to Burley Griffin Way, simplify transport access to export markets
- Limited opportunity for the expansion of Yenda village in the north of the area – south of Main Channel at corner of Wells Road and Burley Griffin Way – future rezoning subject to further investigation, availability of infrastructure, and limitation of potential adverse impacts.

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## Broad Strategic Principals

### ***(Read this section with “Future Land uses for Bilbul” Map)***

- Consistent with current land use pattern, with possible increased economic activity at wineries.
- Further Residential development in the north as an extension of Yenda village (see candidate site 4).
- Future residential growth in Bilbul village should be accommodated by the densification of larger lots already zoned for village purposes.

## Selection Criteria for Candidate Sites

The suitability of candidate site 3 (see “Future Land Uses for Bilbul” map) for further residential development, has been assessed in terms of a set of key criterion set out at the end of this section.

## Submissions Received

Four submissions were received from the area. The submissions are listed as site No’s 1, 31, 39 and 64 in the submission analyses and on the submission locality plan attached to the strategy.

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## Griffith

### Locality Description

Griffith represents the main urban area within the Griffith Local Government area and is situated in the centre of the wider area. It is a modern city and offers a host of **Commercial, Industrial, Residential, Educational and Recreational** opportunities. These opportunities are supported by modern **infrastructure**, maintained and upgraded by Council within the limits of resources available. This forms the basis for a well balanced physical and social environment in which the urban setting continues to grow and expand.

### Commercial

Griffith business and commercial activities includes:

- A retail and business core situated between Kookora, Jondaryan, Canal and Railway Streets. The area is predominately occupied by retail outlets, service industries, offices, some overnight accommodation and some residential units and dwellings.
- An area of mixed uses including the circular civic centre part of town containing Council's administrative offices, regional theatre and TAFE; as well as an area showing signs of land use transition with a medium density residential character and some commercial uses, being the area situated roughly between Canal Road, Willandra Avenue, Oakes Road, and Harris Road. The two areas differ in terms of their composition predominance but share a common denominator, being in a stage of land use transition from a residential character to a mixed use character with a mixture of businesses, offices, services and medium density residential land uses.
- An area of mixed commercial and light industrial character roughly situated east of Crossing Street, along Banna and Mackay Avenue up to the Main Channel. The type of activities relates to typical service industries for the automotive and agriculture related industries as well as retail in vehicles and agricultural machinery. Service stations and fast food enterprises are aimed at commuters using Mackay Avenue. Other activities include low level manufacturing, storage facilities, gas storage and retail in building related materials. In addition to these activities retail facilities (furniture shops) and a motel is situated here with prominent visibility from Mackay and Blumer Avenue respectively. A recreation facility in the form of the indoor sports facility is also situated within this area.

### Industrial

The main industrial area is situated south-east of the CBD. Predominant industrial land uses include service industries, agricultural support industries, warehouses and self-storage, freight services, provision of building related materials, concrete plants, wineries, packaging and development relating to the agricultural industry.



In addition some industrial land is situated to the west of Griffith along Kidman way.

(See Griffith Industrial Land Analyses is attached as an Annexure)

## **Residential**

Residential land use in Griffith includes high, medium and low density development.

High and medium density residential development occurs mainly around the local business centre in the form of one and two storey flats and multiple dwelling developments.

Low density residential development dominates the urban landscape of Griffith and includes the majority of suburbs, East Griffith, Collina, West Griffith, North Griffith and South Griffith.

Large lot urban development occur south of the main industrial area and also in the West Griffith area

## **Educational**

Griffith has 6 pre- schools, 11 public primary Schools, 3 private primary schools, 2 Public High Schools and a Catholic High School.

Griffith has a TAFE campus which caters to local business and industry including; hair and beauty, motor mechanic, digital media, laboratory skills, bridging courses for HSC, traineeships, basic English for non-English speaking people, and in recent years the facility has entered into a MOU with Charles Sturt University and Griffith City Council to deliver a unique Western Riverina Higher Education Project in: Integrated Business Program - Bachelor of Business Studies, Nursing and Childcare.

## **Recreational**

Various recreational facilities are located in Griffith including: community and neighbourhood parks; natural open spaces; sporting facilities; a golf course; equestrian facility; indoor sports facilities; cinemas with indoor bowling alley and regional theatre.

## **Infrastructure and community facilities**

The substance of infrastructure and community facilities (including education) in Griffith is as outlined in Part B of this Strategy.

## **Natural Environment**

Scenic Hill and McPherson Range provide the most dominant natural environmental attributes to the area. Some remnant vegetation also occurs in the vicinity of the airport and golf course. Various environmental initiatives are in place to maintain the presence of Scenic Hill and the ridge areas as natural features. Several sites of heritage and cultural value are located within this area.

## Role and Function

Griffith represents the main urban area within Griffith Local Government area. It is also one of two regional cities that offer **Commercial, Industrial, Residential and Recreational** opportunities within a broader Sub-Regional Context. Map No 2 indicates the Sub Region also known as the Riverina area.

## Constraints

### Commercial

- Weak pedestrian links to some areas
- Appearance of certain buildings are not aesthetic pleasing
- Existing railway creates a linkage barrier
- Presence of abandoned industrial infrastructure and vacant sites

### Industrial

- Current main industrial area is not suitable to larger and offensive industries
- Impact of some existing uses such as wineries and related odour issues

### Residential

- Infrastructure and services for isolated large lot developments not economically viable
- Limited linkage with commercial centres

### Educational

- Limited tertiary educational opportunities

### Recreational

- Under developed open air water related summer recreation facilities
- Vandalism of play equipment
- Lack of funding to implement urban design proposals

### Infrastructure

- Lack of a bypass route causes heavy vehicle traffic to travel through urban area
- Locality of Rail Freight Terminal not conducive to CBD development and encourage heavy vehicle movements in CBD.

### Other constraints

- Railway reserves through urban areas creates a harsh visual impact
- Some canal reserves, particularly at 'gateways' are not maintained which creates a harsh visual impact
- Gateways into urban area are undefined and uninviting
- The Griffith Flood Management Study indicates that a significant portion of agricultural and urban land in the southern section is situated within the identified flood path and is

therefore subject to development control measures set out in the applicable Development Control Plan.

## Opportunities

### Commercial

- A comprehensive Central Business District Improvement Strategy has been compiled by Council's Urban Design Unit – addressing a wide range of constraints and proposing counter measures.

### Industrial

- Main Industrial area has ample vacant properties and appropriate infrastructure available to accommodate non-hazardous and/or non-offensive industries

### Residential

- Opportunities for infill development (densification) in older established areas
- Significant expansion still possible on fringes, particularly in Collina and South Griffith.

### Educational

- The TAFE campus is centrally located and enough land is available to allow significant expansion of the campus in future.

### Recreational

- Lake Wyangan and the main canal offer several recreational opportunities which have not been realised

### Infrastructure

- Well established infrastructure in general that could be extended to accommodate new growth and infill development

## Broad Strategic Principals

### ***(Read this section with “Future Land uses for Griffith” Map)***

- Consistent with current land use pattern, with increased economic activity in CBD and gradually transition of land uses in and around the Mooreville area.
- Larger commercial development should be encouraged to settle in the south along Kidman Way.
- Residential expansion should be limited to the area north of Collina including (candidate site 1) and the vacant portion already zoned Residential. Also included should be the vacant portion of land in south Griffith already zoned Residential.

- Dwelling densities in Hyandra and Carrathool streets are currently controlled by DCP 21 limiting infill to a maximum of two dwellings per lot. Detail regarding infill in future would be guided by the new combined DCP and special consideration would be given to the immediate surrounding area and its existing character.
- Large lot Rural Residential development should be limited to the existing zoned areas and no further zoning of land for this purpose should be allowed.
- The area situated mainly west of Jondaryan Avenue already has a mixture of residential and business uses. This should be further encouraged with proper consideration of possible land use conflict.
- Subdivision of small holdings should only be allowed in accordance with the minimum Lot sizes stipulated in the Griffith Local Environmental Plan.
- Industries that might be of a hazardous and offensive nature should be encouraged to develop in the demarcated area west of the town including candidate site 5 in Tharbogang.
- A future by-pass, to be developed in stages, should be considered as recommended in the **“Review of Economic Growth and Infrastructure (June 2007) by URS Australia Pty Ltd”**. A subtract of this study is available in Part B under ‘Infrastructure Recommendations’. Such consideration would have to ensure that land uses surrounding the proposed corridor do not impede the future development of the land for a by-pass.
- Areas of high conservation value should be retained.

## Selection Criteria for Candidate Sites

The suitability of candidate site 1 for further residential development has been assessed in terms of a set of key criterion set out at the end of this section.

## Submissions Received

Twenty seven submissions were received from the area. The submissions are listed as site No’s 2, 3, 5, 8, 9, 10, 18, 21, 22, 26, 27, 30, 44, 45, 46, 47, 48, 49, 51, 53, 55, 58, 61, 65, 69, 72 and 73 in the submission analyses and on the submission locality plan attached to the strategy.

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## Hanwood

### Locality Description

Hanwood is situated south of Griffith along Kidman Way approximately four kilometres from the central business district of Griffith. The area consists of the village of Hanwood, irrigation farms, intensive livestock farming, a prominent winery, food processing facilities and agriculture related offices and research facility. The topography is flat with no outstanding natural features.

The area is dominated by Burley Griffin Way intersecting the locality and Mirrool Branch Channel Road situated in the south-east of the area.

### Natural Environment

Limited occurrence of remnant vegetation is found along and within Mirrool Creek, which wraps around the southern boundary, and to a lesser extent along Main Drain J. The rest of the area is made up of cultivated land.

### Role and Function

The role and function of Hanwood within the broader planning area can be summarized as follows:

- The residential component provides alternative accommodation within a village orientated setting. Hanwood village consist of approximately 240 conventional and a few larger residential lots
- The educational facility or primary school forms an integral part of education within its designated area. The pre-school facility is currently not in use.
- The area has a wide range of economic activities including retail, service station, irrigation farming, intensive poultry farming, food processing, a large winery, agricultural related industry, agricultural related research and limited agricultural related support services. Some of the largest employers in Griffith are located in this area, including Baida (poultry), Great Southern (poultry), McWilliams Wines, Rhinaland (food processing), Cherry King (food processing) and Nugan's (food processing).
- Main infrastructure includes part of Kidman Way (Road Train Route) and Willbriggie Road. Other infrastructure includes the open channel irrigation/drainage network supporting the agriculture activities potable water network, sewer network connected to Griffith and electricity supply by Country energy.
- Recreational facilities include the Hanwood club, sport fields and a public park with play equipment.

## Constraints

Some more obvious constraints to future development are:

- Absence of effective linkage for heavy vehicles with Kidman Way to the south of Griffith from both Burley Griffin Way to the north east, and Kidman Way to the north west. The current movement of heavy vehicles through urban parts of Griffith is not an ideal situation with regard to traffic flow, road maintenance and overnight stops
- High-order road intersecting the area, i.e. Kidman Way, with related access and heavy vehicle issues
- Limited future capacity of Kidman Way between Griffith and Hanwood to accommodate future growth – road requires future widening
- Impacts of winery and food processing activities, e.g. odour impacts is not conducive to residential settlement; and higher demand on future infrastructure in this area
- Impacts of intensive poultry farms in terms of odour as well as with reference to quarantine requirements – not conducive to any development in the vicinity
- The Griffith Flood Management Study indicates that a significant portion of agricultural land in the northern section is situated within the identified flood path and is therefore subject to development control measures.

## Opportunities

- The well established large winery and food processing companies are likely to expand significantly in future, with associated job opportunities
- The area is close to urban areas of Griffith, enabling workers to commute to and from places of employment
- Direct access to Kidman Way (access to export markets).
- Opportunity to concentrate development of food processing facilities in a central locality, relatively removed from urban areas which minimise potential adverse impacts

## Broad Strategic Principals

***(Read this section with “Future Land uses for Hanwood” Map)***

- Consistent with current land use pattern.
- Increased economic activity at wineries and food processing activities, and possible new development – particularly in the food processing industry. It is expected that food



- processing industries will in future locate in the area south of Hanwood and north of Mirrool Creek subject to the availability of services.
- Future Residential growth should be limited to the area north and west of the existing village area as indicated by Candidate Site No. 3. Large lot residential expansion should be limited to the area south-west of the existing village already zoned for these purposes

### Criteria for Candidate Sites

The suitability of candidate site 3 (see “Future Land Uses for Hanwood” map) for further residential development, has been assessed in terms of a set of key criterion set out at the end of this section.

### Submissions Received

Ten submissions were received from the area. The submissions are listed as site No’s 6, 11, 12, 36, 61, 63, 66, 67 and 68 in the submission analyses and on the submission locality plan attached to the strategy.

## Kooba

### Locality Description

Kooba is situated south east from Griffith approximately twenty kilometres from the central business district of Griffith. The area consists of a number of irrigation farms. The topography is flat with no high rising areas evident.

### Natural Environment

No remnant vegetation or any other significant natural features occur.

### Role and Function

Kooba's role and function is limited to agriculture which is supported by an open channel irrigation network and other related infrastructure supporting the farming families. Some intensive livestock farming occurs north of Kooba Settlers Way. The area is one of the least populated areas with distinctive larger farms with approximately 15 farm dwellings. Economic activity in the area is limited to farming activities supported by the channel system.

The road network includes local gravel connector roads as well as an unsealed B-Double Route known as Keely Road and a Road Train Route partly known as Wilga road and partly known as Kooba Settlers Way. These routes connect to Kidman Way in the west.

### Constraints

- The fact that it is one of the less populated areas may lead to lower prioritisation of infrastructure investment and limited services capacity in the area.

### Opportunities

- Irrigation farming opportunities
- Relatively good access to Kidman Way
- B-Double and Road Train Route offers great opportunity for the transport of farm produce

### Broad Strategic Principals

***(Read this section with "Future Land uses for Kooba" Map)***

Consistent with current land use pattern.

## Selection Criteria for Candidate Sites

Not applicable.

## Submissions Received

No submissions were received.

## Lake Wyangan

### Locality Description

Lake Wyangan is situated north of Griffith with the village approximately six kilometres from the central business district of Griffith. The area consists of the village of Lake Wyangan, numerous upmarket Rural Residential Developments, irrigation farms, grazing land and recreational areas along the lake fill in the rest.

### Natural Environment

Topography is the form of an enclosed basin formed by McPherson Range sloping towards Lake Wyangan and Tharbogang Swamp. The lake areas and swamps form the lowest point in the centre of the area.

The area contains some of the most important environmental and ecological attributes for Griffith, with Lake Wyangan, Campbell Swamp and other adjoining swamps providing a vital habitat for birdlife and aquatic life.

Remnant vegetation occurs on the western side of the area and around the fringes of the lake area. Other natural features include the northern and southern lake areas and the marsh area south east of the northern lake area.

Bushland of high conservation value occurs to the south-west of Tharbogang Swamp, and along higher areas along McPherson Range.

### Role and Function

The role and function of Lake Wyangan within the broader planning area can be summarized as follows:

- The residential component provides alternative accommodation within a village orientated setting including Lake Wyangan village with approximately 44 residential lots varying in size. The rest of the area includes more residential development in the form of large lot development north of the village (Pelican Shores, Fawcett Drive and Wyangan Estate) as well as low density residential development south of the village along Mallinson Road on the slopes of the higher ground area situated there. This adds another approximate 150 lots excluding further residential development such as Sunset waters. The educational facility or primary school forms an integral part of education within its designated area.
- Economic activities mainly include horticulture and viticulture with numerous packing sheds.
- Main infrastructure include Boorga Road (B- Double Road), Jones Road (B- Double Road), Lakes Road (B- Double Road), and Mallinson Road. These roads link the area to the rest of the Griffith urban area to the south. McCann road, Lakes road, and Jones road links the area

to Kidman Way in west. Other infrastructure includes the open channel irrigation/drainage network supporting the agriculture activities as well as a potable water network. A main sewer line has been constructed linking the Lake Wyangan sewer system with the Griffith Sewage treatment plant, as sewage reticulation expands within the Lake Wyangan area this infrastructure would cope with the related increase in demand. Electricity is supplied by Country energy through their existing supply network.

- Lake Wyangan provides a primary recreational facility for Griffith and the region – particularly relating to water sports. Facilities at Lake Wyangan include a boat club, sailing club, camping area and large recreation area located on the foreshore of the northern lake. The southern lake is dedicated as a natural reserve with some recreational fishing occurring from the banks. An important Aboriginal lunette is located on the eastern shore of the southern lake. A cycle/walking track linking the area with urban parts of Griffith also makes the area popular for recreational activities.

## Constraints

Some more obvious constraints to future development are:

- Environmentally fragile and sensitive nature of the area
- Area has a high degree of land use interface, with potential for land use conflict
- Impact of intensive farming activities on residential land users, e.g. spray drift and frost fan impacts
- Potential land use conflict between recreational users of lake and residential properties on foreshores
- Shallow water tables have been noted in the area with some salinity outbreaks
- Some lower lying areas are flood prone and a detailed flood study which is in process still has to identify these areas.
- Almost all vehicle access is via Boorga Road and major upgrading would be essential in future
- Portions of Jones Road as unsealed road does not provide an acceptable link

## Opportunities

- Sewer and water mains have already been upgraded to enable further residential development.

- Major residential subdivisions have already been approved by council to facilitate development in the area.
- Further residential development within a rural setting contributes to various lifestyle choices Griffith has to offer.
- The area is close to Griffith, enabling residents to commute to and from places of employment within a short period
- The lake and cycling route offers recreational opportunities.

## Broad Strategic Principals

### ***(Read this section with “Future Land uses for Lake Wyangan” Map)***

- Future land use character is likely to change significantly with the redevelopment of the area as a future residential release area.
- Reduced horticultural activity in the area south of the village is expected.
- Significant change in the landscape is expected with the development of approved large lot residential developments in the vicinity of the lake.
- The outer lying areas are however likely to remain more consistent with current land uses character.

## Selection Criteria for Candidate Sites

The suitability of candidate site 2 (Lake Wyangan) for further residential development, has been assessed in terms of a set of key criterion set out at the end of this section.

## Submissions Received

Twelve submissions were received from the area. The submissions are listed as site No's 14, 15, 16, 19, 20, 23, 24, 28, 29, 32, 33, and 43 in the submission analyses and on the submission locality plan attached to the strategy.



## Myall Park

### Locality Description

Myall Park is situated north east from Griffith approximately twenty five kilometres from the central business district of Griffith. The locality consists of some large lot residential development, irrigation farms, some dry land crop farming and grazing.

### Natural Environment

Topography includes McPherson Range with sloping areas to the west towards Nericon and to the east towards Rankins Springs Road. West of Rankin Springs Road the area becomes relatively flat and featureless. The area west of Rankins Springs Road can be described as scenic with the McPherson Range stretching from north to south as well as sloping areas to the west with patches of remnant vegetation evident. High value conservation areas and significant remnant vegetation is obvious along McPherson Range. The area has strong scenic attributes.

### Role and Function

- Myal Park's role and function is predominantly agriculture supported by an open channel irrigation network and other related infrastructure supporting the farming families.
- Main roads include the Rankins Springs Road (B – Double Road), McPherson Road, Quarry Road and to the east Myall Park Road (B – Double Road).
- To the south High scenic low density residential development occur contributing to the range of life style choices Griffith has to offer.

### Constraints

Some more obvious constraints to future development are:

- Quarrying activities (some illegal) could have a detrimental effect on the natural scenic value of the area
- Potential land use impacts of farming activities on natural environment (fauna and birdlife)
- Limited services capacity

### Opportunities

- Natural Scenic value
- Good access to Rankins Spring Road

- Well established irrigation network east of the Rankins Springs Road
- Protection of areas with remnant vegetation and parts of McPherson Range

## Broad Strategic Principals

### ***(Read this section with “Future Land uses for Myall” Map)***

Consistent with current land use pattern. Further subdivision for residential purposes should not be encouraged.

## Selection Criteria for Candidate Sites

Not applicable

## Submissions Received

No submissions received from this area.

## Nericon

### Locality Description

Nericon is situated north of Griffith with the village approximately 18 kilometres from the central business district of Griffith. The area consists of the village of Nericon, irrigation farms to the eastern side with the majority of irrigation infrastructure east of Canal Road. Irrigation farming is less prominent west of Canal road. The approved Sunset Waters Rural Residential development also forms part of Nericon although more associated with Lake Wyangan.

### Natural Environment

Nericon is situated west of the McPherson Range and the area east of Canal road boasts a very mild east to west slope while the area west of Canal road is mostly flat. A natural ridge area occur north-west of Nericon village and vegetation rehabilitation is currently undertaken here.

Some remnant vegetation is found to the west of Canal road although this area can best be described as overgrazed and visually not appealing. A significant wetland is present in the form of Nericon Swamp in the southern portion just to the east of Boorga Road and this area attracts significant bird life.

The southern area has high value scenic attributes with views towards the northern lake.

### Role and Function

- The residential component provides alternative accommodation within a village orientated setting including Nericon village with approximately 47 residential lots varying in size. The rest of the area includes the approved Sunset Waters Rural Residential development and approximately 40 farm dwellings.
- Main infrastructure includes Boorga Road (B-Double Route) which is sealed up to Lakes Road. West Road and Lakes Road are also two major gravel roads in the area, linking Nericon with the Lake Wyangan area and Griffith. Other roads include the sealed road linking Nericon with Boorga Road as well as sealed and unsealed roads within the village itself. Kubank Road links the area effectively with Kidman Way. Other infrastructure includes the open channel irrigation/drainage network supporting the agriculture activities as well as a potable water network.

## Constraints

Some more obvious constraints to future development are:

- Weak linkage with Rankins Springs Road
- Potential land use impacts of farming activities on natural environment (fauna and birdlife)
- Limited services capacity
- Potential impact of recreation activities on northern lake on surrounding residential lots

## Opportunities

- Proposed large lot development north east of Lake Wyangan (Sunset Waters) likely to revitalise the area
- Proposed future regional recreation facility and cemetery in the most southern point north of Rifle Range Road
- Well developed irrigation system with strong horticulture and possibility for expansion in this area
- Natural Scenic value
- Protection of wetland area (Nericon Swamp)

## Broad Strategic Principals

### ***(Read this section with “Future Land uses for Nericon” Map)***

Consistent with current land use pattern with significant population influx to large lot residential development on northern lake (Sunset Waters).

## Selection Criteria for Candidate Sites

Not applicable

## Submissions Received

Three submissions were received from the area. The submissions are listed as site No's 54, 62, and 59 in the submission analyses and on the submission locality plan attached to the strategy.

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## Tabbita

### Locality Description

Tabbita is situated north west from Griffith approximately thirty kilometres from the central business district of Griffith. The locality consists of irrigation farms and some limited dry land crop farming. It is dominated by Barren Box Swamp used for irrigation water reclamation.

### Natural Environment

The topography is flat with some high rising areas north-west of Barren Box Swamp with very little remnant vegetation. Barren Box Swamp covers approximately 40 % of the area and occasionally fills up with surface water encouraging natural bird life in the area and is a significant regional environmental attribute. Besides Barren Box Swamp, no remnant vegetation or any other significant natural features occur.

### Role and Function

- The area is one of the least populated areas with distinctive larger farming lots with approximately 8 farm dwellings. Economic activity in the area is limited to farming activities supported by irrigation.
- Main Infrastructure includes the road network and a short distance of Tabbita Lane and Kidman Way offers the only sealed surface roads. The main unsealed roads are Bringagee, Crump and Poole Road; other dirt roads form part of the network that provides access to farms. The area has good access to Kidman Way which links the area with Griffith. Other infrastructure includes the open channel irrigation/drainage network supporting the agriculture activities

### Constraints

- The fact that it is one of the least populated areas may lead to lower prioritisation of infrastructure investment and limited services capacity in the area
- The presence of Barren Box Swamp reduces the agricultural potential significantly

### Opportunities

- Irrigation farming opportunities
- Relatively good access to Kidman Way and also to crop storage facilities next to the Temora Roto Railway line.

## Broad Strategic Principals

***(Read this section with “Future Land uses for Nericon” Map)***

Consistent with current land use pattern.

## Selection Criteria for Candidate Sites

Not applicable

## Submissions Received

No submissions were received from this area.



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## Tharbogang

### Locality Description

Tharbogang is situated west of Griffith with the village approximately 6 kilometres from the central business district of Griffith. The locality consist of the village of Tharbogang, irrigation farms varying in size from smaller lots in the north east to larger lots in the south west

### Natural Environment

The topography is flat with some higher ground being part of McPherson Range in the north western corner as well as the north eastern corner around the landfill site.

High value environmental areas are located along McPherson Range and surrounding the landfill and quarry. Virtually no other significant remnant vegetation occurs in the remaining part so the area.

### Role and Function

- The residential component provides alternative accommodation within a village orientated setting. The village of Tharbogang consists of approximately 46 residential lots and a small retail outlet.
- Educational facilities include Tharbogang Primary School situated separate from the village north of White Road.
- Recreational facilities include a go-cart racing circuit used by the wider community of Griffith.
- Significant irrigation infrastructure in the form of retention dams is situated here as well as Council's water reclamation works.
- Main roads in the area include Kidman Way, (Road Train Route) Brodgen Road (partly Road Train Route partly B- Double Route) McNamara Road and Brown Road (B-Double Route). Individual accesses to farms are gained from a few gravel roads in the area.
- The Temora-Roto railway line runs parallel to Kidman Way through the area and storage silo facilities is situated next to the line in Tharbogang village.
- Economic activities are mostly related to citrus farming, viticulture and other horticultural activities, with a number of packing sheds and wineries and some industrial activity. A large quarry operation is situated in the northern part south of Parle Road and Council's landfill site is situated north of slopes road. In the south adjacent to Bowditch and Rathbone Road some poultry farming related to the Hanwood operations occur. To the east along Kidman Way is significant winery activity as well as some industrial activity.

## Constraints

Some more obvious constraints to future development are:

- High potential for land use conflict due to farming activities, dwellings, wineries and quarry/landfill in relative close proximity
- Similarly high potential for environmental impact and pollution issues
- Odour and potential contamination issues
- The Griffith Flood Management Study indicates that a significant portion of agricultural land more or less in the centre of the area is situated within the identified flood path and is therefore subject to development control measures set out in the applicable Development Control Plan.

## Opportunities

- Effective established irrigation system
- Established winery creates work opportunities and a set off point for viticulture
- Good access to crop storage facilities served by rail situated north of Tharbogang village
- Opportunity for further development of industrial activity along Kidman Way on the eastern side of the area
- Economic potential of quarry
- Scenic areas with conservation value is situated in the north eastern part

## Broad Strategic Principals

***(Read this section with “Future Land uses for Tharbogang” Map)***

Consistent with current land use pattern with significant change in south-east due to the area being allocated as primary locality for future industrial expansion.

A possible future recreational facility in the form of a drag strip could develop near the landfill site subject to submission and approval of a Development Application.

## Selection Criteria for Candidate Sites

The suitability of candidate site 5 Tharbogang for further industrial development has been assessed in terms of a set of key criterion set out at the end of this section. .

## Submissions Received

Seven submissions were received from the area. The submissions are listed as site No's 7, 17, 25, 52, 55, 70 and 74 in the submission analyses and on the submission locality plan attached to the strategy.

## Warburn

### Locality Description

Warburn is situated north west from Griffith approximately twenty kilometres from the central business district of Griffith. The locality consists of irrigation farms, dry land crop farming and grazing land with the bulk of irrigation farms situated south west of Kidman Way and the bulk of dry land crop farming and grazing north east of Kidman Way.

### Natural Environment

Topography is flat with five distinctive outcrop areas where some remnant vegetation exists. The south eastern portion north of McCann Road and south of Testini Lane is a swamp area (Warburn Swamp) where some natural vegetation occurs on a limited scale. Barren Box Swamp covers a small portion of the area.

### Role and Function

- The area is sparsely populated with distinctive larger farming lots with approximately 12 farm dwellings.
- Economic activity in the area is limited to farming activities of which a portion is supported by irrigation.
- Kidman Way (Road Train Route) runs through the area in a north western direction dividing the area in two almost similar sized portions. This portion of Kidman Way also presents the predominant road for the area.
- Other main roads are gravel roads and include Nelson Road (B – Double Route), Cunningham, Tyson and White Road.
- The Temora Roto Railway line runs adjacent to the northern side of Kidman Way.

### Constraints

- The fact that it is one of the least populated areas may lead to lower prioritisation of infrastructure investment and limited services capacity in the area
- The presence of Barren Box Swamp and Warburn Swamp reduces the agricultural potential slightly

## Opportunities

- Irrigation farming opportunities
- Relatively good access to Kidman Way.
- Expansion of existing quarry operations.

## Broad Strategic Principals

***(Read this section with “Future Land uses for Warburn” Map)***

Consistent with current land use pattern.

## Selection Criteria for Candidate Sites

Not applicable

## Submissions Received

No submissions were received from this area.

## Warrawidgee

### Locality Description

Warrawidgee is situated south west from Griffith approximately 35 kilometres from the central business district of Griffith measured from its centre. The locality consists of a number of irrigation farms.

### Natural Environment

The topography is flat with no high rising areas. Very limited remnant vegetation exists in the area; a few distinctive clumps of trees are the only signs of significant vegetation. Mirrool Creek which drains water to Barren Box Swamp wraps around the north eastern corner of the area. The inflow to Barren Box Swamp is situated in the most northern portion.

### Role and Function

- The area is sparsely populated with distinctive larger farming lots and the whole area consists of approximately 25 farm dwellings.
- Economic activity in the area is limited to farming activities supported by irrigation. A council owned quarry is situated adjacent to Dare road.
- The road network is a grid pattern and no sealed roads service the area except for a short distance of McNamara Road. The main unsealed roads are Barber, Brodgen, Twadell Casserley, and Bringagee Roads (Classified Road Train Routes). Portions of McNamara Road and Cassebey Road is classified B-Double Routes and McNamara Road offers good access to Griffith with a sealed surface
- Part of the main feeder canal is also situated within the area.

### Constraints

- The fact that it is one of the least populated areas may lead to lower prioritisation of infrastructure investment and extremely limited services capacity in the area

### Opportunities

- Irrigation farming opportunities



## Broad Strategic Principals

*(Read this section with “Future Land uses for Warrawidgee” Map)*

Consistent with current land use pattern.

## Selection Criteria for Candidate Sites

Not applicable

## Submissions Received

No submissions were received from this area.

## Whitton

### Locality Description

Whitton is situated south east from Griffith approximately 25 kilometres from the central business district of Griffith measured from its centre. The locality consists of a number of irrigation farms.

### Natural Environment

The topography is flat with no distinctive high rising areas. No remnant vegetation or any other significant natural features occur except for a clump of trees north of Mancini Road.

### Role and Function

- The area is the smallest and least populated area with distinctive larger farming lots and approximately 5 farm dwellings.
- Economic activity in the area is limited to farming activities supported by irrigation.
- The road network offers gravel surfaces in the form of Adams, Mancini (B-Double Route) and Mathews Road. A portion of Wilga Road (Road Train Route) also runs through the area.
- Part of the main feeder canal is situated within the area.

### Constraints

- The fact that it is one of the least populated areas may lead to lower prioritisation of infrastructure investment and extremely limited services capacity in the area

### Opportunities

- Irrigation farming opportunities

### Broad Strategic Principals

***(Read this section with “Future Land uses for Whitton” Map)***

Consistent with current land use pattern.

### Selection Criteria for Candidate Sites

Not applicable

## Submissions Received

No submissions received from this area.

## Widgelli

### Locality Description

Widgelli is situated south east from Griffith approximately 20 kilometres from the central business district of Griffith measured from its centre. The locality consists of a number of irrigation farms.

### Natural Environment

The topography is flat with only 4 distinctive high rising areas. Limited remnant vegetation exists in the area and is limited to the higher areas. One distinctive clump of trees is situated east of Widgelli Settlers Road. Mirrool Creek forms an important ecological attribute to the area.

### Role and Function

- The area is sparsely populated with distinctive larger farming lots with approximately 18 farm dwellings.
- Economic activity in the area is limited to farming activities supported by the canal system.
- The road network offers sealed surfaces in the form of Irrigation Way (B-Double Route) situated in the northern side of the area and crossing east to west as well as Widgelli Settlers Road running north-south. The main unsealed roads are Martin and Cashmere Roads offering access to individual lots.

### Constraints

- The fact that it is one of the least populated areas may lead to lower prioritisation of infrastructure investment and limited services capacity in the area

### Opportunities

- Irrigation farming opportunities
- Good access to Irrigation Way.
- Intensive livestock (poultry) to facilitate the growth of the Hanwood processing plant.

## Broad Strategic Principals

*(Read this section with “Future Land uses for Widgelli” Map)*

Consistent with current land use pattern.

## Selection Criteria for Candidate Sites

Not applicable

## Submissions Received

No submissions received from this area.

## Willbriggie

### Locality Description

Willbriggie is situated approximately 20 kilometres south of the central business district of Griffith measured from its centre. The locality consists of a number of irrigation farms, grazing and dry land crop farming towards the south.

### Natural Environment

The topography is flat with no high rising areas. Remnant vegetation exists in the area south of Coppard and Silo Roads with distinctive clumps of natural bushland. The Murrumbidgee River forms the border of the south western corner of the area with river vegetation along its banks.

### Role and Function

- The area is also one of the least populated areas with distinctive larger farming lots and approximately 23 farm dwellings.
- Economic activity in the area is limited to farming activities supported by the cannel system, grazing, dry land farming and some poultry farming facilities related to the Hanwood facilities.
- Except for Kidman Way the road network servicing the area is gravel. Lockhart, Gum Creek (B-Double Route) and Coppard Road (B-Double Route) on the western side of Kidman Way and Adams Road on the eastern side of Kidman Way could be ranked as three major roads

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on the basis that all three give direct access to Kidman Way (Road Train Route). Other dirt roads form part of the network that provides access to farms.

## Constraints

- The fact that it is one of the least populated areas may lead to lower prioritisation of infrastructure investment and limited services capacity in the area

## Opportunities

- Irrigation farming opportunities
- Good access to Kidman Way

## Broad Strategic Principals

***(Read this section with “Future Land uses for Willbriggie” Map)***

Consistent with current land use pattern.

## Selection Criteria for Candidate Sites

Not applicable

## Submissions Received

No submissions received from this area.

# Yenda

## Locality Description

Yenda is situated north-east of Griffith along Burley Griffin Way approximately sixteen kilometres from the central business district of Griffith. The Locality consists of Yenda village which includes conventional residential lots, large lot residential, and a recreation area including a golf course and industrial lots with storage and winery facilities. The village also has a small business area providing for the day to day needs of residents both in and around the village. Irrigation farms mainly focus on viticulture. Some forestry (Binya Forest) occurs to the north adjacent to Cocopara National Park. The area is dominated by Burley Griffin Way intersecting the locality and Mirrool Branch Channel Road situated in the south-east of the area.

## Natural Environment

Topography is flat with some higher ground situated in a small northern and eastern portion of the locality.

Natural features include bushland in the northern portion next to Cocopara National Park as well as remnant vegetation on some higher ground situated in the southern part next to Dalton Road. Mirrool Creek meanders its way from a north eastern direction through the southern part of the area and some remnant vegetation occurs in and along the banks of the creek.

## Role and Function

The role and function of Yenda village within the broader planning area can be summarized as follows:

- The residential component provides alternative accommodation within a village orientated setting. The village consists of approximately 340 conventional residential lots, 32 residential large lots and 132 farm dwellings.
- Main infrastructure includes both Burley Griffin Way and Beelbanger Road which are sealed. B-Double Routes which connect Yenda to Griffith and other major routes. The Whitton road is another main sealed B-Double Route connecting to the old Whitton Stock route which is a prominent Road Train Route that leads to Leeton and beyond. Wood Road and Wakley Road is partly B-Double and partly Road Train Route to service the large winery operating from here. The rest of the roads form an effective grid pattern that links the various farms up with the major roads. Internal local village roads are all sealed roads. Other infrastructure includes the open channel irrigation/drainage network supporting the agriculture activities potable water connected to Griffith and electricity supply by Country energy. Yenda has its own sewer outfall works.
- The Temora Roto railway line runs through Yenda, parallel with Burley Griffin Way and Beelbanger Road.
- The economic activities are based on the small business area in town, irrigation farming of grapes and the huge Casella winery which is an international role player within the wine industry.

## Constraints

Some more obvious constraints to future development are:

- Short distance from Griffith and amended travelling patterns over the years has strained development of and sustainability of the small business centre.



- 
- The 100 year susceptibility data for Griffith indicates that a significant portion of the village is situated within flood prone land
  - Odour and potential contamination issues related to the wine industry.

## Opportunities

- Good road network
- Situated on Burley Griffin way
- Casella developed into an international name in the wine industry and could expand even further
- Land available to accommodate further growth
- Effective established irrigation system
- The central business area contains buildings with significant heritage value and could be renovated to enhance a historic architectural theme that could be promoted as a stop over destination.

## Broad Strategic Principals

### ***(Read this section with “Future Land uses for Yenda” Map)***

Consistent with the current land use pattern with further expansion of the wineries. Expansion of the village residential component is also likely, with the most appropriate direction being to the south-east. The latter falls within the Bilbul local area boundary but would functionally form part of Yenda (see candidate site 4 Bilbul). The proposed portion is not flood prone land, effective linkage with the existing village area already exists via Burley Griffin Way and minimizes the “channel effect”. The overwhelming strategic factor is the fact that this area minimizes potential land use conflict with current and future Industrial activity linked to the wine industry situated north of Doug McWilliam Road.

Large lot expansion would be accommodated by the land situated to the south west already zoned for this purpose.

## Selection Criteria for Candidate Sites

The suitability of candidate site 4 (Bilbul) for further residential development has been assessed in terms of a set of key criterion set out at the end of this section.

## Submissions Received

Two submissions were received from the area. The submissions are listed as site No's 37 and 57 in the submission analyses and on the submission locality plan attached to the strategy.

## Yoogali

### Locality Description

Yoogali is situated east of Griffith along Irrigation Way approximately five kilometres from the central business district of Griffith. The Locality consists of Yoogali village which includes educational facilities, conventional residential lots, large lot residential, recreation areas including sports facilities and a private club. The village also has a small business area providing for the day to day needs of residents both in and around the village. Yoogali also includes some industrial, commercial and winery activities situated between Irrigation way and Oakes Road. Irrigation farms mainly focus on viticulture a retirement village is situated north of Oakes Road. A major electricity distribution centre is situated at the T-junction formed by Hamilton Road and Irrigation Way.

### Natural Environment

Topography is flat with Mirool Creek that forms a large part of the south-eastern boundary. Some remnant vegetation occurs in and along the creek.

### Role and Function

The role and function of Yoogali within the broader planning area can be summarized as follows:

- The residential component provides alternative accommodation within a village orientated setting. The village consists of approximately 120 conventional residential lots, 102 residential large lots and 80 farm dwellings.
- The educational facilities including a pre school and primary school forms an integral part of education within its designated area.
- The economic activities are based on the small business area in town plus various industrial and commercial activities between Irrigation Way and Kurrajong Avenue as well as irrigation farming and one food processing facility
- Recreational facilities include the Yoogali club, sport fields and a public park with play equipment
- Main infrastructure includes Burley Griffin Way, Irrigation Way and Kurrajong Avenue (B-Double Routes). The rest of the roads form an effective grid pattern that links the various farms up with

the major roads. Other infrastructure includes the open channel irrigation/drainage network supporting the agriculture activities potable water network, sewer network connected to Griffith and electricity supply by Country energy. A major electrical substation is situated in the eastern part next to Irrigation Way.

- The Temora Roto railway line runs through Yoogali parallel with Irrigation Way. Internal local village roads are all surfaced roads. Constraints

## Constraints

- Awkward and dangerous intersection and railway crossing at Burley, Irrigation and Kurrajong Avenue
- High number of level crossings
- Potential land use conflict due to farming activities
- Existing development on flood prone land
- Short distance from Griffith and amended travelling patterns over the years has strained development and sustainability of the small business centre
- The Griffith Flood Management Study indicates that a significant portion of agricultural and urban land in the western section is situated within the identified flood path and is therefore subject to development control measures set out in the applicable Development Control Plan.

## Opportunities

- Good road network
- Exposure to two main roads
- Land available to accommodate further growth
- Effective established irrigation system.
- Possible relocation of the existing freight terminal to the east of the village.

## Broad Strategic Principals

*(Read this section with “Future Land uses for Yoogali” Map)*

Consistent with current land use pattern with further expansion of wineries. Further expansion of urban residential lots in the area zoned village should be monitored closely due to flood issues. Large lot expansion could be accommodated west of the area zoned village on the land already zoned for this purpose.

## Selection Criteria for Candidate Sites

Not applicable

## Submissions Received

Six submissions were received from the area. The submissions are listed as site No’s 13, 34, 41, 42 and 60 in the submission analyses and on the submission locality plan attached to the strategy.

## Selection Criteria for Candidate Sites 1 – 4 (Urban Residential)

√ = Satisfy Criteria    X = Do not Satisfy Criteria (Scale)

SELECTION CRITERIA	Candidate Sites			
	1	2	3	4
Discourage further fragmentation	√	√	√	√
Discourage unnecessary service augmentation	√	√	√	√
Discourage potential land use conflict	√	X	X	√
Avoid Land within Floodway areas indicated in the GCC Flood Management Study	√	√	√	√
Avoid bushfire prone land	√	√	√	√
Avoid land with high scenic value	√	√	√	√

<b>Avoid land with high biodiversity significance</b>	√	√	√	√
<b>Avoid land with high agricultural capability and suitability</b>	√	<b>X</b>	√	<b>X</b>
<b>Compliment applicable 117 Directions</b>	√	√	√	√
<b>Avoid physical impediments posed by irrigation channels</b>	√	√	√	√
<b>Avoid high water table in certain known localities</b>	Possibility	Possibility	√	√
<b>Avoid areas of known high salinity</b>	Possibility	Possibility	√	√
<b>Avoid main roads and associated traffic impacts</b>	√	√	√	√
<b>Avoid railway and associated (noise and traffic) impacts</b>	√	√	√	√
<b>Avoid Airport related constrains - Noise contours (ANEF) &amp; Obstacle Limitation Surfaces</b>	√	√	√	√

## Brief Environmental Overview of Candidate Sites

### Candidate Site 1: Collina

The residential candidate site in Collina comprises seven lots with a total area of 79 Ha. The candidate site is bordered to the south and west by existing urban residential areas. To the east of the site and across Citrus Road are flood prone lands presently used for horticulture. To the north of the candidate site is the village of Beelbanger. Due to the close proximity of residential land uses to the candidate site, the area is not considered to be “highly suitable” for agricultural uses.

The land use history of the candidate site has been limited to horticultural farms and associated residential dwellings. The use of the lands for horticultural, primary the planting of grapes, suggests that the soils of the candidate site could have potential contaminants present from the use of pesticides and the presence of tile drainage comprised of asbestos. As part of the preparation of the Local Environmental Plan, a phase 1 site investigation will be required in accordance with SEPP 55 to re-zone the lands. If the site investigation were to suggest the potential presence of contaminants associated with the historical agricultural use of the site, a Phase 2 investigation would be required and possible remediation measures including the removal of any existing tile drainage would be required as part of a development application for the subdivision of these lands.

The previous and current irrigation practices on the candidate site may entail that some areas of the site has a high water table and salinity issues. Any future development applications for the subdivision of the candidate site would be required to be supported by a groundwater and salinity assessment and management plan. The assessment would describe the locations of potential salinity and the depth of the watertable and provide recommendations or mitigation measures to be

imposed by the applicant. Council has a “Building in a Saline Environment” guide which can be utilised by developers if the lands are found to be potentially saline.

A survey of the candidate site indicated a highly modified area which did not contain any native vegetation or habitat for a notable population of species including TSC Act listed vulnerable species. As such, it is considered that the site does not have any biodiversity significance to the area.

A search of the State Heritage registrar indicates that there are no items within the candidate site that are listed or that are subject to an interim Heritage Order. Due to the highly disturbed nature of the site the use of the candidate site for residential purposes is not considered to have a significant impact upon any non-indigenous or indigenous heritage items. However, if during the construction of the future residential subdivisions any relic, artefact or material suspected of being of aboriginal origin is found, all works would be required to cease and the Office of Environment and Heritage and the Aboriginal Land Council would be contacted.

The candidate site is not considered to be in an area with:

- known mineral resources,
- riparian land and waterways,
- wetlands,
- steep or highly erodible soils (site is flat),
- susceptibility to bushfires.

## Candidate Site 2: Lake Wyangan

The residential candidate site in Lake Wyangan consists of 14 lots with a total area of 85.2 Ha. The candidate site surrounds the existing village on three sides (south, east and west). At the boundaries of the candidate sites exists horticultural land uses. However, to the north of the existing village includes rural residential lands adjacent to the Lake Wyangan water body. The majority of the lots within the candidate site are presently and have historically been used for horticultural farming (citrus and grapes) and associated residential dwellings. Some of the lots have been cleared and have been approved for urban residential subdivisions including: Lot 2 DP 1068127, Lot 2 DP 1071622, lot 484 DP 751743 and lot 175 DP 751743 (approximately 250 residential lots). However, the historical use of the majority of the lots contained in the candidate site for primarily the planting of grapes and citrus, suggests that the soils of the candidate site could have potential contaminants present from the use of pesticides and the presence of tile drainage comprised of asbestos. As part of the preparation of the Local Environmental Plan, a phase 1 site investigation will be required in accordance with SEPP 55 to re-zone the lands. If the site investigation were to suggest the potential presence of contaminants associated with the historical agricultural use of the site, a Phase 2 investigation would be required and possible remediation measures including the removal of any existing tile drainage as part of a development application for the subdivision of these lands.



A survey of the candidate site indicated a highly modified area which did not contain any native vegetation. As part of a development application for a 78 lot residential subdivision within the candidate site, an ecological assessment was carried out. The assessment found that:

*The site exists within a mosaic of intensive agricultural practices; primarily irrigated citrus and vineyards and is therefore providing minimal habitat resources for fauna, particularly threatened species. Although the TSC Act listed vulnerable Major Mitchell's Cockatoo was observed in the study area during the survey period, it is considered unlikely that this species would be affected by the proposed activity given the disturbed nature of the subject site, the mobility of the species and the availability of similar and better habitat within the wider study area.*

It is considered that the above assessment is indicative of the entire candidate site as all of the lots are presently, or have been historically disturbed by agricultural practices and no regeneration has taken place. As such, it is considered that the site does not have any biodiversity significance to the area.

The previous and current irrigation practices on the candidate site may entail that some areas of the site have a high water table and salinity issues. Any future development applications for the subdivision of the candidate site would be required to be supported by a groundwater and salinity assessment and management plan. The assessment would describe the locations of potential salinity and the depth of the watertable and provide recommendations or mitigation measures to be imposed by the applicant. Council has a "Building in a Saline Environment" guide which can be utilised by developers if the lands are found to be potentially saline.

A search of the State Heritage registrar indicates that there are no items within the candidate site that are listed or that are subject to an interim Heritage Order. Due to the highly disturbed nature of the site the use of the candidate site for residential purposes is not considered to have a significant impact upon any non-indigenous or indigenous heritage items. However, if during the construction of the future residential subdivision any relic, artefact or material suspected of being of aboriginal origin is found, all works would be required to cease and the Office of Environment and Heritage and the Aboriginal Land Council would be contacted.

The candidate site is not considered to be in an area with:

- known mineral resources,
- riparian land and waterways,
- wetlands,
- steep or highly erodible soils (site is flat),
- susceptibility to bushfires.

### Candidate Site 3: Hanwood

The residential candidate site in Hanwood consists of 4 lots with an area of 25.6 Ha. The candidate site is to the east of the existing Hanwood village. Horticultural land uses exist to the north, west and east of the candidate site. All of the lots within the candidate site are presently and have historically been used for horticultural farming (citrus and grapes) and associated residential dwellings.

The historical use of the lots contained in the candidate site for primarily the planting of grapes and citrus, suggests that the soils could have potential contaminants present from the use of pesticide and the presence of tile drainage comprised of asbestos. As part of the preparation of the Local Environmental Plan, a phase 1 site investigation will be required in accordance with SEPP 55 to re-zone the lands. If the site investigation were to suggest the potential presence of contaminants associated with the historical agricultural use of the site, a Phase 2 investigation would be required and possible remediation measures including the removal of any existing tile drainage as part of a development application for the subdivision of these lands.

A survey of the candidate site indicated a highly modified area which did not contain any native vegetation or habitat for a notable population of species including TSC Act listed vulnerable species. As such, it is considered that the site does not have any biodiversity significance to the area.

A search of the State Heritage registrar indicates that there are no items within the candidate site that are listed or that are subject to an interim Heritage Order. Due to the highly disturbed nature of the site the use of the candidate site for residential purposes is not considered to have a significant impact upon any non-indigenous or indigenous heritage items. However, if during the construction of any future residential subdivisions a relic, artefact or material suspected of being of aboriginal origin is found, all works would be required to cease and the Office of Environment and Heritage and the Aboriginal Land Council would be contacted.

The previous and current irrigation practices on the candidate site may entail that some areas of the site have a high water table and salinity issues. Any future development applications for the subdivision of the candidate site would be required to be supported by a groundwater and salinity assessment and management plan. The assessment would describe the locations of potential salinity and the depth of the watertable and provide recommendations or mitigation measures to be imposed by the applicant. Council has a "Building in a Saline Environment" guide which can be utilised by developers if the lands are found to be potentially saline.

The candidate site is not considered to be in an area with:

- known mineral resources,
- riparian land and waterways,
- wetlands,
- steep or highly erodible soils (site is flat),
- susceptibility to bushfires.

#### Candidate Site 4: Bilbul

The residential candidate site in Bilbul consists of one lot which is approximately 35 Ha. The candidate site is located to the south of the existing Village of Yenda. Surrounding the candidate site are horticultural land uses to the east, south and west. The agricultural capability of the candidate site is limited by its close proximity to the Village of Yenda.

The land use history of the candidate site has been limited to horticultural farming and an associated residential dwelling. The use of the lands for horticultural, primary the planting of grapes and growing of rice, suggests that the soils of the candidate site could have potential contaminants present from the use of pesticides and the presence of tile drainage comprised of asbestos. As part of the preparation of the Local Environmental Plan, a phase 1 site investigation will be required in accordance with SEPP 55 to re-zone the lands. If the site investigation were to suggest the potential presence of contaminants associated with the historical agricultural use of the site, a Phase 2 investigation would be required and possible remediation measures including the removal of any existing tile drainage as part of a development application for the subdivision of these lands.

The previous and current irrigation practices on the candidate site may entail that some areas of the site have a high water table and salinity issues. Any future development applications for the subdivision of the candidate site would be required to be supported by a groundwater and salinity assessment and management plan. The assessment would describe the locations of potential salinity and the depth of the watertable and provide recommendations or mitigation measures to be imposed by the applicant. Council has a "Building in a Saline Environment" guide which can be utilised by developers if the lands are found to be potentially saline.

The adjacent irrigation channel poses a physical impediment to development that is easily overcome by restricting access off of Dredge Street and requiring fencing to be installed as part development applications for the candidate site.

A survey of the candidate site indicated a highly modified area which did not contain any native vegetation or habitat for a notable population of species including TSC Act listed vulnerable species. As such, it is considered that the site does not have any biodiversity significance to the area.

A search of the State Heritage registrar indicates that there are no items within the candidate site that are listed or that are subject to an interim Heritage Order. Due to the highly disturbed nature of the site the use of the candidate site for residential purposes is not considered to have a significant impact upon any non-indigenous or indigenous heritage items. However, if during the construction of the future residential subdivision any relic, artefact or material suspected of being of aboriginal origin is found, all works would be required to cease and the Office of Environment and Heritage and the Aboriginal Land Council would be contacted.

The candidate site is not considered to be in an area with:

- known mineral resources,
- riparian land and waterways (other than the irrigation channel),
- wetlands,

- steep or highly erodible soils (site is flat),
- susceptibility to bushfires.

## Selection Criteria for Candidate Site 5 (Proposed Industrial)

SELECTION CRITERIA	Candidate Site
	5
Discourage further fragmentation	√
Discourage unnecessary service augmentation	√
Discourage potential land use conflict	√
Avoid Land within Floodway areas indicated in the GCC Flood Management Study	√
Avoid bushfire prone land	√
Avoid land with high biodiversity significance	√
Avoid land with high agricultural capability and suitability	X
Compliment applicable 117 Directions	√
Avoid physical impediments posed by irrigation channels	√
Avoid high water table in certain known localities	√
Avoid areas of known high salinity	√
Place near or adjacent to main Transport Routes	√

## Brief Environmental Overview of Candidate Site

The industrial candidate site consists of 8 lots with a total area of 296.5 ha. The candidate site is located at the western extent of the urban area of Griffith. To the east of the candidate site exists mainly rural industrial uses. To the north and east of the candidate site exists Griffith City Council's Sewage Treatment Plant. To the south and west of the candidate site exists agricultural uses, mainly horticultural crops (rice and grapes).

The candidate site is primarily used for horticultural crops; however, there are rural industries present within the site with frontage on the Kidman Way. As the proposed uses of the candidate site are industrial in nature it is not considered that contamination will pose a risk to future developments.

The previous and current irrigation practices on the candidate site may entail that some areas of the site have a high water table and salinity issues. Any future development applications for the industrial development of the candidate site would be required to be supported by a groundwater and salinity assessment and management plan. The assessment would describe the locations of potential salinity and the depth of the watertable and provide recommendations or mitigation measures to be imposed by the applicant. The applicant would have to justify that the industrial practices on the site will not be detrimental to groundwater.

A survey of the candidate site indicated a highly modified area which did not contain any native vegetation or habitat for a notable population of species including TSC Act listed vulnerable species. As such, it is considered that the site does not have any biodiversity significance to the area.

A search of the State Heritage registrar indicates that there are no items within the candidate site that are listed or that are subject to an interim Heritage Order. Due to the highly disturbed nature of the site the use of the candidate site for residential purposes is not considered to have a significant impact upon any non-indigenous or indigenous heritage items. However, if during the construction of the future residential subdivision any relic, artefact or material suspected of being of aboriginal origin is found, all works would be required to cease and the Office of Environment and Heritage and the Aboriginal Land Council would be contacted.

The candidate site is not considered to be in an area with:

- known mineral resources,
- riparian land and waterways (other than the irrigation channel),
- wetlands,
- steep or highly erodible soils (site is flat),
- susceptibility to bushfires.

## Release of Candidate Sites

### Strategic Demand

Based on the Strategic Demand calculations in Part C page 5 of this study a total amount of 417 Ha needs to be released up to and including 2033. This amounts to +- 20 Ha / year. To facilitate the release in an orderly fashion land will be made available over two time periods namely 2013 up to and including 2022 (first release period) and 2023 up to and including 2033 and beyond (second release period). Availability of infrastructure and cost effective augmentation of infrastructure played a critical role to identify first period versus second period land releases. Also note that the

two stage period requires more or less 200 + Ha per release period. Candidate site 1 – 4 provides for 444 Ha of the needed 417 Ha. Existing Zoned Residential land provides a further 142.65 Ha. The net calculation is based on 25% loss to infrastructure such as roads and community facilities such as open space etc. (444 Ha + 142.65 = 586.65 – 25% = 440 net Ha of land available) (Refer Part C).

Considering land already zoned Residential it calculates to a slight over provision over the period 2013 up to and beyond 2033 which is considered favourably.

## Candidate Site 1 (Collina)

### Possible Constraints

Refer to selection Criteria Table

### Land Release Table (Release Stage 1)

Lot and DP Number	Area/ Ha	Release Stage	Period
<ul style="list-style-type: none"> <li>Lot 1 DP827055</li> <li>Lot 593 DP751743</li> <li>Lot 589 DP751743</li> <li>Lot 590 DP751743</li> <li>Lot 591 DP751743</li> <li>Lot 592 DP751743</li> <li>Lot 695 DP43610</li> </ul>	79 Ha	1	2013 - 2022

### Actions Required to Facilitate Release

- Rezone the area to R1 as part of the Standard Instrument Local Environmental Plan
- Development Applications are to be supported by land contamination reports and salinity management plans.
- Infrastructure

### Roads

GHD Consulting Engineers were engaged by Council in 2003 to provide a basis for the design of the road network for each subdivision in the Collina development area. This included the area marked as Candidate Site 1 as shown on your conceptual plan. I.e. The Collina farms along Clifton Boulevard from the subdivision known as Farm 1 Collina through to Rifle Range Road. As it can be seen from the first 7 stages of the Collina precinct the road infrastructure along Clifton Boulevard will be extended from its current location through to Rifle Range Road for the same geometrical width.



The road layout from the existing developed allotments within the Collina precinct can be extended to the proposed Candidate Site 1 generally in accordance with the GHD Consulting Engineers conceptual plan.

#### Sewer

GHD Consulting Engineers were engaged by Council in 2003 to provide a basis for the design of the sewer infrastructure networks internal for each subdivision in the Collina development area. This included the area marked as Candidate Site 1 as shown on your conceptual plan. I.e. The Collina farms along Clifton Boulevard from the subdivision known as Farm 1 Collina through to Rifle Range Road. The conceptual sewer infrastructure plan modelled the entire Collina development area and indicates that to service the area marked as Candidate Site 1 on your plan an addition sewer pumping station will be required to be constructed to service the remaining undeveloped allotments within the Collina development area. This pumping station will be located within the future developed allotments within the area marked as Candidate Site 1. All other sewer infrastructure can be constructed as per *Council's Engineering Guidelines - Subdivision and Development Standards December 2008*.

#### Water

GHD Consulting Engineers were engaged by Council in 2003 to provide a basis for the design of the potable water infrastructure networks internal for each subdivision in the Collina development area. This included the area marked as Candidate Site 1 as shown on your conceptual plan. I.e. The Collina farms along Clifton Boulevard from the subdivision known as Farm 1 Collina through to Rifle Range Road. A trunk Ø375mm potable water main has been constructed along Clifton Boulevard to service the existing Collina precinct and can be connected and extended to for the Candidate Site 1 area. Feeder potable water mains can be connected off the trunk potable water main to internally service the allotments located within Candidate Site 1.

#### Drainage

GHD Consulting Engineers were engaged by Council in 2003 to provide a basis for the design of the trunk drainage networks internal for each subdivision in the Collina development area. This included the area marked as Candidate Site 1 as shown on your conceptual plan. I.e. The Collina farms along Clifton Boulevard from the subdivision known as Farm 1 Collina through to Rifle Range Road. In summary the report by GHD Consulting Engineers included a conceptual 'Collina Trunk Stormwater Concept' plan which indicates that an additional two (2) stormwater detention basins are required to be constructed within the Candidate Site 1 catchment in addition to the existing stormwater detention basins constructed within the Collina development area. The stormwater detention basins are to be constructed by the relevant developers and the land handed to Council who will own and maintain the areas at the completion of the subdivision of the relevant land.

In addition the Citrus Road drainage channel located along the eastern boundary of Candidate Site 1 will be required to be embellished to cater for the additional runoff/flows from the developed areas.

## Candidate Site 2 (Lake Wyangan)

### Possible Constraints

Refer to selection Criteria Table

### Land Release Table (Release Stage 1)

Lot and DP Number	Area/ Ha	Release Stage	Period
<ul style="list-style-type: none"> <li>LOT 3 DP1067284</li> <li>LOT 4 DP1067284</li> <li>LOT 128 DP751743</li> <li>LOT 2 DP1071622</li> <li>LOT 2 DP1068127</li> <li>LOT 175 DP751743</li> <li>LOT 484 DP751743</li> <li>LOT 2 DP862634</li> <li>LOT 1 DP1071622</li> <li>LOT 125 DP751743</li> <li>LOT 2 DP1093210</li> <li>LOT 1 DP1093210</li> <li>LOT 1 DP792549</li> <li>LOT 2 DP792549</li> </ul>	85.2 Ha	1	2013 - 2022

### Actions Required to Facilitate Releases

- Rezone the area to R1 as part of the Standard Instrument Local Environmental Plan
- Development Applications are to be supported by land contamination reports and salinity management plans.
- Infrastructure

## Roads

Existing bitumen sealed network is available to service the Candidate Site 2. However the road network will be required to be upgraded to comply with the specifications outlined in *Council's Engineering Guidelines - Subdivision and Development Standards December 2008*. This will include road widening of existing roads to ensure they comply with the minimum road widths relating to the related road classification. I.e. Boorga Road is classified as an Arterial Road; as such the road is required to be at a constructed sealed width of thirteen (13) metres with kerb and gutter constructed along both sides of the road fronting each developed allotment frontage.

Appropriate intersection treatments will be required at road intersections which will be dependant on the 'Level of Service' of the specific intersection. This is to be determined by appropriate Traffic Studies being conducted.

## Sewer

Council has completed the construction of a sewer pumping station (LW1) at the corner of Boorga Road and Smeeth Road which has been completed to service the Lake Wyangan catchment. The area marked as Candidate Site 2 on the submitted plan will require the construction of a second sewer pumping station (LW2). The area for LW2 has been sited by Council and the trunk main to this future sewer pumping station has been built. However Council's Water & Sewer Department have indicated that LW2 will not be completed until the demand for development within the Candidate Site 2 catchment proceeds.

## Water

Council has completed the construction of a trunk ø375mm water main to Scott's Road. This trunk main in the future will provide a potable water service to the Candidate Site 2; however at this stage Council's Water & Sewer Department have indicated this water main will not be extended to service Candidate Site 2 until the demand for development within the Candidate Site 2 catchment proceeds.

## Drainage

Council has recently completed the Lake Wyangan Flood Study which has determined Flood Planning Levels for the Lake Wyangan catchment. Information can be extrapolated from this study. Drainage infrastructure within the Candidate Site 2 can be accommodated to drain to the existing drainage network within the Lake Wyangan catchment, however onsite detention will be required for each specific development within the Candidate Site 2 to ensure post and pre development drainage flows are not exceeded.

### Land Release Table (Release Stage 2)

Lot and DP Number	Area/ Ha	Release Stage	Period
<ul style="list-style-type: none"> <li>• LOT 189 DP751743</li> <li>• LOT 536 DP751743</li> <li>• LOT 2 DP791024</li> <li>• LOT 177 DP751743</li> <li>• LOT 2 DP787159</li> <li>• LOT 2 DP1019423</li> <li>• LOT 1 DP1019423</li> <li>• LOT 171 DP751743</li> <li>• LOT 172 DP751743</li> <li>• LOT 533 DP751743</li> <li>• LOT 675 DP257060</li> <li>• LOT 529 DP751743</li> <li>• LOT 173 DP751743</li> <li>• LOT 542 DP751743</li> <li>• LOT 686 DP39731</li> <li>• LOT 147 DP751743</li> <li>• LOT 726 DP46245</li> <li>• LOT 727 DP46245</li> <li>• LOT 115 DP751743</li> <li>• LOT 116 DP751743</li> </ul>	158.8 Ha	2	2023–2033 &Beyond

### Actions Required to Facilitate Release

- Rezone the area to R1 as part of the Standard Instrument Local Environmental Plan
- Development Applications are to be supported by land contamination reports and salinity management plans.
- Infrastructure ( see above)

## Candidate Site 3 (Hanwood)

### Possible Constraints

Refer to selection Criteria Table

### Land Release Table (Release Stage 1)

Lot and DP Number	Area/ Ha	Release Stage	Period
<ul style="list-style-type: none"> <li>Lot 679 DP751709</li> <li>Lot 2 DP1131414</li> <li>Lot 1 DP1131414</li> <li>Lot 154 DP751709</li> </ul>	25.6	1	2013 - 2022

### Actions Required to Facilitate Release

- Rezone the area to R1 as part of the Standard Instrument Local Environmental Plan
- Development Applications are to be supported by land contamination reports and salinity management plans.
- Infrastructure

### Roads

Existing bitumen sealed network is available to service the Candidate Site 3. However the road network will be required to be upgraded to comply with the specifications outlined in *Council's Engineering Guidelines - Subdivision and Development Standards December 2008*. This will include road widening of existing roads to ensure they comply with the minimum road widths relating to the road classification.

Appropriate intersection treatments will be required at road intersections which will be dependant on the 'Level of Service' of the specific intersection. This is to be determined by appropriate Traffic Studies being conducted.

### Sewer

Council has existing sewer infrastructure in place to cater for the developed Hanwood area along Beaumont Road and Murrumbidgee Avenue. This existing infrastructure will be able to cater for the additional catchment area known as Candidate Site 3.

## Water

Council has completed the construction of a trunk ø450mm water main to Harris Road. This trunk main in the future will provide a potable water service to the Candidate Site 3; however at this stage Council's Water & Sewer Department have indicated this water main will not be extended to service Candidate Site 3 until the demand for development within the Candidate Site 3 catchment proceeds.

## Drainage

Drainage infrastructure within the Candidate Site 3 can be accommodated to drain to the existing drainage network within the Hanwood catchment, however onsite detention will be required for each specific development within the Candidate Site 3 to ensure post and pre development drainage flows are not exceeded. Candidate Site 3 is identified as Flood Liable Land from the information extrapolated from Council's Flood Study.

## Land Release Table (Release Stage 2)

Lot and DP Number	Area/ Ha	Release Stage	Period
<ul style="list-style-type: none"> <li>Lot 1623 DP257265</li> <li>Lot 1622 DP257265</li> <li>Lot 287 DP751709</li> <li>Lot 150 DP751709</li> </ul>	41.4	2	2023 – 2033 & Beyond

## Actions Required to Facilitate Release

- Rezone the area to R1 as part of the Standard Instrument Local Environmental Plan
- Development Applications are to be supported by land contamination reports and salinity management plans.
- Infrastructure (see above)



## Candidate Site 4 (Bilbul)

### Possible Constraints

Refer to selection Criteria Table

### Land Release Table (Release Stage 1)

Lot and DP Number	Area/ Ha	Release Stage	Period
• Lot 2 DP1084525	Release Full portion +- 27Ha	1	2013 - 2022

### Actions Required to Facilitate Release

- Rezone the area to R1 as part of the Standard Instrument Local Environmental Plan
- Development Applications are to be supported by land contamination reports and salinity management plans.
- Infrastructure

### Roads

Existing bitumen sealed network is available to service the Candidate Site 4. However the road network will be required to be upgraded to comply with the specifications outlined in *Council's Engineering Guidelines - Subdivision and Development Standards December 2008*. This will include road widening of existing roads to ensure they comply with the minimum road widths relating to the related road classification.

Appropriate intersection treatments will be required at road intersections which will be dependant on the 'Level of Service' of the specific intersection. This is to be determined by appropriate Traffic Studies being conducted.

### Sewer

- Council has existing sewer infrastructure in place to cater for the developed Yenda Village area. In order to service the catchment area known as Candidate Site 4 a deep and large sewer pumping station would be required to be constructed to direct sewerage flows from Candidate Site 4 to Council's existing sewer pumping station for the Yenda Village. This infrastructure would be quite costly mainly due to the depth and size of the sewer pumping station required to be built. This is due to the locality of Candidate Site 4 in relation to existing sewer infrastructure. At this stage Council has no future plans for sewer infrastructure to be completed to service Candidate Site 4.
-

## Water

The existing Yenda Filtration Plant could accommodate the Candidate Site 4. Extension of existing potable water infrastructure from the developed Yenda Village area would be required to be constructed to Candidate Site 4. At this stage Council has no future plans for potable water infrastructure to be completed to service Candidate Site 4.

## Drainage

Drainage infrastructure within the Candidate Site 4 can be accommodated to drain to the existing drainage network within the Yenda catchment, however onsite detention will be required for each specific development within the Candidate Site 4 to ensure post and pre development drainage flows are not exceeded.

## Land Release Table (Release Stage 2)

Lot and DP Number	Area/ Ha	Release Stage	Period
• Lot 230 DP 751728	Release full portion +/- 27 Ha	2	2023 – 2033 &Beyond

## Actions Required to Facilitate Release

- Rezone the area to R1 as part of the Standard Instrument Local Environmental Plan
- Development Applications are to be supported by land contamination reports and salinity management plans.
- Infrastructure (see above)

## Candidate Site 5 (Industrial Griffith)

### Possible Constraints

Refer to selection Criteria Table

## Land Release Table (Release Stage 1)

Lot and DP Number	Area/ Ha	Release Stage	Period
<ul style="list-style-type: none"> <li>• Lot 2 DP1149538</li> <li>• Lot 165 DP756035</li> <li>• Lot 1 DP1149538</li> <li>• Lot 2 DP875506</li> </ul>	296.57	1	2013 - 2023

<ul style="list-style-type: none"> <li>• Lot 1 DP875506</li> <li>• Lot 1 DP1161152</li> <li>• Lot 2 DP1034658</li> <li>• Lot 881 DP751709</li> </ul>			
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### Actions Required to Facilitate Release

- Rezone the area to IN 1 as part of the Standard Instrument Local Environmental Plan
- Development Applications are to be supported by land contamination reports and salinity management plans.
- Infrastructure

### Roads

Existing bitumen sealed network is available to service Candidate Site 5. However the road network will be required to be upgraded to comply with the specifications outlined in *Council's Engineering Guidelines - Subdivision and Development Standards December 2008*. This will include road widening of existing roads to ensure they comply with the minimum road widths relating to the related road classification.

Appropriate intersection treatments will be required at road intersections which will be dependant on the 'Level of Service' of the specific intersection. This is to be determined by appropriate Traffic Studies being conducted.

### Sewer

Council's Sewer Treatment Plant is located within the vicinity of Candidate Site 5 and as such existing sewer infrastructure in place to cater for the candidate site. At this stage Council has no future plans for sewer infrastructure to be completed to service Candidate Site 5.

### Water

Council has existing water mains along Griffin Avenue to service Candidate Site 5. Due to Candidate Site 5 being an industrial precinct the existing water main infrastructure may be required to be upgraded.

### Drainage

Drainage infrastructure within the Candidate Site 5 can be accommodated to drain to the existing drainage network within the area, however onsite detention will be required for each specific development within the Candidate Site 5 to ensure post and pre development drainage flows are not exceeded.



# FUTURE LAND USES FOR BEELBANGERA



## LEGEND



Railway



Main Feeder Canal (MI)

Retain Land for Landscape Qualities  
(Reduced Agricultural Capability -  
suitable for controlled grazing &  
other forms of extensive agriculture)

High Conservation Value

Retain Shooting Ranges  
& Gun Clubs

Conservation Value  
(Remnant Vegetation)

Retain for Agriculture (Primarily Horticulture & Viticulture)

Retain Shooting Range

Retain Existing  
Recreational Facility

Rural Residential  
Future Expansion

Preserve Land for its  
Landscape Value

Distillery

Existing Village  
(minor intensification  
allowed on merits)

Rural Residential  
Future Expansion

Retain for Agriculture  
(Primarily Horticulture & Viticulture)

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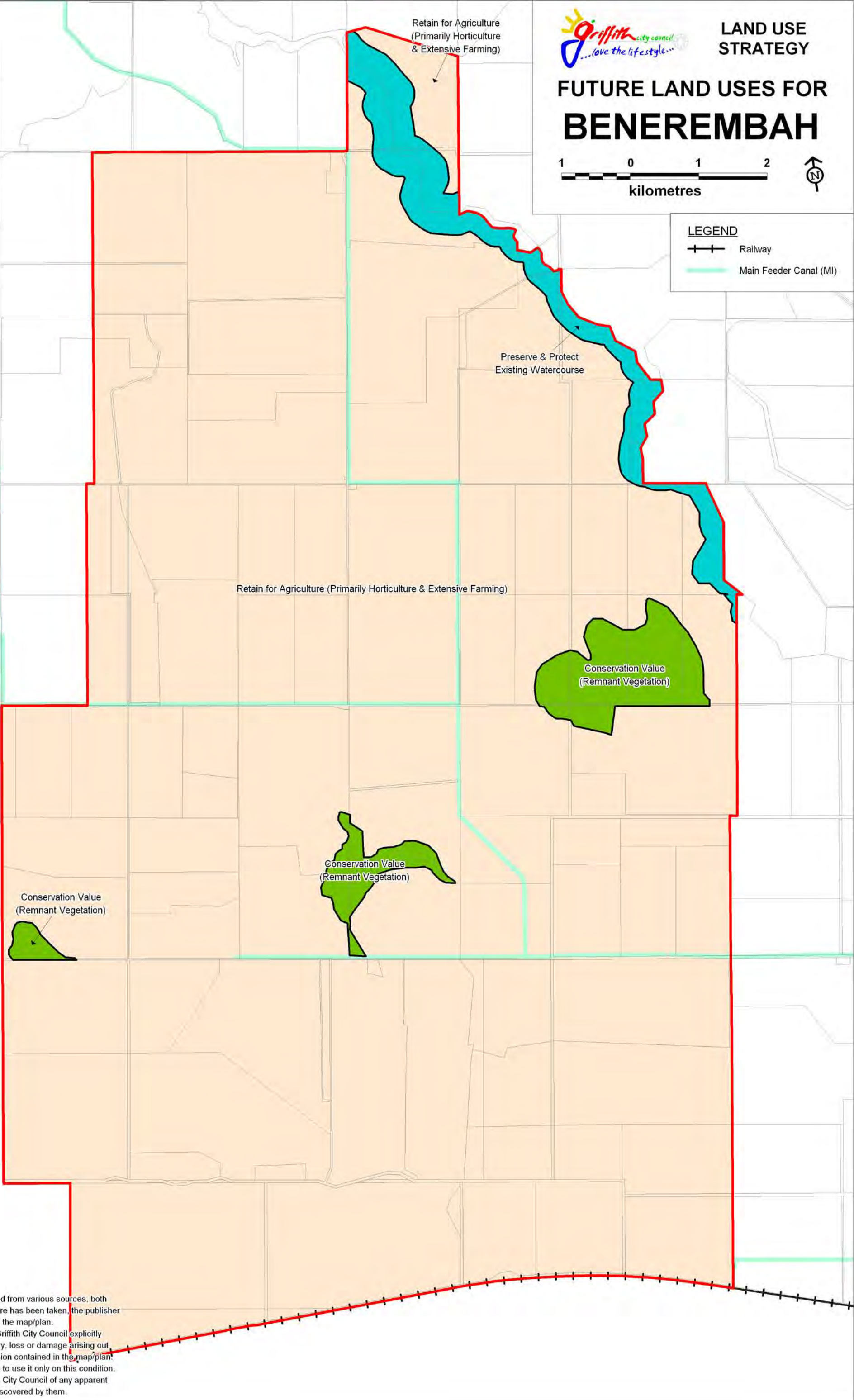


LAND USE  
STRATEGY

FUTURE LAND USES FOR  
**BENEREMBAH**



LEGEND	
	Railway
	Main Feeder Canal (M)



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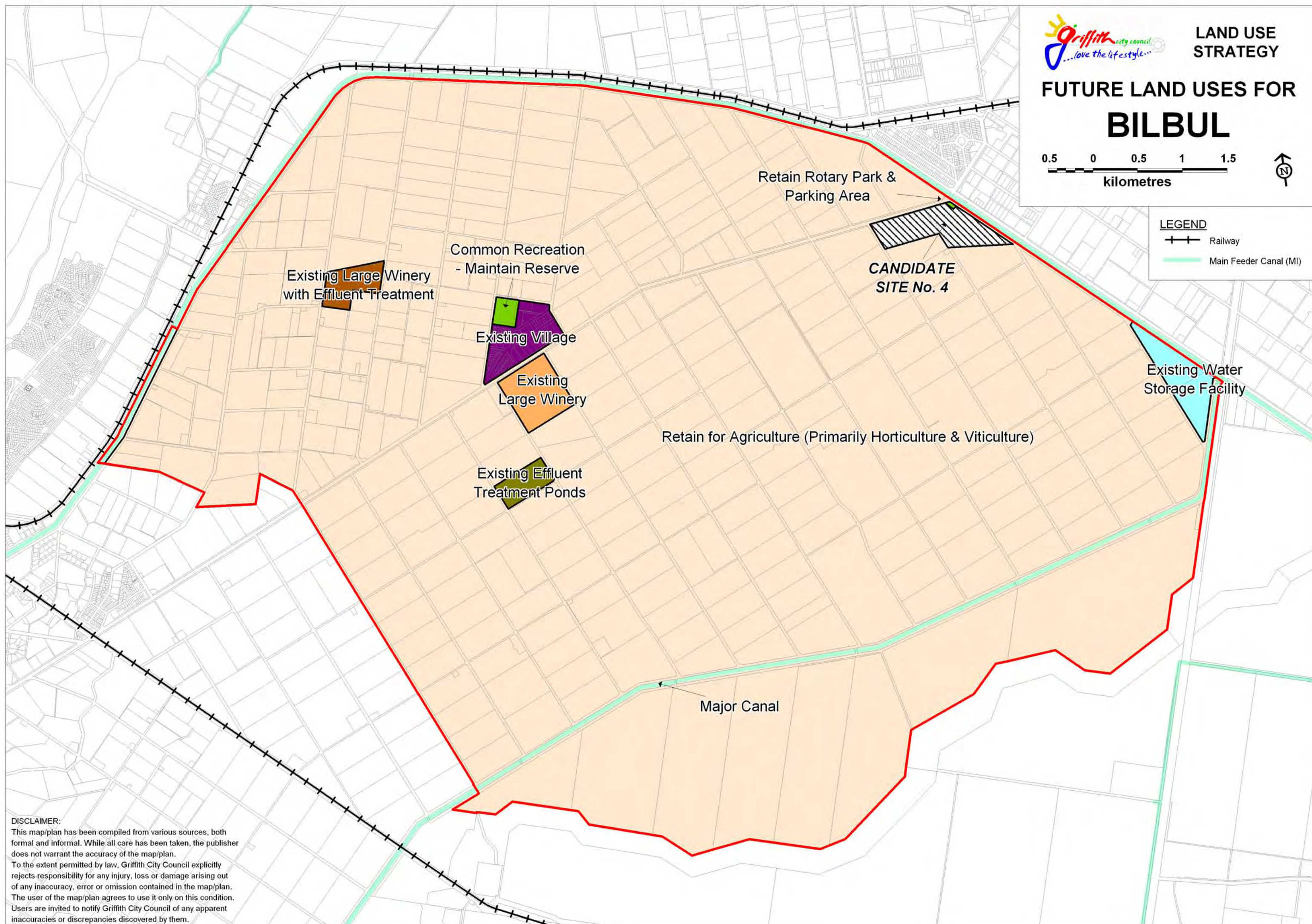
# LAND USE STRATEGY

## FUTURE LAND USES FOR BILBUL



### LEGEND

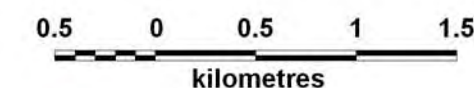
- Railway
- Main Feeder Canal (M)



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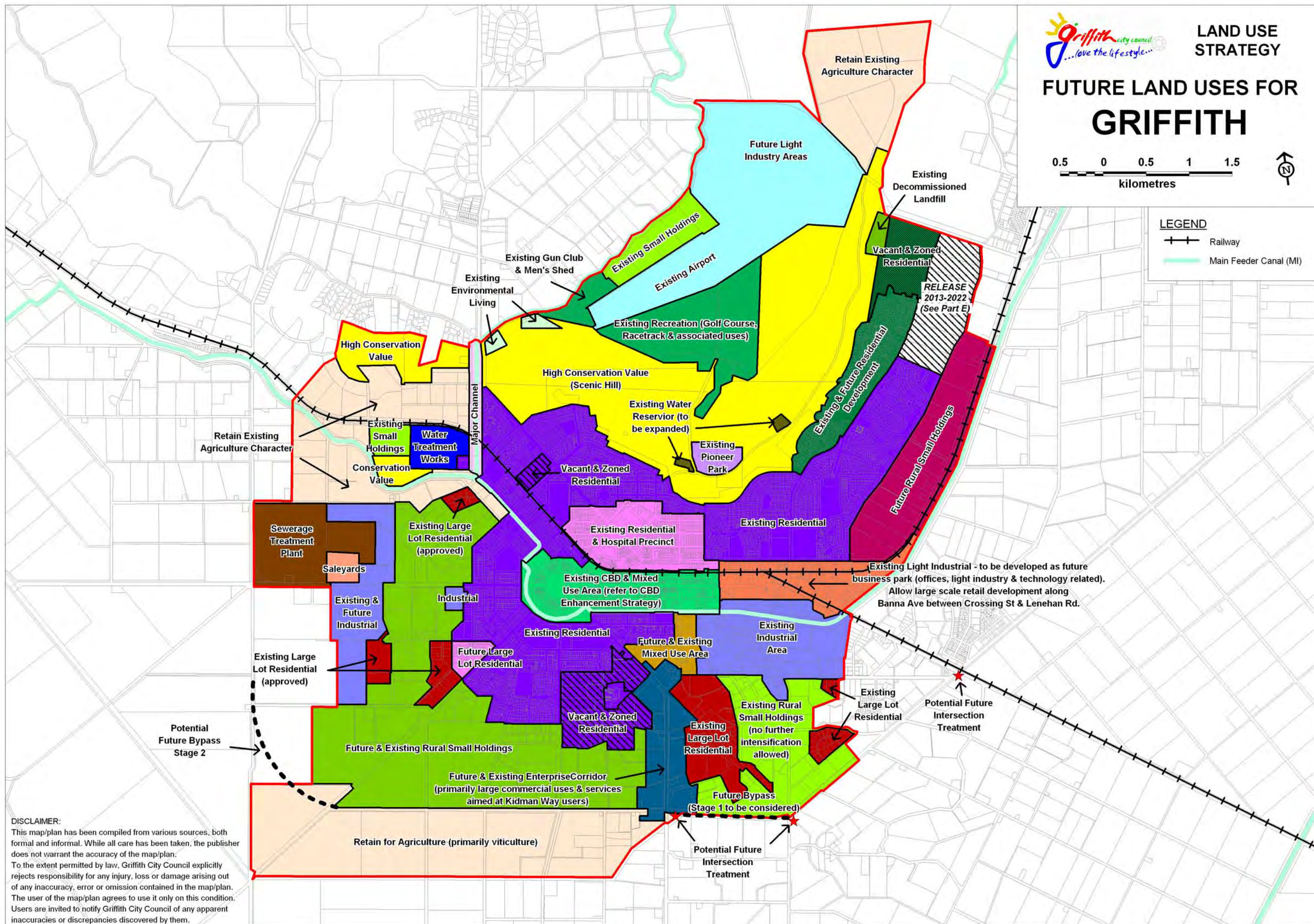
# FUTURE LAND USES FOR GRIFFITH



## LEGEND

 Railway

— Main Feeder Canal (MI)



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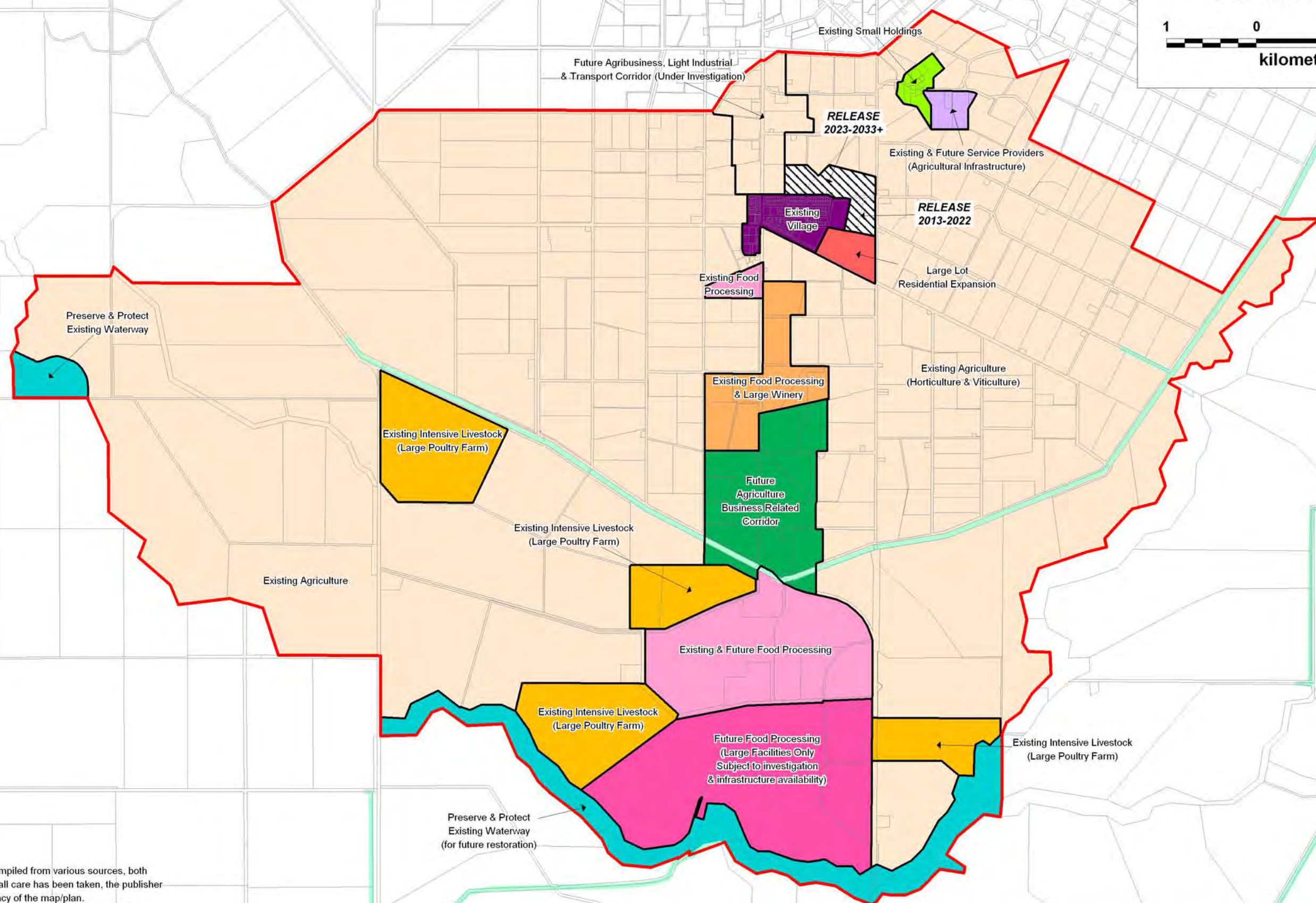
# LAND USE STRATEGY

## FUTURE LAND USES FOR HANWOOD



### LEGEND

- Railway
- Main Feeder Canal (MI)



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LAND USE  
STRATEGY

FUTURE LAND USES FOR  
**KOOBA**



LEGEND

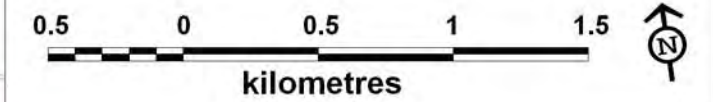
- +—+— Railway
- Main Feeder Canal (MI)

Existing Agriculture

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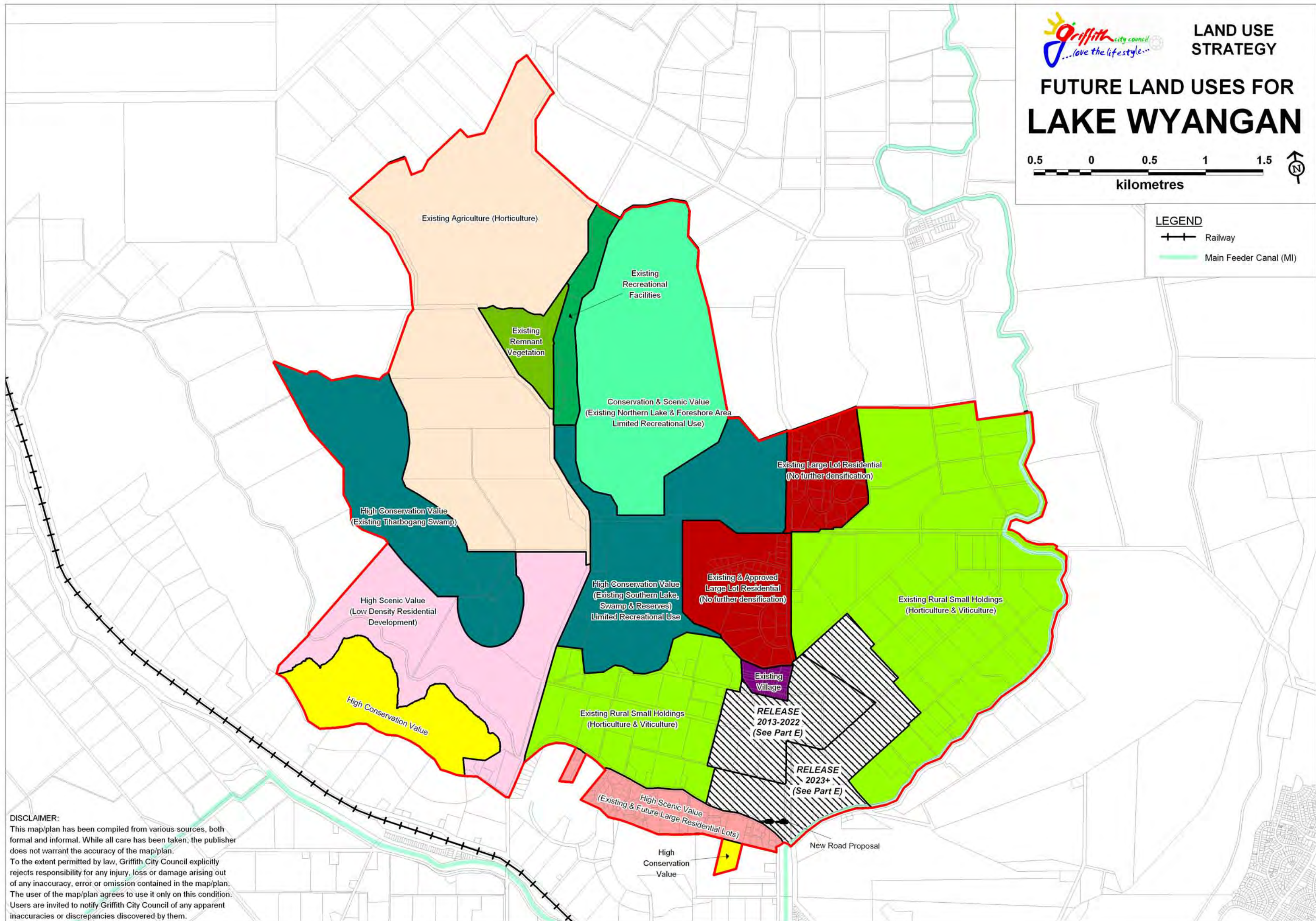


# FUTURE LAND USES FOR LAKE WYANGAN



**LEGEND**

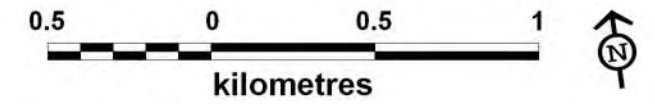
+	Railway
—	Main Feeder Canal (MI)



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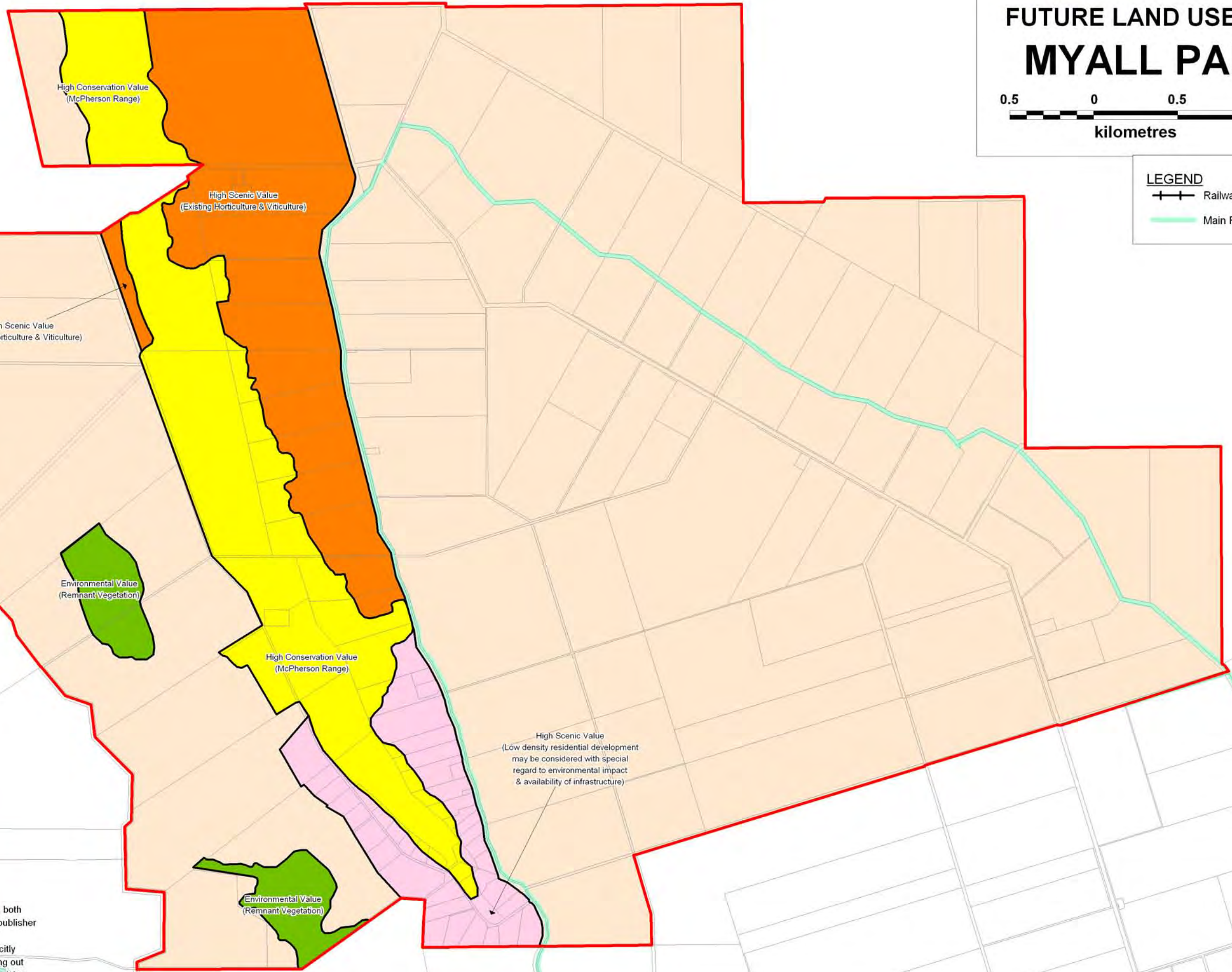


# FUTURE LAND USES FOR MYALL PARK



## LEGEND

- +—+— Railway
- Main Feeder Canal (MI)



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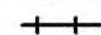



# FUTURE LAND USES FOR NERICON

0.5 0 0.5 1 1.5  
kilometres



## LEGEND

-  Railway
-  Main Feeder Canal (MI)

Existing Agriculture

Environmental Value  
(Remnant Vegetation)

Existing Large Lot  
Residential (Approved)

Existing Village

Existing Rural Small Holdings  
(Horticulture & Viticulture)

High Conservation Value  
(Nericon Swamp)

Future Regional  
Recreational Facility

Future  
Cemetery

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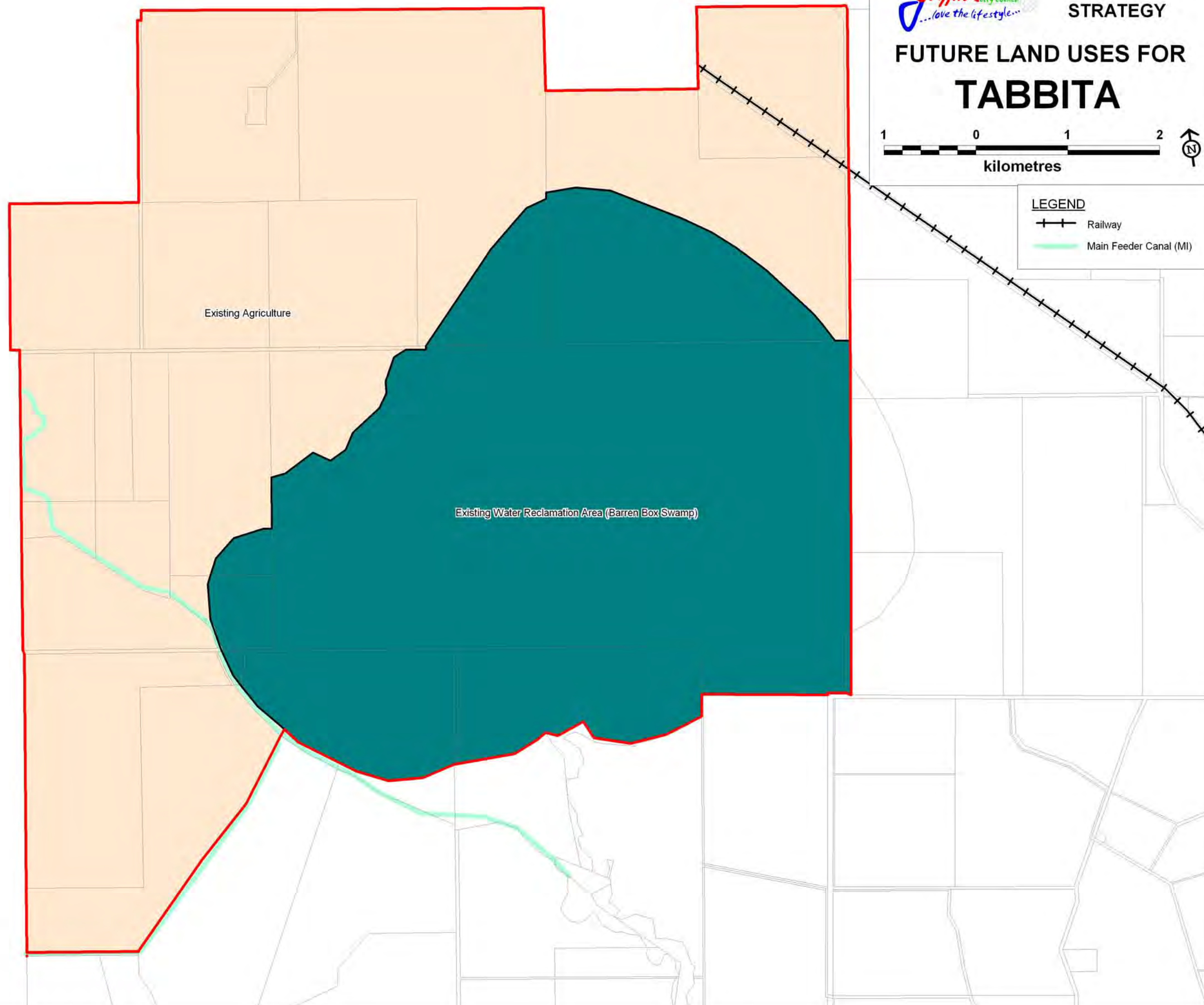
LAND USE  
STRATEGY

FUTURE LAND USES FOR  
**TABBITA**



LEGEND

- Railway
- Main Feeder Canal (M)



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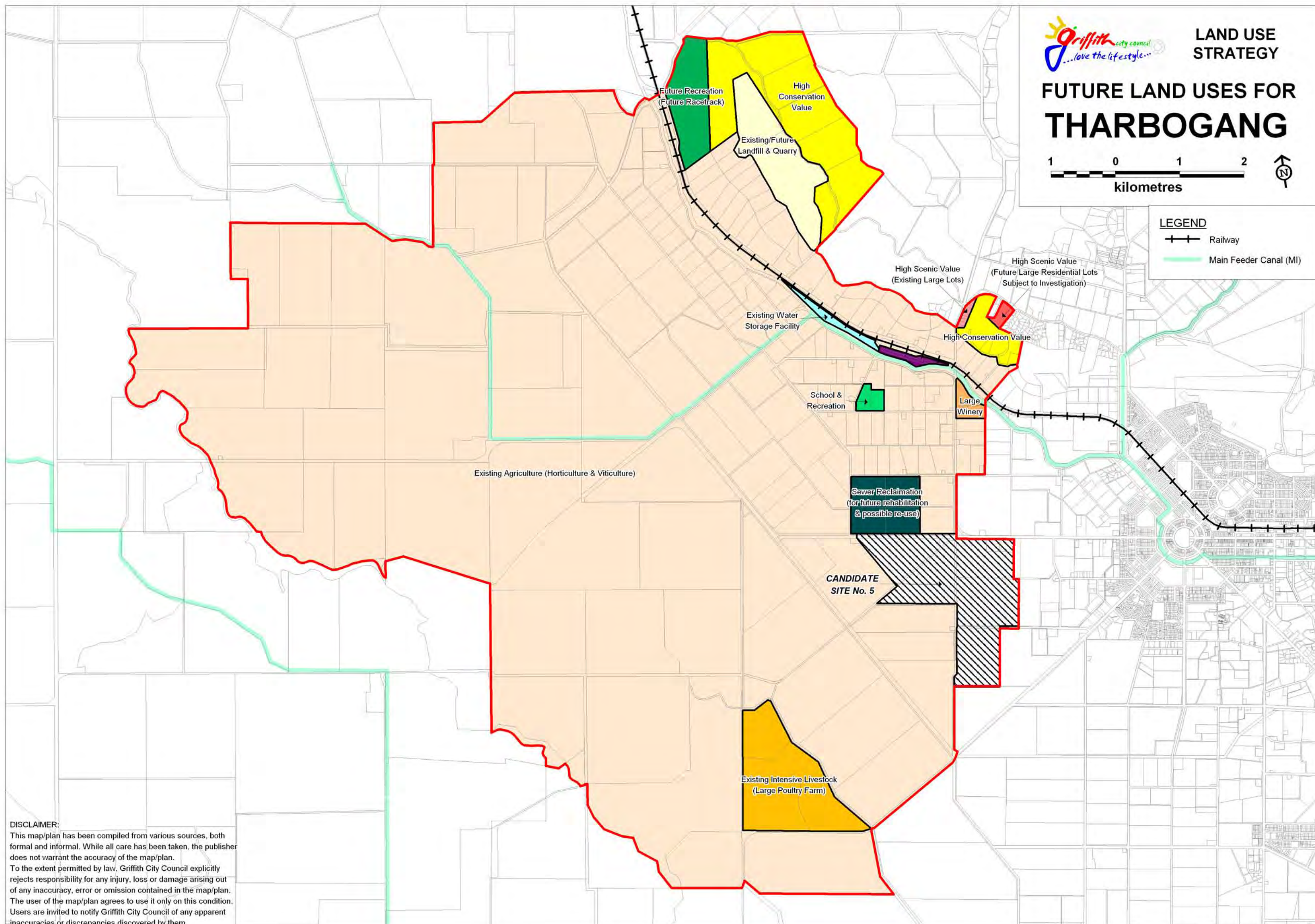
# LAND USE STRATEGY

## FUTURE LAND USES FOR THARBOGANG



### LEGEND

- Railway
- Main Feeder Canal (MI)



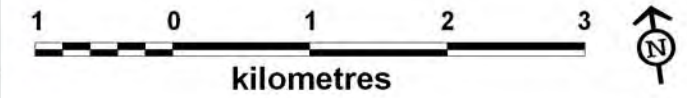
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LAND USE  
STRATEGY

FUTURE LAND USES FOR  
**WARBURN**



**LEGEND**

- Railway
- Main Feeder Canal (M)

Existing Water Reclamation Area  
(Barren Box Swamp)

Existing Gravel Quarry

Environmental Value

Conservation  
Value

Existing Agriculture

Environmental Value

High Conservation Value  
(Swamp)

Environmental Value

Environmental Value

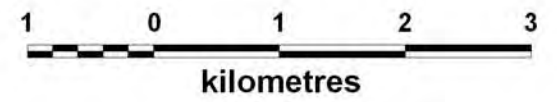
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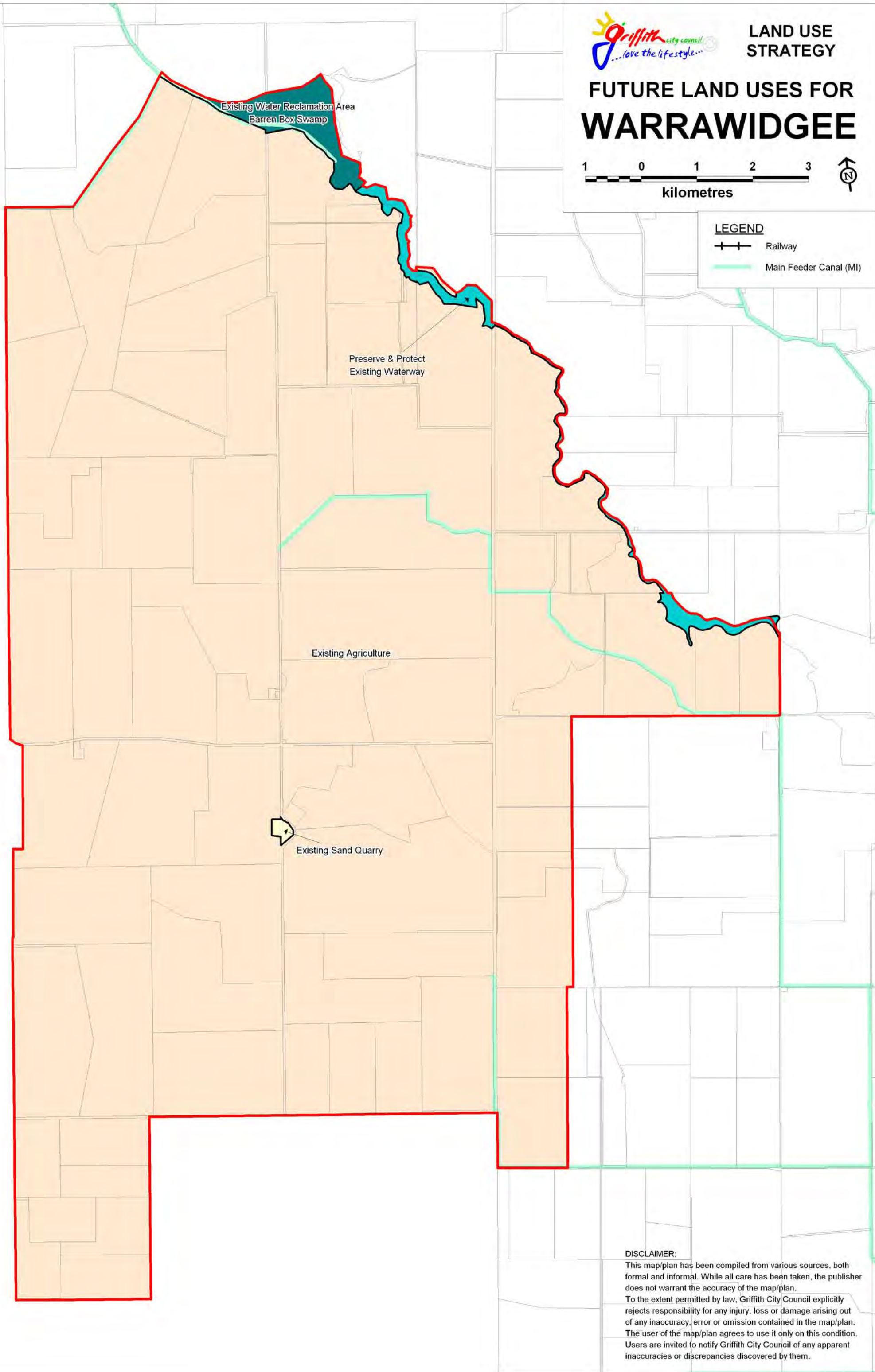
# LAND USE STRATEGY

## FUTURE LAND USES FOR WARRAWIDGEE



### LEGEND

- Railway
- Main Feeder Canal (MI)



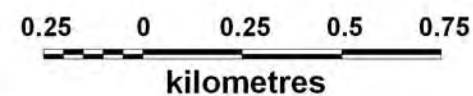
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LAND USE  
STRATEGY

FUTURE LAND USES FOR  
**WHITTON**



LEGEND

- Railway
- Main Feeder Canal (MI)



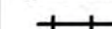

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# FUTURE LAND USES FOR WIDGELLI



## LEGEND

-  Railway
-  Main Feeder Canal (MI)

Preserve and Protect Existing Watercourse

Existing Agriculture

Environmental Value  
(Vegetation)

Environmental Value  
(Vegetation)

Environmental Value  
(Vegetation)

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

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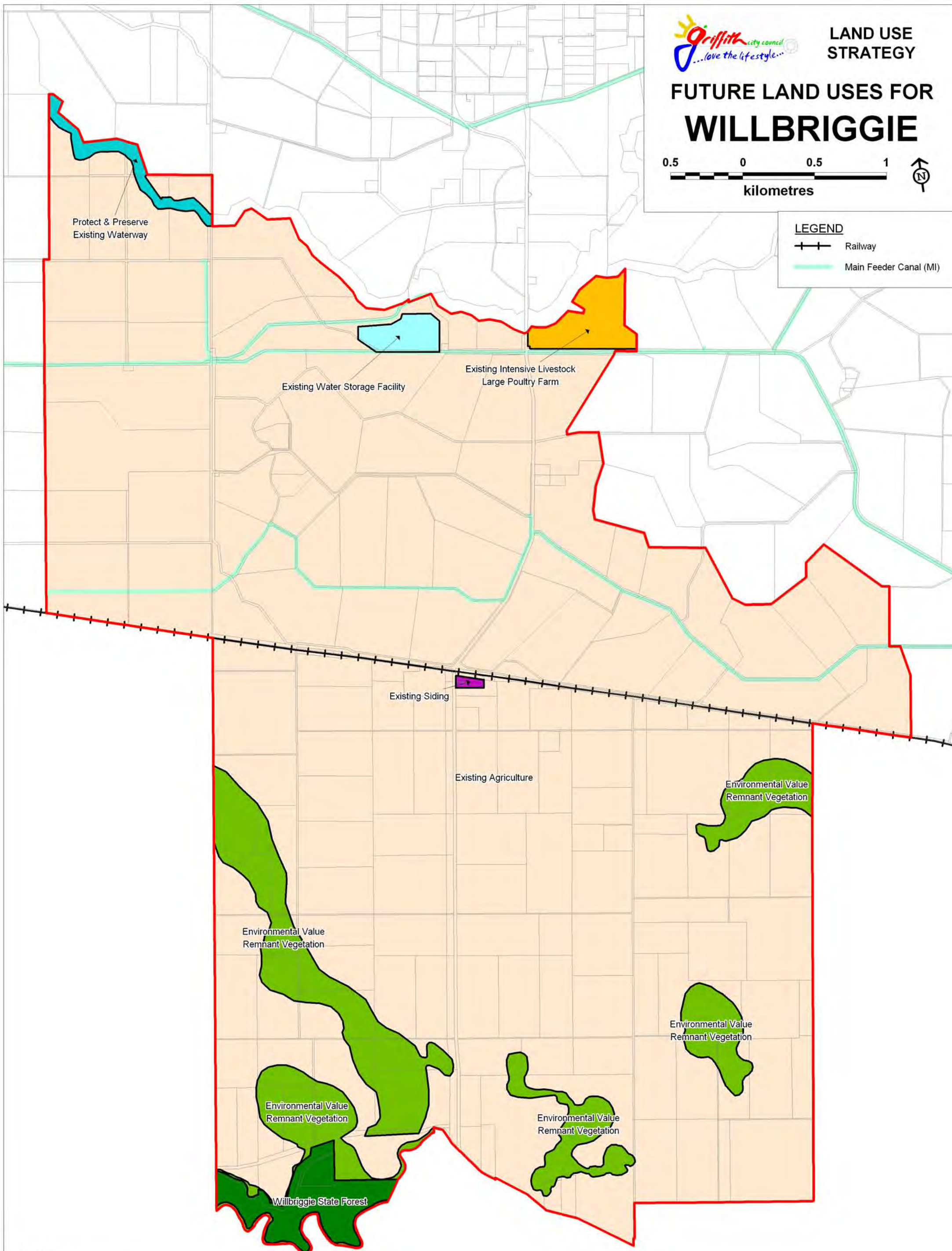


# FUTURE LAND USES FOR WILLBRIGGIE



## LEGEND

-  Railway
-  Main Feeder Canal (MI)



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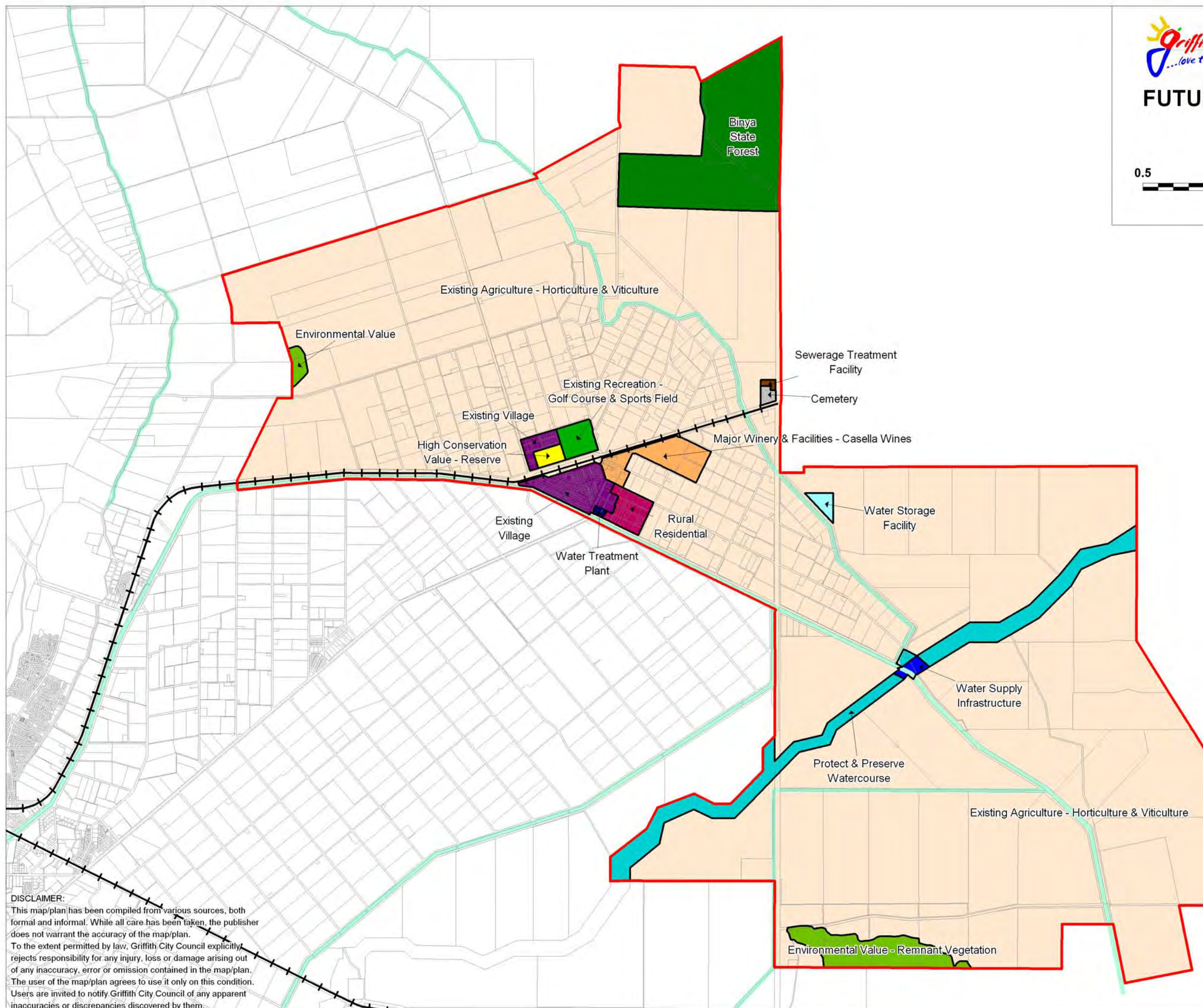


# FUTURE LAND USES FOR YENDA



## LEGEND

-  Railway
-  Main Feeder Canal (MI)



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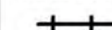

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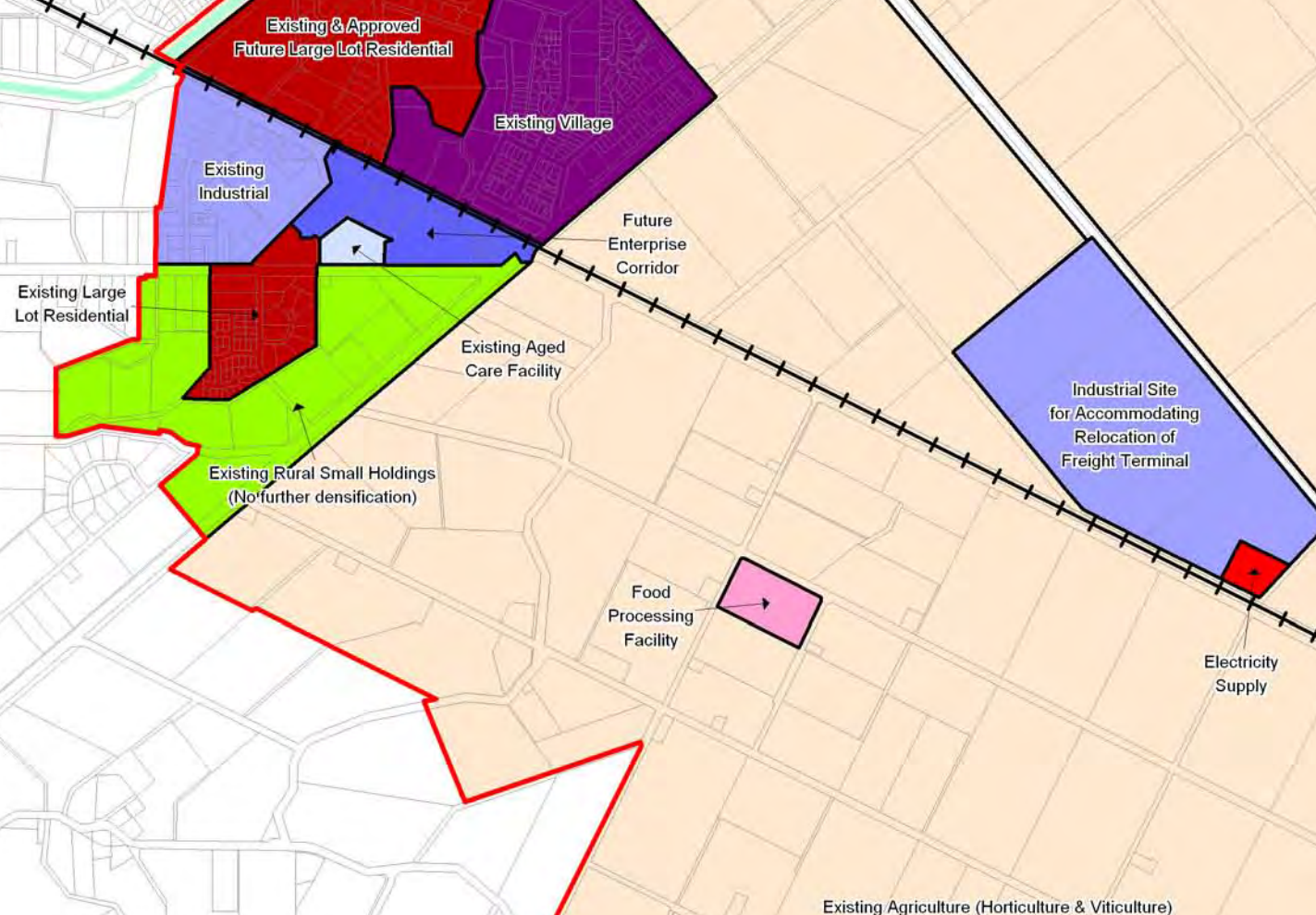


# FUTURE LAND USES FOR YOOGALI



## LEGEND

-  Railway
-  Main Feeder Canal (M)



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# Part F

## Implementation Plans

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New Comprehensive DCP .....	3
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## Implementation plans as strategic response

As already outlined in Part A of this Strategy, implementation plans are necessary to articulate the actions necessary to realise the visions, objectives and strategies outlined in the long-range general plan, local area plans and functional plans.

Actions include the formulation of appropriate planning instruments, i.e. Local Environmental Plan and Development Control Plan to regulate land use and development.

Actions may also include the formulation of appropriate planning instruments to secure the necessary funding are secured, i.e. development contribution plans and development servicing plans.

In recognition of the broader underlying land use themes in this Strategy, implementation plans will be primarily deal with land use instruments and infrastructure funding instruments, i.e.:

- A new LEP based on the gazetted standard template
- A new comprehensive DCP
- Revised contribution plans
- Revised Development Servicing Plans (DSPs)

## New LEP (Local Environmental Plan)

A new LEP to replace the current 2002 LEP is a primary motivation for the drafting of this Strategy. The only way in which the land use recommendations of this Strategy can be implemented is through appropriate rezoning of properties. In this regard a new LEP will accompany the drafting of this strategy.

The new LEP will be drafted in accordance with the latest plan making provisions and the provisions of the Environmental Planning and Assessment Amendment Act 2008 and the Environmental Planning and Assessment Amendment (Plan Making) Regulation 2009 that commenced on 1 July 2009.

In this regard it is important to take note of the following documents:

- NSW Department of Planning Circular PS 09-015
- NSW Department of Planning: A guide to preparing local environmental plans
- NSW Department of Planning: A guide to preparing planning proposals

---

## New Comprehensive DCP

In terms of Section 74C(2) of the Environmental Planning and Assessment Act 1979, only one development control plan (DCP) may apply to any particular portion of land.

Currently Griffith has a range of separate DCPs dealing with different issues and various areas. This needs to be combined into a single comprehensive DCP to give effect to the legislative requirements of the Environmental Planning and Assessment Act 1979. This however does not exclude the option of having site specific DCPs for certain portions of identified land.

A preliminary draft comprehensive DCP was developed during 2007, but not submitted for adoption in anticipation of this Strategy and the implications it may have for such a new comprehensive DCP. A second reason for not submitting the preliminary draft DCP for adoption related to the new gazetted standard template, where it was considered desirable to have common zoning terminology in both the DCP and LEP to avoid confusion.

In this regard it is suggested that the development of a new comprehensive DCP be approached in four stages:

- Firstly, it is necessary to identify development, if any, for which a site specific DCP will be required due to specific and unique circumstances.
- Secondly, it is necessary to revise the preliminary draft DCP of 2007 to be responsive to the land use recommendations in this Strategy.
- Thirdly, it is necessary to ensure that the DCP offers the best possible outcome in terms of development control measures. (This may require comparison with other DCPs and shires.)
- Lastly, it is imperative to ensure that the drafting and public participation processes for the new comprehensive DCP is meticulously in accordance with legislative requirements contained in the EP&A Act and Regulations. (This will enhance the integrity and effectiveness of the instrument.)

It is furthermore suggested that the comprehensive DCP be drafted in conjunction with a new LEP to ensure that a full new suite of development control measures be implemented simultaneously. This will reduce potential for confusion and interpretation issues.

To further improve the integrity of the instrument and the associated process, Council may consider peer review of the draft document prior to exhibition, and further peer review of any submissions.

---

## Revised Contribution Plan

Griffith City Council has historically required contributions from developers under Section 94 of the Environmental Planning and Assessment Act 1979 (EPA Act). These funds have been levied against developers for some years in terms of various contribution plans.<sup>1</sup>

Changes to the EPA Act were introduced in 2005 and included the insertion of Sections 93F (Planning Agreements) and 94A (Fixed Development Consent Levies). These sections introduced other options for the levying and collection of contributions for works made necessary or desirable by a development project. The flexibility afforded by these amendments is significant and requires a re-evaluation of Council's previous method of levying contributions under Section 94.

A new Section 94A. Contributions Plan has been adopted by Council substituting previous plans prepared under Section 94. The new plan also provides guidelines for the content and structure of Planning Agreements.

The structure of the new Section 94A plan allows three significant variations that allow more freedom in actual operation:

- The use of a fixed levy as a percent of the development cost. This makes it much easier for developers to calculate what their contribution costs will be, yet achieves a similar total monetary contribution.
- The need for a clear nexus (or connection) between the development and the project or work that the contributions will be used for. Section 94A explicitly says that "*A condition imposed under this section is not invalid by reason only that there is no connection between the development the subject of the development consent and the object of expenditure of any money required to be paid by the condition.*" This change allows the planning of works to achieve the greatest benefit for the entire community without the threat of a legal challenge that the development does not have a clear connection to the works proposed.
- Funds may be pooled and applied progressively to projects included on the works schedule. This allows easier allocation of funding to significant projects and provides more freedom in setting priorities. Adoption of the new contributions plan provides Council with an up-to-date policy and plan for the charging of developer contributions and allows freedom to manage and apply funds to the greatest benefit of the community.

---

<sup>1</sup> This section is derived extracts from a Council report submitted for Council's consideration on 25 August 2009 (CL 01)

## Revised Development Servicing Plans

Similar to the afore-mentioned contribution plans, Council has historically required contributions from developers under Section 64 of the Local Government Act 1993 for water supply, sewerage and drainage works. Several of these plans, known as Development Servicing Plans (DSPs) are in place for different services and localities.

Unlike the afore-mentioned contribution plans, DSPs are likely to continue without an immediate legislative requirement for revision. However, given the revision of infrastructure provision, capital projects and level of service, it will make sense to revise these plans to reflect actual infrastructure expenditure accurately.

Revision of DSPs is a lower priority compared to the other plans and instruments.



# Part G

## Monitoring and Review

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        Major Review ..... 2

        Ad Hoc Review ..... 2

    Administration ..... 2

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## Monitoring, review and administration

By monitoring, reviewing and administering the LUS document, Council would ensure that the LUS is established and maintained as a working document that remains relevant as a guiding tool in all decisions relating to planning and development in the Griffith local government area.

Negligence in ensuring continuous monitoring, review and sound administration of the document would result in loss of confidence in the document as a guideline and land use policy document and in time it would become irrelevant as a planning and development tool.

### Monitoring

Part B of the LUS document contains extensive general information relating to Griffith local government area as well as its setting in a wider context.

The statistical information in Part B forms a critical part of the analysis phase of the document and ultimately plays a crucial role in planning proposals contained in the document. It is crucial that this part of the document be monitored on a constant basis. Any relevant new information released should be captured in the document to supplement Part B information assisting in keeping the LUS updated and relevant. Usually this type of document is widely used to gather or address requests relating to general statistical information and therefore monitoring and updating of Part B of the LUS is necessary for this reason as well.

Guidelines for continuous monitoring:

- Changes should only be made with new released data coming from the best available sources of data or from a generally accepted and credible source, e.g. ABS Census updates.
- Monitoring should be carried out on a constant and continuous basis;
- All changes relating to Part B would be done by City Strategy and Development and would have to be accurately recorded in the LUS Administration register; and
- No council endorsement is needed for the monitoring process involving changes to, or updating of Part B.

### Review

The Review process would consist of three types of review namely:

- Minor Review
- Major Review
- Ad Hoc Review

### Minor Review

Minor review should ideally be undertaken every six months, but not less than once a year. This review will consider the document in its entire context. The review would be done by City Strategy and Development and a review report will be compiled and tabled to Council for final endorsement. Independent consultants may be used to assist in the review process. Amendments, if any, would then be done to the Strategy via a council resolution, and all amendments would be accurately recorded in the LUS Administration register.

### Major Review

Major review of the document should take place every five years. This review will consider the document in its entire context and will be more detailed than a minor review. The review process would include full public participation, inviting residents and landowners to make written submissions to be considered and/or evaluated by council. Independent consultants may be used to assist in the review process. The amendments if any would then be done to the LUS via a Council resolution and all amendments would be accurately recorded in the LUS Administration register.

### Ad Hoc Review

Ad Hoc Review of the LUS would be done if and when needed. An ad hoc review would only be undertaken if a unique proposal or event comes up that justifies such a review. Ad hoc review can only be undertaken with the approval of the General Manager or under a Council resolution. A Council resolution to support a spot rezoning could also justify an Ad Hoc review if such proposal does not erode any final strategic planning outcomes. Such amendments if any would then be done to the LUS via a Council resolution and all amendments would be accurately recorded in the LUS Administration register.

## Administration

In order to effectively keep record of the review process and amendments to the Strategy, a LUS Amendment Register will be maintained as part of this Strategy. This register will record all amendments made to the LUS resulting from the monitoring and review processes and it will be the responsibility of City Strategy and Development to ensure that the register is regularly updated.

The following information will be recorded in the Amendment Register:

- Date of amendment
- Brief description of amendment, i.e. the part or section of the LUS that has been amended, and the nature of the change or new information that was added
- An indication whether the amendment is a minor, major or ad hoc amendment
- Council resolution or responsible officer in the case of departmental updates to Part B

[illegible]



Griffith City Council  
Sustainable Development

# Griffith Land Use Strategy

Beyond 2030

Annexure 1-6

Final Draft  
2012



# Annexures

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### **Annexure 1**

Climate Data & Wind Rose

### **Annexure 2**

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### **Annexure 6**

Comments: State Agencies & Neighbouring Council's

## Annexure 1

# Climate Data and Wind Rose

## CLIMATE STATISTICS FOR GRIFFITH – 1970 – 2012

Statistics	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Years	Plot	Map
<b>Temperature</b>																
Mean maximum temperature (°C)	32.8	32.1	28.7	24.0	19.2	15.5	14.5	16.5	19.8	23.8	28.0	30.8	23.8	37	1970 2012	
Mean minimum temperature (°C)	17.0	17.3	14.2	10.2	7.1	4.5	3.5	3.9	5.8	9.0	12.6	15.1	10.0	37	1970 2012	
<b>Rainfall</b>																
Mean rainfall (mm)	33.7	28.8	33.2	27.7	35.7	33.7	33.5	36.2	32.9	40.0	33.5	33.3	402.4	49	1958 2012	
Decile 5 (median) rainfall (mm)	19.6	19.8	14.4	18.2	32.2	29.6	29.8	35.6	29.2	27.2	28.2	24.6	381.7	49	1958 2012	
Mean number of days of rain ≥ 1 mm	2.8	2.7	2.7	3.0	4.2	4.8	5.6	5.6	4.8	4.6	3.4	3.3	47.5	46	1958 2012	
<b>Other daily elements</b>																
Mean daily sunshine (hours)																
Mean number of clear days														3	1967 2010	
Mean number of cloudy days														3	1967 2010	
<b>9 am conditions</b>																
Mean 9am temperature (°C)	23.0	21.7	18.5	15.3	10.6	7.9	6.9	9.0	12.3	16.8	18.8	21.3	15.2	17	1967 2010	
Mean 9am relative humidity (%)	49	58	60	66	78	87	88	79	70	56	56	49	66	16	1972 2010	
Mean 9am wind speed (km/h)	16.3	14.0	11.4	10.5	8.1	9.4	8.6	10.8	13.3	16.1	15.1	16.7	12.5	16	1967 2010	
9am wind speed vs direction plot																
<b>3 pm conditions</b>																
Mean 3pm temperature (°C)	30.6	30.2	27.0	22.8	18.2	14.3	13.3	15.5	18.9	22.8	26.0	28.6	22.4	29	1967 2010	
Mean 3pm relative humidity (%)	28	34	37	41	53	63	62	54	47	37	35	31	43	26	1979 2010	
Mean 3pm wind speed (km/h)	17.8	17.2	15.9	15.6	14.7	15.8	16.0	19.0	19.8	19.5	19.6	19.1	17.5	22	1967 2010	
3pm wind speed vs direction plot																

# Rose of Wind direction versus Wind speed in km/h (02 Jan 1967 to 30 Sep 2010)

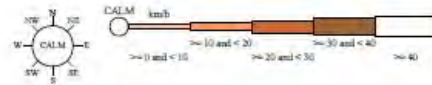
Custom times selected, refer to attached note for details

## Griffith Airport AWS

Site No: 075041 • Opened Jan 1960 • Still Open • Latitude: -34.2487° • Longitude: 146.0695° • Elevation 134m

An asterisk (\*) indicates that calm is less than 0.5%.

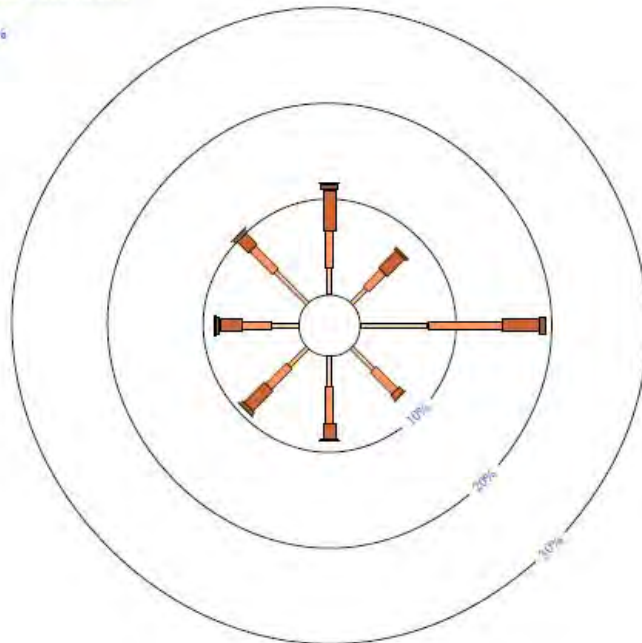
Other important info about this analysis is available in the accompanying notes.



9 am

5496 Total Observations

Calm 16%



# Rose of Wind direction versus Wind speed in km/h (02 Jan 1967 to 30 Sep 2010)

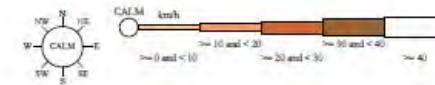
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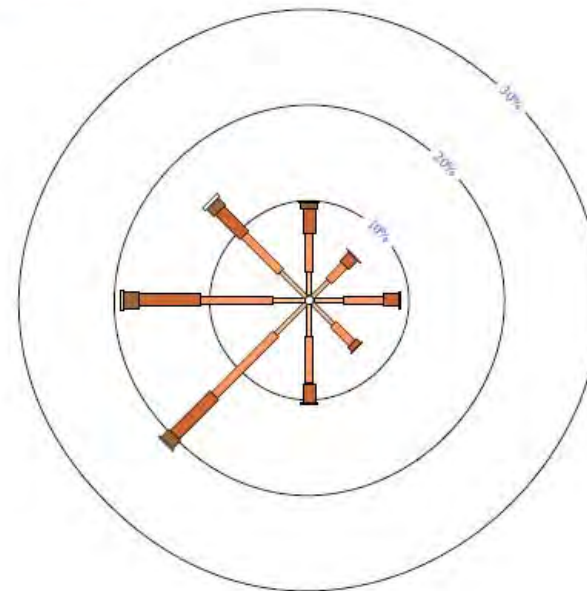
Other important info about this analysis is available in the accompanying notes.



3 pm

8107 Total Observations

Calm 2%





## Annexure 2.

# McCrindle Report – Demographic Analysis of Griffith LGA

Any other details across the bottom of the page



# Griffith Land Use Strategy

Demographic Analysis of the Griffith LGA (2680 & 2681)



October 2008



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## **Introduction**

This whitepaper was commissioned by Griffith City Council to analyse population statistics and growth trends for the total local government area of Griffith, New South Wales. This includes Griffith, Yenda and surrounds, taking in the postcodes 2680 and 2681.

## **Methodology**

This research project involved both qualitative and quantitative research to gain insights into potential growth outcomes for the Griffith City Council area in the next 25-30 years. Initial research included analyses of demographic and other available data, which was followed by a series interviews and population projections.

## **Interviews**

Building upon existing research of the Griffith area conducted by McCrindle Research, the Australian Bureau of Statistics (ABS) and other sources, this report also draws its findings from direct consultations with a dozen industry representatives and key stakeholders. These interviews probed local business owners and managers for their views, concerns, comments and observations on the topic of future growth in the Griffith region. Carried out over the telephone, these interviews covered key topics such as existing and anticipated challenges to the future of one's business, attraction and retention of staff, as well as the likelihood of dramatic growth or decline scenarios.

## **Population projections**

Additional quantitative research was subsequently conducted through a review of the previous projection calculations. Based on the latest data, these follow-up calculations are also informed by the insights and observations communicated by stakeholders during the interview portion of this project. Although it is to be acknowledged that there are inherent difficulties in converting qualitative analysis to quantitative figures, the calculations within are based on standardised alternate scenarios that take into account common long-term demographic variations.

## General stakeholder observations

This section of the report gives voice to some of the general observations expressed by those interviewed throughout the project. Though much of this provides context to what these research participants considered to be the more central issues affecting business in the Griffith region (see next section), these comments also inform population projection outcomes as well as the nature of possible growth and decline scenarios.

### Location

- Compared to other regional centres, Griffith was deemed to be relatively small. On many fronts, this meant that the town had to work harder to compete with these other areas. This was especially in relation to attracting and retaining people to work and live in the area. Many also expressed a felt need to attract and retain new businesses and industries to the area, so as to have the flow-on effect and drawing more people into local employment and housing.

**“We’re two hours too far from anywhere.”**

— Interview participant

### Industries

- The general consensus was that Griffith needs to focus more on diversification—and that failure to do so would result in declined growth. Some stated that the area had become too reliant on agriculture, wineries and other linked industries. Potentially viable suggestions for new businesses or industries included a university campus (e.g. a branch of an existing institution such as Charles Sturt University), a glass factory, a juicing plant or an army base.

### Jobs

- Despite current low levels of unemployment, there was increasing concern regarding skills shortages in the area as well as the difficulty experienced in attracting and retaining staff with the appropriate or necessary skills for certain positions.

**“If you’re unemployed in Griffith, it’s generally because you want to be.”**

— Interview participant

## Farming

- While stakeholders were aware of Griffith's status as a large food producing area, it was felt that the keys to sustaining this element of the region were water irrigation, water security and mixed enterprise. Those within the industry were also concerned about the need for more government funding, smaller farms being phased out and becoming unviable and a general apathy among growers towards overcoming both the current and future challenges inherent in this industry.

## Water

- Water was a key concern mentioned by the vast majority of participants interviewed for this project and, each time it was raised, was always couched as an issue of vital importance. Although the drought has not (as yet) had as devastating effects on Griffith as it has other regional centres and towns, there was still much apprehension over how Griffith would be coping in the years to come. Even with the irrigation structures in place, Griffith was seen as a water-dependent area and that managing this aspect of the region's future would be its biggest challenge.

**"For Griffith, water equals production."**

— Interview participant

## Growth

- Participants expressed mixed feelings over the future growth of the area. Though some were confident that it would continue to grow steadily, several failed to see how Griffith could continue to grow at recent rates.



## Central issues affecting business

The following is a summary of the most pertinent issues affecting business in the Griffith region. These responses were prompted as a result of being asked about how participants felt the council could better cater to the future needs and help facilitate the continued growth of Griffith LGA.

### Airport

- Overall, the distinct lack of airline competition was deemed undesirable. Many felt that the area's sole airline (Regional Express) had negatively impacted the region for the following reasons:
  - Unaffordable ticket prices
  - Ticket prices that were more expensive when compared to other trips of similar or equal distance (e.g. Griffith to Sydney versus Albury to Sydney)
  - Difficulty in getting seats for a flight
  - Only one destination available (Sydney) since the removal of the Griffith to Melbourne service
- Each of the above factors was believed to have had some measureable impact on further emphasising the already remote location of Griffith. Ultimately, people wanted access to more destinations via the airport.

### Council

- Research indicated that bureaucratic procedures could be more efficient and customer service could be better utilised in order to facilitate relationships between council and the public. It was also indicated that training for staff could focus on communication and policy education. This would better facilitate customer service as staff would be educated in matters of policy, planning and development and could better communicate such information to a general public.
- For instance, the development application approval process was at times deemed complicated and participants were unsure of how to negotiate perceived "hurdles" (such as a slow bureaucracy)—it was suggested that better support could be provided, in terms of offering expert guidance, and this could further expedite these processes.

### **Council (continued)**

- Participants were often unsure about the purpose of internal processes and were not clear about timeframes and development. Clearer articulation about the necessity of internal processes and realistic timeframes may facilitate a greater awareness and understanding of internal processes.
- Council could work to effectively promote the region in order to attract people and new business investments. This could focus on the good living standards, good infrastructure and water security.

### **Housing**

- Many interviewees were quite clear about their concerns for the housing market in Griffith—namely that it was very expensive, especially for a regional area. For example, one respondent felt that Wagga Wagga was a much cheaper alternative for housing in regional NSW. It was thought that this would provide a significant deterrent to the idea of settling in the area and lead to increased levels of outbound migration.

### **Staff**

- Many managers and business owners noted their difficulty in attracting and retaining valuable staff for significant periods. This was especially difficult for the occupations associated with higher qualifications and higher salaries. A similar problem was also encountered in retaining youth following the initial period of on-the-job training, with the trend being that young employees would often leave Griffith in order to travel the world.
- As with several other studies of this type, family, friends and lifestyle were frequently cited as main reasons for settling in a given area. Although individual businesses can attempt to retain staff as best as possible by facilitating the work-life balance of their employees through implementing flexible working practices, it is also important that local organisations and councils seek to assist in building new and valuable social networks of their own (e.g. through sport, clubs, events, etc.). This could be a strong selling point for Griffith, particularly among those who do not have existing social networks in the area.

## Population projections (2033 and 2038)

As at August 8, 2006, the population of Griffith LGA was estimated at 23,801. This represented approximately 0.12% of Australia's national population. This proportion remained steady in relation to the area's total labour force.<sup>1</sup>

Additional details include:

- Even gender distribution within the region: 11,905 males to 11,896 females.
- Above average proportion of indigenous persons: 3.8% (Griffith); 2.3% (National).
- Median age of persons just below average: 35 (Griffith); 37 (National).
- At least three-quarters of Griffith residents were born in Australia and only speak English at home. Italian was the second-most represented language (10.9%) and ethnicity (5.9%) in Griffith.

## Undercounting

The collated population figures for the 2006 Census aim to measure the number of people present in Australia on Census Night. This includes both short-term and long-term visitors to the country, but excludes foreign diplomats and their families. These figures, however, can only be so accurate due to the inevitability that some people will be missed and some people will be counted more than once. Consequently, following each Census the ABS conducts the Post Enumeration Survey (PES) to determine the extent of the undercount for the nation. The net undercount figure used in each of the calculations below is the difference between the PES estimate of the number of people who should have been counted in the Census and the published Census count. As detailed below, the ABS breaks down these net undercount percentages by each state/territory, each capital city, and the balance of each state/territory excluding their respective capital city.<sup>2</sup>

The ABS only conducts the post enumeration surveys and releases undercount data at a national, state and capital city level. Therefore, there is currently no data available on either undercount rates or numbers for Griffith LGA. The ABS has advised us that the only way of accurately determining actual numbers at the level of an LGA is through a metric methodology such as those developed in this paper.

## Moderate population projection

The national net undercount rate calculated by the ABS for the 2006 Census is estimated at 2.7%—thereby increasing the true population of Australia as at August 8, 2006 to 20,402,459. This undercount figure, however, is much higher than the more appropriate net rates estimated for the balance of New South Wales (NSW) minus Sydney (1.3%) and the total of New South Wales (2.4%).<sup>3</sup> Utilising these net undercount rates, the true population of Griffith, NSW as at Census Night 2006 lies between a minimum of 24,110 and maximum of 24,372—the average of which is 24,241.

The following projections make use of Series B data from the latest ABS population projections document.<sup>4</sup> These projections are conservative and largely reflect current trends in fertility rates (1.8 babies per woman), life expectancy increase, net overseas migration (180,000 per year) and net interstate migration. Both projections also draw on the relative proportion of Griffith's 2006 population estimations to the national population—both of which are just below 0.12%.<sup>5</sup>

### Series B

#### 2033

Minimum 2006 Griffith population					
<hr/>		X	Series B national projection 2033	=	
Estimated 2006 national population					
24,110					
<hr/>					
20,402,459	X	29,378,900	=	<b>34,717</b>	
				(Minimum 2033 Griffith projection)	

Maximum 2006 Griffith population					
<hr/>		X	Series B national projection 2033	=	
Estimated 2006 national population					
24,372					
<hr/>					
20,402,459	X	29,378,900	=	<b>35,093</b>	
				(Maximum 2033 Griffith projection)	

## Series B (continued)

2038

Minimum 2006 Griffith population				
<hr/>				
Estimated 2006 national population	X	Series B national projection 2038	=	

24,110				
<hr/>				
20,402,459	X	30,794,600	=	<b>36,390</b> (Minimum 2038 Griffith projection)

Maximum 2006 Griffith population				
<hr/>				
Estimated 2006 national population	X	Series B national projection 2038	=	

24,372				
<hr/>				
20,402,459	X	30,794,600	=	<b>36,784</b> (Maximum 2038 Griffith projection)

---

### Note:

- Undercount rates for both Griffith and Australia are built into the above projections in the form of an (LGA):(Nation) ratio.
- This projection is based on ABS projections staying the same and does not allow for any extraordinary changes in fertility, life expectancy, population movement etc.



## Dramatic population scenarios

The following projections make use of Series A and C data from the latest ABS population projections document for dramatic growth and dramatic decline scenarios respectively.<sup>6</sup>

Compared to Series B, Series A forecasts assume higher fertility rates (2.0 babies per woman), higher life expectancy increase, higher net overseas migration (220,000 per year) and higher levels of net interstate migration. Similarly, Series C forecasts a state of natural decrease—deaths outnumbering births—and assumes lower fertility rates (1.6 babies per woman), lower life expectancy increase, lower net overseas migration (140,000 per year) and lower levels of net interstate migration. As demonstrated above, these projections also draw on the relative proportion of Griffith's 2006 population estimations to the national population (approximately 0.12%).

### Series A

#### 2033

Minimum 2006 Griffith population				
<hr/>				
Estimated 2006 national population	X	Series A national projection 2033	=	

24,110				
<hr/>				
20,402,459	X	31,834,000	=	<b>37,618</b>
				(Minimum 2033 Griffith projection)

Maximum 2006 Griffith population				
<hr/>				
Estimated 2006 national population	X	Series A national projection 2033	=	

24,372				
<hr/>				
20,402,459	X	31,834,000	=	<b>38,026</b>
				(Maximum 2033 Griffith projection)

## Series A (continued)

2038

Minimum 2006 Griffith population				
<hr/>				
Estimated 2006 national population	X	Series A national projection 2038	=	

24,110				
<hr/>				
20,402,459	X	34,061,900	=	<b>40,251</b> (Minimum 2038 Griffith projection)

Maximum 2006 Griffith population				
<hr/>				
Estimated 2006 national population	X	Series A national projection 2038	=	

24,372				
<hr/>				
20,402,459	X	34,061,900	=	<b>40,687</b> (Maximum 2038 Griffith projection)

## Series C

2033

Minimum 2006 Griffith population				
<hr/>				
Estimated 2006 national population	X	Series A national projection 2033	=	

24,110				
<hr/>				
20,402,459	X	27,461,900	=	<b>32,452</b> (Minimum 2033 Griffith projection)

## Series C (continued)

### 2033 (continued)

Maximum 2006 Griffith population					
<hr/>					
Estimated 2006 national population	X	Series A national projection 2033	=		
24,372					
<hr/>					
20,402,459	X	27,461,900	=	<b>32,803</b>	
					(Maximum 2033 Griffith projection)

### 2038

Minimum 2006 Griffith population					
<hr/>					
Estimated 2006 national population	X	Series A national projection 2038	=		
24,110					
<hr/>					
20,402,459	X	28,382,800	=	<b>33,540</b>	
					(Minimum 2038 Griffith projection)

Maximum 2006 Griffith population					
<hr/>					
Estimated 2006 national population	X	Series A national projection 2038	=		
24,372					
<hr/>					
20,402,459	X	28,382,800	=	<b>33,903</b>	
					(Maximum 2038 Griffith projection)

### Note:

- Undercount rates for both Griffith and Australia are built into the above projections in the form of an (LGA):(Nation) ratio.
- This projection is based on ABS projections staying the same and does not allow for any extraordinary changes in fertility, life expectancy, population movement etc.

## Summary of findings

Using ABS data, there are a number of conclusions to be drawn from the above calculations (with final projections also featured in the table below). While these figures function solely as projections and not forecasts, they do provide useful approximations of possible outcomes based on demographic trends that may unfold in the Griffith region over the coming years.

Series B		Series A		Series C	
2033	2038	2033	2038	2033	2038
MIN 34,717	MIN 36,390	MIN 37,618	MIN 40,251	MIN 32,452	MIN 33,540
AVG 34,905	AVG 36,587	AVG 37,822	AVG 40,469	AVG 32,628	AVG 33,722
MAX 35,093	MAX 36,784	MAX 38,026	MAX 40,687	MAX 32,803	MAX 33,903

## General estimates

These Griffith LGA projections take into account all of the figures detailed in the table.

**In 25 years** it is anticipated that the population will fall between:

- An absolute minimum of 32,452 (a dramatic decrease scenario), and
- An absolute maximum of 38,026 (a dramatic increase scenario)

The mid-point for these figures is 35,239 and closely resembles the maximum calculation in the conservative estimates of Series B (see below).

**In 30 years** it is anticipated that the population will fall between:

- An absolute minimum of 33,540 (dramatic decrease scenario), and
- An absolute maximum of 40,687 (dramatic increase scenario)

The mid-point for these figures is 37,114 and, again, most resembles the maximum calculation in the conservative estimates of Series B (see below).

## Conservative estimates

Based on Series B calculations, this stream of population projections largely reflects current trends and is, therefore, predicated on these remaining essentially stable.

**In 25 years** it is anticipated that the population will be 34,905. This is a mid-point figure between the minimum calculation of 34,717 (produced by the balance of NSW undercount rate) and the maximum calculation of 35,093 (produced by the total of NSW undercount rate).

**In 30 years** it is anticipated that the population will be 36,587. This is a mid-point figure between the minimum calculation of 36,390 and the maximum calculation of 36,784.

## Increased estimates

Based on Series A calculations, this stream of population projections is dependent on increased growth and is, therefore, reliant on the Griffith City Council's and the numerous stakeholders' capacity to adapt to and capitalise on both the times and immediate climate.

**In 25 years** it is anticipated that the population will be 37,822. This is a mid-point figure between the minimum calculation of 37,618 and the maximum calculation of 38,026.

**In 30 years** it is anticipated that the population will be 40,469. This is a mid-point figure between the minimum calculation of 40,251 and the maximum calculation of 40,687.

## Decreased estimates

Based on Series C calculations, this stream of population projections is dependent on decreased growth when compared with current trends—namely natural decrease, whereby deaths will outnumber births much sooner than in other projection scenarios. These figures will only come into effect should council and local stakeholders be overcome by some of the central issues outlined earlier in this paper (e.g. drought, attraction/retention of staff, etc.).

**In 25 years** it is anticipated that the population will be 32,628. This is a mid-point figure between the minimum calculation of 32,452 and the maximum calculation of 32,803.

**In 30 years** it is anticipated that the population will be 33,722. This is a mid-point figure between the minimum calculation of 33,540 and the maximum calculation of 33,903.



## References

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<sup>1</sup> Australian Bureau of Statistics (2007) *2006 Census QuickStats: Griffith (C) (Local Government Area)*; Australian Bureau of Statistics (2007) *2068.0 2006 Census of Population and Housing: Griffith (C) (Local Government Area) – NSW, Age By Sex*.

<sup>2</sup> Australian Bureau of Statistics (2007) *2940.0 Census of Population and Housing – Undercount, 2006*, pp.3-8.

<sup>3</sup> Australian Bureau of Statistics (2007) *2940.0 Census of Population and Housing – Undercount, 2006*, pp.6-7.

<sup>4</sup> Australian Bureau of Statistics (2008) *3222.0 Population Projections, Australia, 2006-2101*, pp.3, 78.

<sup>5</sup> The population projections displayed in this document are not predictions or forecasts—they are an assessment of what would happen to Griffith's population if the assumed levels of the components of population change—births, deaths and migration—were to be realised over the next 25 to 30 years.

<sup>6</sup> Australian Bureau of Statistics (2008) *3222.0 Population Projections, Australia, 2006-2101*, pp.3, 78.

## Annexure 3

# Industrial Land Analyses

## Industrial Land Analyses Griffith Land Use Strategy

### Zoning:

#### 4(a) General Industrial

### Locality

There are three main areas zoned for General Industrial 4(a) in terms of the Griffith Local Environmental Plan 2002 (LEP 2002). The primary area is situated adjacent to the south east of Griffith Town Centre with two minor areas respectively situated adjacent to the Leeton road south east from the primary area and adjacent to the west of Yenda village south of Burley Griffin Way. The three areas are indicated on **Map1** as 4 (a) General Industrial **Node 1, 2 and 3**.

### Zone Objectives

In terms of the (LEP 2002) the objectives for 4 (a) General Industrial is as follows:

- (a) To provide for and encourage the development and expansion of industrial activities that will contribute to the economic growth of and employment opportunities within the City of Griffith, and*
- (b) To ensure a variety of sites is available with regard to area, frontage and services to meet the requirements of a range of industrial uses, and*
- (c) To minimise negative visual impact of development by limiting the size and scale of buildings and having regard to building design and landscaping of the site, and*
- (d) To ensure industrial development creates areas that are pleasant to work in and safe and efficient in terms of transportation, land utilisation and service distribution, and*
- (e) To enable development of land within this zone for industrial purposes, and*
- (f) To enable development of land within this zone for the display and sale of bulky goods, and*
- (g) To enable development of specific office and incidental or ancillary activities in association with the primary industrial use, and*
- (h) To enable the erection of dwellings the use of which will be ancillary to an industrial use for which consent has been granted, and*
- (i) To enable development of land within this zone for purposes that will not compromise the industrial development of the locality.*

As part of the conclusion the current situation within these nodes would be compared with the abovementioned objectives.

### General composition of Industry

In a recent study done by URS (Review of Economic Growth and Infrastructure, 2007) data showed that Griffith's strength in general industries relates to the irrigation network. Two of the largest Industries are Agriculture and Food Manufacturing relating to the strong local citrus, wine, grapes and rice industries. The importance of this relating to the 3 identified nodes is that existing industrial activity within the nodes supports these industries in the form of service industries, manufacturing, transport, product processing and storage. This emphasize and contribute to the importance of well located and suitable serviced land on which these industrial

activities could be maintained and further developed in support of industries related to the irrigation network.

The Industrial nodes also play a wider role in supporting the rest of the industry sector that forms the economic basis for Griffith and surrounding areas and therefore it is important to reflect on the following issues to ensure effective management and availability of industrial land:

- Locality
- Current activities within the nodes
- Adjacent Land uses
- Potential Land use conflict
- Occupancy
- Potential for expansion

The three identified nodes have been analysed in terms of the abovementioned issues in order to place industrial land in perspective and to formulate a long term strategy ensuring effective management and availability of industrial land. This strategy would include planning proposals that should inform the LEP review on management and availability of industrial land for small, medium and large scale Industrial activities within the Griffith area.

## **Analyses**

### **Node 1**

#### **Locality**

As indicated on **Map2** the area is situated east of the existing Central Business Area between Wakaden Street and Oakes Road with a small portion south of Oaks Road between Holt, Eipper and Willbriggie Road. Due to the size and development tendencies within Node 1 it has been divided into 6 areas for analyses purposes as indicated on **Map 2**. The areas are indicated as **Node 1(a), 1(b), 1(c), 1(d), 1(e)** and **1(f)** respectively.

#### **Node1(a)**

##### **Current Activity within Node 1(a)**

This is probably the most visible Industrial properties fronting Wakaden Street with access onto Wakaden Street via a dedicated service lane. The types of activities relate to typical service industries for the automotive and agriculture related industries as well as retail in vehicles and agricultural machinery. Other activities include low level manufacturing, self storage facilities, gas storage and retail in building related materials.

### **Adjacent Land uses Node 1(a)**

North of **Node 1(a)** separated by Wakaden Street is situated agricultural activity, Residential properties, Griffith cemetery, Sport and recreational facilities and two institutional facilities.

To the east is more industrial land and to the south the railway line and rest of Node 1. To the West is situated some vacant land separated by Crossing street.

### **Potential Land use Conflict and other issues Node 1(a)**

The existence of Wakaden as well as the service lane road reserve forms a wide buffer between Node 1(a) and the uses situated to the north of it. This as well as the type and scale of current activities prevent land use conflict.

Issues which do need attention is informal access to and from Wakaden Street by heavy vehicles which seems to ignore the formal access points to the service lane as well as landscaping within councils road reserves which could be improved in order to contribute positive towards this point of entry to Griffith City.

### **Occupancy Node 1(a)**

<b><u>Occupancy Category</u></b>	<b><u>No. Lots</u></b>	<b><u>Size in hectares</u></b>
Amount of land zoned for Industrial Purposes	50	12.3ha
No. of lots serviced, developed and occupied	48	11.93ha
No. of lots serviced, developed and unoccupied	0	0ha
No. of lots serviced and vacant	0	0ha
Under Utilized Land	2 Residential properties	0.37ha
Saturation percentage = Amount of land zoned for industrial purposes – ( No. of lots serviced, developed and occupied) expressed as a percentage		97%

### **Potential for Expansion**

This area has a saturation percentage of 97%. **Node 1(a)** is surrounded by development and no further natural external expansion is possible.

In terms of abovementioned figures **0.37ha** is available for internal expansion.



## **Node 1(b)**

### **Current Activity within Node 1(b)**

This area offers reasonably good visibility to properties fronting Mackay Avenue with access via Alten and Ebert Street which explains the presence of retail activities. The type of activities relate to typical service industries for the automotive and agriculture related industries as well as retail in vehicles and agricultural machinery. Other activities include low level manufacturing, self storage facilities, gas storage and retail in building related materials. In addition to these activities retail facilities (factory shops) and a motel is situated here with prominent visibility from Mackay and Blumer Avenue respectively. A recreation facility in the form of the indoor sports facility is also situated within the area.

### **Adjacent Land uses Node 1(b)**

The railway line is situated along the entire northern length and to the east rural residential land use is separated from **Node 1(b)** by the main channel. To the south is industrial land indicated as **Node 1(d)** and to the west separated by Mackay Avenue is more industrial land indicated as **Node 1(c)**.

### **Potential Land use Conflict and other issues Node 1(b)**

The composition of current land use activity does not seem to create any significant land use conflict due to the absence of disturbing industrial activity. Issues which should be addressed include dilapidated structures in Collier Street and huge amounts of rubble at the north eastern end of this node which defaces the town entrance from the east.

### **Occupancy Node 1(b)**

<b><u>Occupancy Category</u></b>	<b><u>No. Lots</u></b>	<b><u>Size in hectares</u></b>
Amount of land zoned for Industrial Purposes	96	28.1ha
No. of lots serviced, developed and occupied	90	21.97ha
No. of lots serviced, developed and unoccupied	1	0.68ha
No of lots serviced and vacant	5	2.87ha
Under Utilized Land	Ptn of Lot 1 as indicated	2.58ha
Saturation percentage = Amount of land zoned for industrial purposes – ( No. of lots serviced, developed and occupied) expressed as a percentage		78.2%

### **Potential for Expansion Node 1(b)**

This area has a saturation percentage of 78.2%. **Node 1(b)** is effectively edged off by rail, road and the main water channel and no further natural external expansion is possible. Some vacant sites and re-development of dilapidated structures leaves room for internal expansion.

In terms of above mentioned figures **6.13ha** is available for internal expansion.

### **Node 1(c)**

#### **Current Activity within Node 1(c)**

This area include the eastern portion of Banna Avenue and links with the CBD area which explain the presence of office, retail and recreation uses. Other activities includes service industries and abandoned agricultural related processing structures adjacent to Banna Avenue. A small portion is situated in Railway Street between Bonegila Road and Jondaryan Avenue, activities in this area includes service industry, entertainment and the railway distribution yard. The rest of the area include the section between Twigg street (not surfaced) and the railway siding with abandoned agricultural related structures, a service support depot and motor scrap yards.

#### **Adjacent Land uses Node 1(c)**

North of **Node 1(c)** is situated the railway line and railway line reserve. To the east Mackay Avenue and the railway line and reserve separates **Node 1(c)** from **Node 1(b)**.

To the south the main channel and Bridge Road separates **Node 1(c)** from **Node 1(d)** and **Node 1(e)**. To the west Crossing Street separates **Node 1(c)** from the Central Business Area with Griffen Plaza and Woolworths/Big W retail outlets directly adjacent to Crossing Street.

#### **Potential Land use Conflict and other issues Node 1(c)**

The composition of current land use activity does create opportunity for potential land use conflict within the node as well as in relation to adjacent land uses.

Potential land use conflict within the node relates to the Railway freight distribution centre in relation to Central Business expansion and re- development along Railway Street. Further potential land use conflict arises from the presence of agricultural related processing facilities adjacent to Banna and Mackay Avenue. A good example is the old Sunrise site situated in an area where small to medium diverse land uses as described under current activity uses the visibility and traffic volume on Banna Avenue to settle successfully. Land use conflict with adjacent areas mainly evolves around visual appearance. A good example would be Yamble Street where three major retail centres are situated, and the visual appearance from west to east reveals unkept dilapidated industrial visual blight.

### Occupancy Node 1(c)

<u>Occupancy Category</u>	<u>No. Lots</u>	<u>Size in hectares</u>
Amount of land zoned for Industrial Purposes	66	35.7ha
No of lots serviced, developed and occupied	50	22.39ha
No of lots serviced, developed and unoccupied	8	7.75ha
No of lots serviced and vacant.	8	4.81ha
Under Utilized Land	Ptn's as indicated	0.75ha
Saturation percentage = Amount of land zoned for industrial purposes – ( No. of lots serviced, developed and occupied) expressed as a percentage		62.7%

### Potential for Expansion Node 1(c)

Node 1 c has a saturation percentage of 62.7%, the area is effectively edged off by rail, road the main water channel and The Central Business area no further natural external expansion is possible. Some vacant sites and re-development of dilapidated structures leaves room for internal expansion.

In terms of abovementioned figures **13.3ha** is available for internal expansion.

### Node (1d)

#### Current Activity within Node 1(d)

The majority of land is still used for agricultural purposes. On the eastern side the Batista Industrial Estate is situated accommodating service industries, ware houses and self storage, freight services and provision of building related materials. In the south western corner a concrete plant presents the only current noxious industry.

#### Adjacent Land uses Node 1(d)

To the north are situated Bridge road and the main water channel.  
To the east is situated Mackay Avenue with some rural residential development as well as Yoogali village north of Mackay Avenue. South of Mackay Avenue is a fair sized winery and some retail outlets adjacent to the roadside. Further east between Mackay Avenue and Oaks road development applications have been approved for re-location of Toyota and Holden car sales adjacent to an existing old age care facility. To the south east is situated Oakes road with significant expansion of Yoogali village. To the south is situated agricultural land and south west is **Node 1(f)**.

### **Potential Land use Conflict and other issues Node 1(d)**

The composition of current land use activity does create opportunity for potential land use conflict within the node as well as in relation to adjacent land uses.

Potential land use conflict within the node relates to the concrete plant which represents the only noxious industry within the node. This plant has the potential to create land use conflict with adjacent land uses if the scale of its activities is increased dramatically. The residential component situated south west of Node 1(d) should also be considered as a current use which could be effected negatively.

### **Occupancy Node 1(d)**

<b><u>Occupancy Category</u></b>	<b><u>No. Lots</u></b>	<b><u>Size in hectares</u></b>
Amount of land zoned for Industrial Purposes	50	59.6ha
No of lots serviced, developed and occupied	27	16.9ha
No of lots serviced, developed and unoccupied	0	0ha
No. of lots serviced and vacant.	10 + 11 new lots	11.28ha
Under Utilized Land	Current agricultural ptn's	31.4ha
Saturation percentage = Amount of land zoned for industrial purposes – ( No. of lots serviced, developed and occupied) expressed as a percentage		28.4%

### **Potential for Expansion Node 1(d)**

Node 1(d) has a saturation percentage of 28.4%. This low saturation percentage does not justify external extension of this node at this point in time.

In terms of above mentioned figures **42.9ha** is available for internal expansion.

### **Node (1e)**

#### **Current Activity within Node 1(e)**

This Node is a typical example of gradual infill development of a previous residential area. Although a fair amount of land converted to Industrial use there is still a significant residential component. The industrial component comprises service industries, winery, packaging and a concrete plant.

### **Adjacent Land uses Node 1(e)**

To the north are situated Bridge road and the main water channel.

To the east is situated Lenehan road and **Node 1(d)**.

To the south is situated Oakes road and **Node 1(f)**.

To the west are situated Harris road and the highway service node.

### **Potential Land use Conflict and other issues Node 1(e)**

The composition of current land use activity does create opportunity for potential land use conflict within the node as well as in relation to adjacent land uses.

Potential land use conflict within the node relates to the amount of residential properties which remains within the area and which have the potential of slowing down the tempo of the infill process.

### **Occupancy Node 1(e)**

<b><u>Occupancy Category</u></b>	<b><u>No. Lots</u></b>	<b><u>Size in hectares</u></b>
Amount of land zoned for Industrial Purposes	78	38.2ha
No of lots serviced, developed and occupied	50	30.15
No of lots serviced, developed and unoccupied	3	1.2ha
No of lots serviced and vacant	2	0.75ha
Under Utilized Land	23 Residential Dwellings & 1 agri.	6.1ha
Saturation percentage = Amount of land zoned for industrial purposes – ( No. of lots serviced, developed and occupied) expressed as a percentage		78.9%

### **Potential for Expansion Node 1(e)**

Node 1(e) has a saturation percentage of 78.9%.

In terms of abovementioned figures **8ha** is available for internal expansion.

### **Node 1 (f)**

#### **Current Activity within Node 1(f)**

Node 1(f) include more recent development relating to the agricultural industry which include selling and maintenance of equipment as well as manufacturing of winery storage tanks.



### **Adjacent Land uses Node 1(f)**

To the north is situated Oaks road, **Node d** and **Node e**.

To the east, south, and west is agricultural activities.

### **Potential Land use Conflict and other issues Node 1(f)**

The presence of agriculture related activities adjacent on three sides of the node do create opportunity for land use conflict which could result from noxious industries.

### **Occupancy Node 1(f)**

<b><u>Occupancy Category</u></b>	<b><u>No. Lots</u></b>	<b><u>Size in hectares</u></b>
Amount of land zoned for Industrial Purposes	17	18.1ha
No. of lots serviced, developed and occupied	12	7.5ha
No of lots serviced, developed and unoccupied	0	0ha
No of lots serviced and vacant	0	0ha
Under Utilized Land	Current and previous agri. Land	10.6ha
Saturation percentage = Amount of land zoned for industrial purposes – ( No. of lots serviced, developed and occupied) expressed as a percentage		41.4%

### **Potential for Expansion Node 1(f)**

Node 1(f) has a saturation percentage of 41.4%.

In terms of abovementioned figures **10.6ha** is available for internal expansion.

## **Analyses**

### **Node 2**

#### **Locality**

As indicated on **Map 1**, **Node 2** is situated north of Leeton Road approximately 3km south east from **Node 1(d)**.

## Current Activity within Node 2

The zoning of Node 2 resulted from the possible relocation of the Regional Freight Centre from **Node 1(c)** to this position. The re-direction of railway line infrastructure played a very important role as part of relocation and could still be seen as a long term possibility. The land is currently utilized for agricultural purposes.

## Adjacent Land uses Node 2

Node 2 is surrounded by agricultural land uses with Leeton Road adjacent to a portion of the southern boundary.

## Potential Land use Conflict and other issues Node 2

The location of **Node 2** cannot be seen as natural expansion of the current Industrial Node1. The zoning of this portion of land was purpose driven pending on the relocation of the Regional Freight Centre and re-direction of railway line infrastructure. This proposal formed part of other possible interventions to address transport issues around heavy vehicles moving to, from and through Griffith. If the relocation of the Regional Freight Centre is not a future reality the position of this node for industrial purposes should be given more thought.

## Occupancy Node 2

<b><u>Occupancy Category</u></b>	<b><u>No. Lots</u></b>	<b><u>Size in hectares</u></b>
Amount of land zoned for Industrial Purposes		76.2ha
No of lots serviced, developed and occupied	0	0
No of lots serviced, developed and unoccupied	0	0
No of lots serviced and vacant	0	0
Under Utilized Land	0	0
Saturation percentage = Amount of land zoned for industrial purposes – ( No. of lots serviced, developed and occupied) expressed as a percentage	0	0

## Potential for Expansion

This area was zoned 4a for a specific purpose and no further expansion of the area as an industrial node is proposed.

## Analyses

### **Node 3**

#### **Locality**

As indicated on **Map 1**, **Node 3** is situated in the east of Yenda village adjacent to Burley Griffin way.

#### **Current Activity within Node 3**

Current activity is limited to fruit storage facilities with the majority of **node 3** vacant.

#### **Adjacent Land uses Node 3**

To the north is situated Burley Griffin way with agricultural activities opposite the road. To the east is Wood road with more agricultural activities. To the south west is Doug Mc William road with Mc Williams's winery adjacent.

#### **Potential Land use Conflict and other issues Node 3**

The location of **Node 3** is justified by the surrounding agricultural related industry which includes Casella and Mc Williams's winery. By allowing non noxious industrial activity in future possible land use conflict would be minimized.

#### **Occupancy Node 3**

<u>Occupancy Category</u>	<u>No. Lots</u>	<u>Size in hectares</u>
Amount of land zoned for Industrial Purposes	3	7.4ha
No. of lots serviced, developed and occupied	3	2.0ha
No. of lots serviced, developed and unoccupied	0	0
No. of lots serviced and vacant	0	0
Under Utilized Land	0	5.4ha
Saturation percentage = Amount of land zoned for industrial purposes – ( No. of lots serviced, developed and occupied) expressed as a percentage		27.1%

## **Potential for Expansion**

Node 3 See planning proposals

### **Strategic Response node 1**

#### **Strategic Response Node 1(a)**

1. It is proposed that the current character be maintained by ensuring that no heavy industrial activities would establish here in future that could result in land use conflict.
2. A suitable zoning in terms of the standard planning instrument recognizing existing uses and minimising possible land use conflict is proposed as part of the LEP review process.

#### **Strategic Response Node 1(b)**

1. It is proposed that the current character be maintained by ensuring that no heavy industrial activities would establish here in future that could result in land use conflict.
2. A suitable zoning in terms of the standard planning instrument recognizing existing uses and minimising possible land use conflict is proposed as part of the LEP review process.

#### **Strategic Response Node 1(c)**

1. It is proposed that the current character be maintained by ensuring that no heavy industrial activities would establish here in future that could result in land use conflict.
2. Ways and means should be investigated to re-develop land on which non operating agricultural processing related facilities such as the old Sunrice is presently situated.
3. Crossing Street needs to be landscaped in such a way that a visual buffer develops between the industrial land and retail facilities. A longer term strategy could be to create General business opportunity adjacent to the east of Crossing Street.
4. A suitable zoning in terms of the standard planning instrument recognizing existing uses and minimising possible land use conflict is proposed as part of the LEP review process.

#### **Strategic Response Node 1(d)**

1. It is proposed that this area be subjected to phased development. Using the Batista development as an example regarding size another four phases should be identified and prioritized on the undeveloped portion. The availability, cost and design features of services should determine the direction and prioritization of the phased development.

2. A suitable zoning in terms of the standard planning instrument recognizing existing uses and minimising possible land use conflict is proposed as part of the LEP review process.
3. The residential component situated south west of Node 1(d) should also be considered apposed to the type of industries allowed in Node 1(d)

#### **Strategic Response Node 1(e)**

1. Ways and means should be investigated to convert remaining residential properties into industrial properties.
2. Part of such strategy could include a moratorium on any further additions to existing residential properties.
3. The area west of **Node 1(e)** between Harris road and the channel reserve should be included as part of Node 1(e) due to the fact that the current uses relate to industrial rather than highway service type of usage.
4. A suitable zoning in terms of the standard planning instrument recognizing existing uses and minimising possible land use conflict is proposed as part of the LEP review process.

#### **Strategic Response Node 1(f)**

1. It is proposed that this area be subjected to phased development. The availability, cost and design features of services should determine the direction and prioritization of the phased development.
2. A suitable zoning in terms of the standard planning instrument recognizing existing uses and minimising possible land use conflict is proposed as part of the LEP review process.

#### **Strategic Response node 2**

1. Whether the re-location of the regional freight centre is still a realistic option or not it is important to safeguard surrounding land uses from the possible development of noxious industries within the zone (4a) category.
2. A suitable zoning in terms of the standard planning instrument recognizing existing uses and minimising possible land use conflict is proposed as part of the LEP review process or alternatively node 2 should be rezoned back to its original status.

#### **Strategic Response node 3**

1. Due to the current activity within **Node 3** as well as the adjoining land uses it is proposed that **Node 3** incorporate the adjoining Casella and Mc William's winery properties.
2. A suitable zoning in terms of the standard planning instrument recognizing existing uses and minimising possible land use conflict is proposed as part of the LEP review process.



## Provision of land for future Industrial purposes

### **General overview**

As indicated earlier two of the largest Industries comprise Agriculture and Food Manufacturing which relates to the strong local citrus, wine, grapes and rice industries. The above analyses indicate that **Node 1 and 3** mainly harbours industrial activities which support these industries in the form of service industries, manufacturing, transport, product processing and storage. This emphasize and contribute to the importance of well located and suitable serviced land on which these industrial activities could be maintained, managed and further developed in support of the industries related to the irrigation network. In addition, Industrial **Node 1** plays a wider role in supporting the rest of the industry sector that forms the economic basis for Griffith and surrounding areas.

It is also noteworthy to mention that a very small minority of industrial activities can be defined or categorized as noxious and offensive industries. The possibility of such industries developing in Griffith should however not be ignored in planning for the provision of land for future industrial use.

### **General determining factors**

In determining the locality and amount of land that should be identified for future industrial purposes the following determining factors resulted from the analyses:

1. The bulk of industrial activity in Griffith is in general non noxious and non offensive in nature and no indications exist that this will change dramatically in future.
2. Saturation percentages allows for further development of non noxious and non offensive industrial activity within certain existing nodes.
3. No clear indication exists as to where possible noxious and offensive industries could be located.
4. Availability of data makes it possible to sketch a picture of the average industrial development trend as an indicator for future need.
5. Council's role as an active participant in the Industrial land market is limited to identifying land without being an owner of serviced industrial land to be sold on the open market.
6. Council's absence as a role player in the active market prevents marketing of Industrial land supported by incentives to lure potential developers.
7. Agricultural industries need to be addressed, accommodated and managed separate from the current Industrial Nodes.

### **Development trends**

In trying to determine a very basic development trend available data dating back to 1990 have been used. Due to shortages of data the development trend is very basic and illustrates expansion expressed as an average growth over the period 1990 to

2008. The development would therefore not include peak and slower periods of growth. This exercise would however assist in our effort to earmark future industrial land without huge over or under supply of Industrial land.

Amount of hectares occupied:

- 1990 = 104 Ha
- 2008 = 112Ha

Amount of growth in hectares over 18 years = 8Ha

Amount of growth in hectares on average /year = 0.45Ha

Amount of growth as percentage over 18 years = 7.14%

Amount of growth as percentage on average / year = 0.4%

Abovementioned figures relate to the indentified nodes zoned 4 (a) and exclude agricultural industrial developments that took place in undefined areas such as the Caselas development.

The figures portray a slow tempo of development over the last 18 years within the 4(a) zoned areas and the following factors contributed to this tendency.

- Land uses normally associated with and allowed only in industrial areas re-located to the fringe zones due to relaxation of zoning requirements e.g. (zone 1g).
- Improvement in technology contributed to the viability of smaller areas for certain Industrial activities.
- Agricultural related industrial activity established on much more affordable agricultural land.

### **Quantification of land for future industrial use**

Quantifying land for future industrial use should represent two categories namely:

- Land for non noxious and non offensive industrial uses.
- Land for noxious and offensive industrial uses.

#### **Land for non noxious and non offensive industrial use**

It is proposed that this type of use be encouraged to locate and develop within **Node 1** currently zoned 4(a). The total amount of land available within **Node 1** amounts to 80.8Ha of which:

- 51.8Ha is “*underutilized industrial land*” which includes residential properties, agricultural activities and unused land,
- 9.63Ha is “*serviced, developed and unoccupied*” and
- 19.7Ha is “*serviced and vacant*”.

Taking in consideration the tempo of development over the last 18 years amounting to 8Ha of Industrial development council should not ad any more land to accommodate non noxious non offensive uses. The 80.8Ha actually constitute an over supply of land

in this category. It should be noted that the amount of land exclude the 76.2 Ha of **Node 2** related to the possible relocation of the regional freight centre.

#### Land for noxious and offensive industrial use

Due to absence of land in this category, historic facts regarding location in absence of effective land use control measures and availability of agricultural land it is important that council focus on making land available in this category.

Due to the financial implications such an exercise might have it is proposed that council investigate the feasibility of land which already belong to council for this purpose.

#### **Councils role as developer**

Whether council should be a role player in the provision of serviced industrial lots is beyond the scope of this report. It should however be noted that if council intend on playing such a role the focus should be on land within **Node 1** as well as bulk provision to land in the noxious and offensive category.

#### **Current situation in relation to LEP Objectives for Zone 4a**

The abovementioned analyses and planning proposals creates the opportunity to reflect on where the current industrial planning and management is positioned in terms of the LEP (2002) objectives.

This can be summarized as follows:

*(a) To provide for and encourage the development and expansion of industrial activities that will contribute to the economic growth of and employment opportunities within the City of Griffith.*

The analyses pointed out that enough land exist for internal expansion within certain nodes. Measures such as incentives to encourage actual development can be investigated and could include various rebates or other encouragement.

*(b) To ensure a variety of sites is available with regard to area, frontage and services to meet the requirements of a range of industrial uses.*

The analyses clearly indicate that enough land is currently available to accommodate small to medium scale activities. These activities should exclude noxious industries and lot sizes should vary from 2000m<sup>2</sup> to 5000m<sup>2</sup>

*(c) To minimise negative visual impact of development by limiting the size and scale of buildings and having regard to building design and landscaping of the site.*

New developments do reflect this objective although some of the older developments do not. The planning proposals indicate some of these issues and by implementing refined strategies this problem can be overcome.

*(d) To ensure industrial development creates areas that are pleasant to work in and safe and efficient in terms of transportation, land utilisation and service distribution.*

Due to fragmentation of the nodes, substandard intersections, channel crossings and absence of dedicated routes linking the nodes with major routes this objective is still to be met.

*(e) To enable development of land within this zone for industrial purposes.*

This objective is currently met by effective management of development applications within these nodes.

*(f) To enable development of land within this zone for the display and sale of bulky goods.*

There is room for improvement especially along routes with good exposure flanking some of the nodes. This would be addressed by zoning processes which will form part of the LEP revision

*(g) To enable development of specific office and incidental or ancillary activities in association with the primary industrial.*

This would be addressed by zoning processes which will form part of the LEP revision.

*(h) To enable the erection of dwellings the use of which will be ancillary to an industrial use for which consent has been granted.*

This would be addressed by zoning processes which will form part of the LEP revision.

*(i) To enable development of land within this zone for purposes that will not compromise the industrial development of the locality.*

This would be addressed by zoning processes which will form part of the LEP revision.

## **Conclusion**

More than enough land exists within Node 1 Zone 4(a) to accommodate vigorous growth within the non noxious non offensive category.

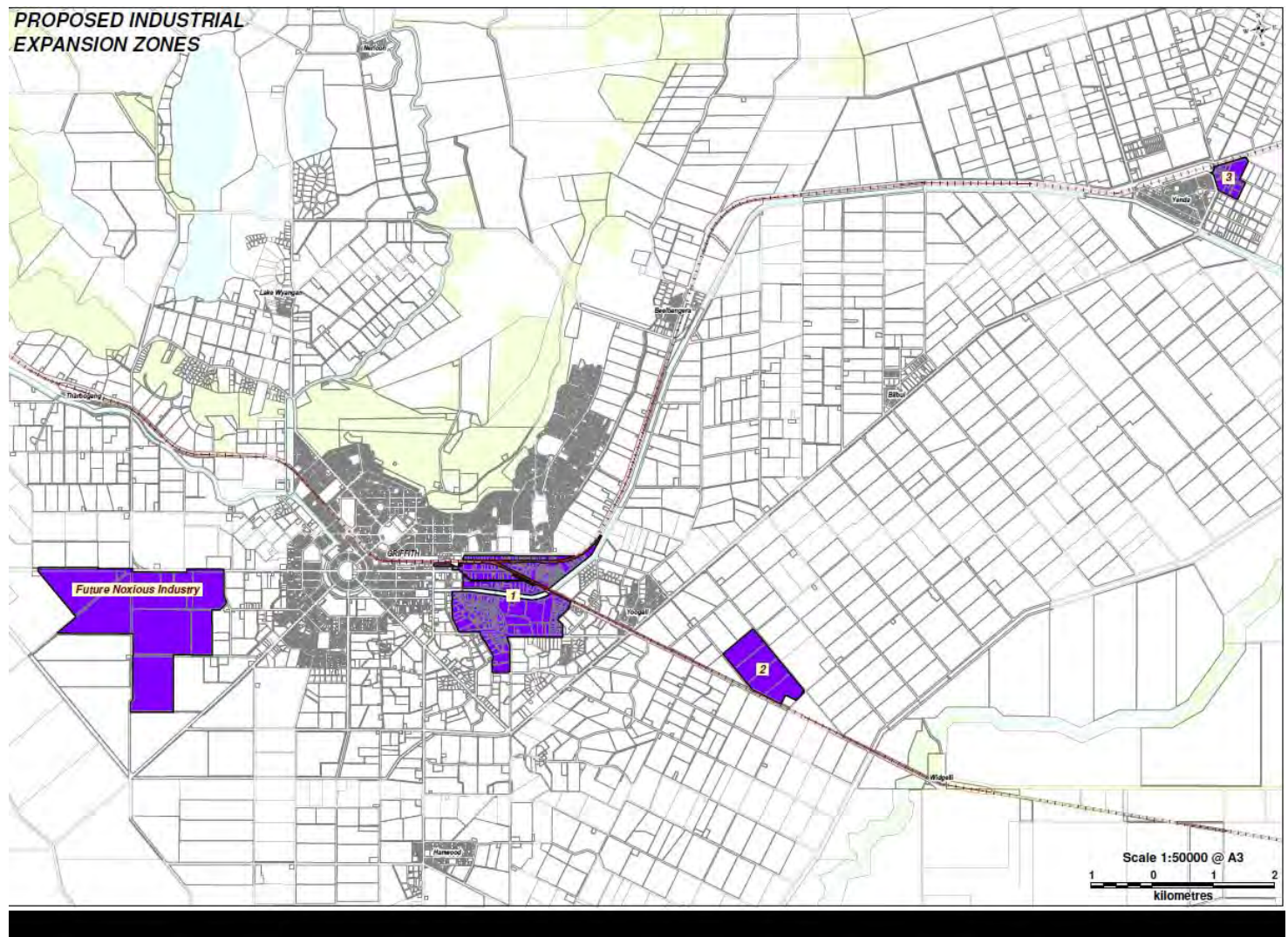
The issues identified and the planning proposals made should be addressed to encourage sustainable growth in this sector.

If council decide to take on the role as developer in order to encourage growth within this sector it should focus on available land within **Node 1**.

There is no land earmarked to accommodate possible noxious and offensive uses.

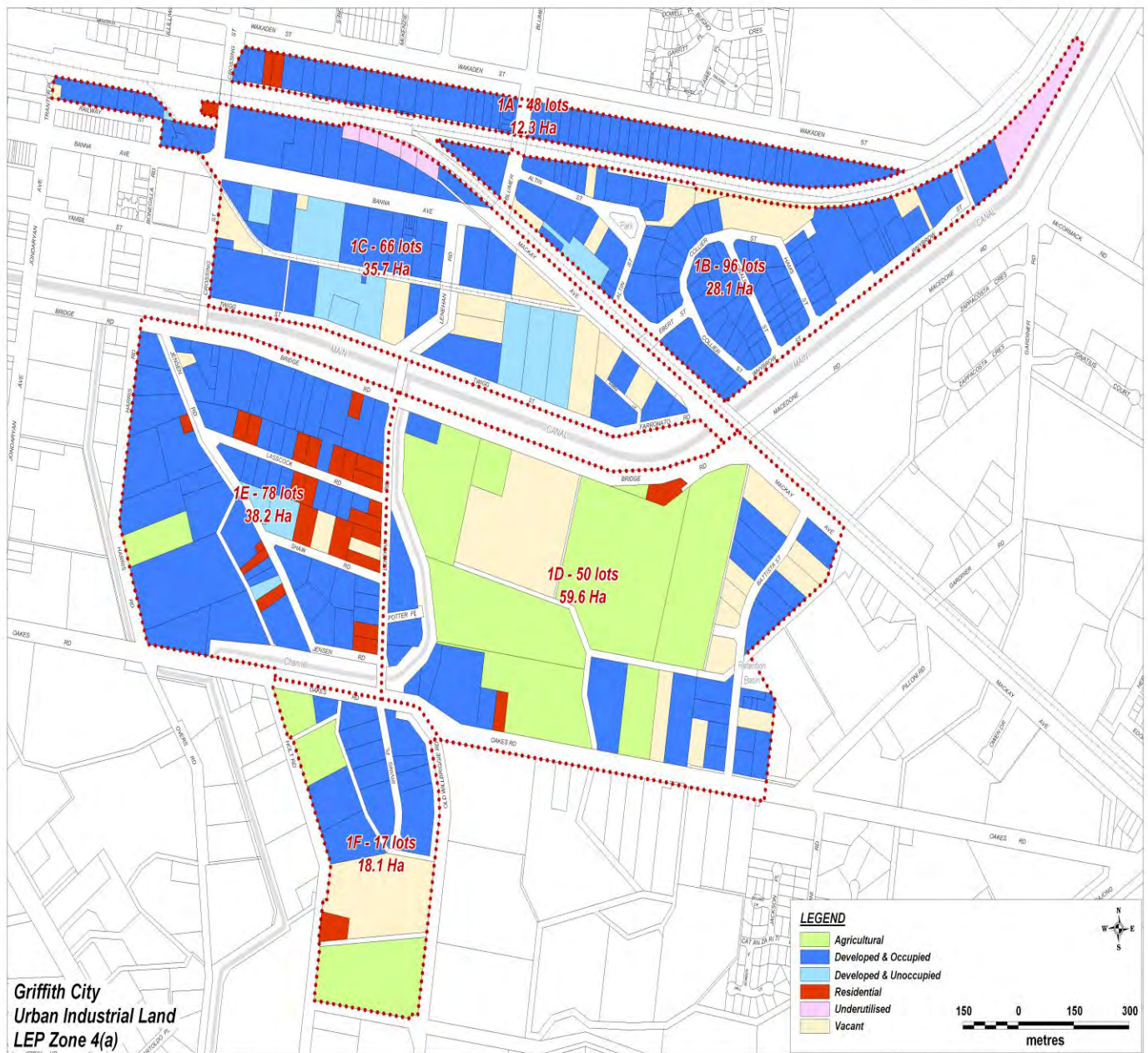
Council should investigate the feasibility of land owned by council for this purpose and formulate a phased development plan which can be implemented fast and effectively if the need arises. Such a plan should cover all environmental issues, bulk infrastructure cost and implementation time.

## MAP 1





## MAP 2





## Annexure 4

# Proposed Sites for Heritage Listing

# PROPOSED SITES FOR HERITAGE LISTING

## ENVIRONMENTAL HERITAGE

### Part 1 - General

SUBURB	DESCRIPTION	ADDRESS	PROPERTY DESCRIPTION	SIGNIFICANCE	ITEM No.
Beelbangera	Beelbangera Public School	Rankins Springs Rd	Lot 91 DP 751743	Local	1670237
Beelbangera	Winery Tanks & Sheds	Rossetto Rd	Lot 1 DP 1035641	Local	1670025
Bilbul	Bilbul Store	1 Bilbul Pl	Lot 404 DP 751728	Local	1670178
Bilbul	De Bortoli Cottage	De Bortoli Rd	Lot 1 DP 1024102	Local	1670002
Griffith	Former Matron's House, Operating Theatre & Mortuary at Base Hospital	5-39 Animoo Ave	Lot 2 DP 1043580	Local	1670038
Griffith	Producer's Offices	37-45 Banna Ave	Lot 2 DP 1135298	Local	1670009
Griffith	Ambulance Station and Residence	125 Banna Ave	Lot 1 Section 48 DP 758476	Local	1670159
Griffith	CWA Hall	129-133 Banna Ave	Lot 1 Section 9 DP 758476	Local	1670100
Griffith	War Memorial Hall & Gallery	167-185 Banna Ave	Lot 2 DP 586768	Local	1670054
Griffith	Area Hotel	206-210 Banna Ave	Lot 34, 35, & 36 Section 2 DP 758476	Local	1670157
Griffith	Griffith City Library	229 Banna Ave	Lot 2 Section 9 DP 758476	Local	1670050
Griffith	Former Rural Bank & Bank Manager's Residence	239 Banna Ave and 81 Kooyoo St	Lot 1 & 2 DP 733447	Local	1670042 1670211
Griffith	Westpac Bank	242 Banna Ave	Lot 43 Section 2 DP758476	Local	1670110
Griffith	Commonwealth Bank	246-250 Banna Ave	Lot 161 DP 130396	Local	1670022
Griffith	Former Lyceum Theatre	300 Banna Ave	Lots 29 & 30* Section 4 DP 758476	Local	1670001
Griffith	Court House	363 Banna Ave	Lot 1 Section 8 DP 758476	Local	1670043
Griffith	Former Police Station	369 Banna Ave (cnr Ulong St)	Lot 1 Section 7 DP 758476	Local	1670095
Griffith	Victoria Hotel	384-392 Banna Ave	Lots 22, 23 & 24 Section 6 DP 758476	Local	1670051
Griffith	Former Murrumbidgee Irrigation Offices	462-468 Banna Ave	Lots 7, 8, 9, 10 Section 16 DP 758476	Local	1670158
Griffith	Salvation Army Hall	103 Binya St	Lot 1 & 2 Section 33 DP 758476	Local	1670165
Griffith	Griffith Masonic Hall	16-20 Benerembah St	Lot 13, 14 & 15 Section 17 DP 758746	Local	1670164
Griffith	First Griffith Police Station	80-82 Benerembah St	Lot 1 DP 1082412	Local	1670240
Griffith	St Alban's Anglican	107 Binya St	Lot 1 Section 32 DP	Local	1670046

Griffith	Cathedral & Hall Griffith High School	82-86 Coolah St	758476 Lot 3 DP 123963	Local	1679238 1670056
Griffith	Griffith Public School	88-98 Coolah St	Lot 1 and 2 DP 123963	Local	1670052
Griffith	Canal Bridges	Griffin Ave Murrumbidgee Ave Wall Ave Willandra Ave		Local	1670151 1670153 1670154 1670152
Griffith	Robinson House	25 Carrathool St	Lot 1 DP 41141	Local	1670058
Griffith	Fibro Cottage	27 Carrathool St	Lot 1 DP 44507	Local	1670208
Griffith	Weatherboard Cottage	33 Carrathool St	Lot 4 Sec 64 DP 758476	Local	1670104
Griffith	Fibro Cottage and Garden	41 Carrathool St	Lot 8 Sec 64 DP 758476	Local	1670105
Griffith	Weeroona	44 Hyandra St	Lot 22 Sec 35 DP 758476	Local	1670200
Griffith	Miranda Winery	55-59 Jondaryan Ave	Lot 2 DP 777210	Local	1670027
Griffith	Group of brick cottages	101-105 Kookora St	Lots 5, 6 & 7 Section 28 DP 758476	Local	1670116 1670117 1670118
Griffith	Griffith Showground and Palais De Danse	12-32 Murrumbidgee Av	Lot 1042 DP 751709	Local	1670011
Griffith	Uniting Church	28 Noorebar Av	Lot 30 Section 34 DP 758476	Local	1670031
Griffith	Railway Station buildings and structures	Railway St	Lot 102 DP 1006655	Local	1670040
Griffith	Pioneer Park Museum	1347 Remembrance Dr	Lot 1347 DP 751709	State	1670220
Griffith	Former Penfolds Winery	51-61 Twigg St 20-22 Mackay Ave	Lot 935, 936, 946 & 947 DP 751709*	Local	1670007
Griffith	Area News	30-32 Ulong St	Pt Lot 1 & 2 Section 54 DP 758476	Local	1670161
Griffith	Sacred Heart Catholic Church, Presbytery, Convent and Hall	11-27 Warrambool St	Lot 1 Section 44 DP 758476	Local	1670005
Hanwood	Catholic Club	21-27 Club Street	Lot 314 DP 751709	Local	1670106
Hanwood	Hanwood Village Store	7 Hanwood Rd (2 Yarran St)	Lot 293 DP 751709	Local	1670180
Hanwood	CSIRO glasshouse, OIC cottage, Buildings 4, 6, 7, 59, reservoir	459 Research Station Rd	Lot 255 DP1116228	Local	1670207
Hanwood	St Anthony's Catholic Church and Hall	Cnr of Ash & Yarran Sts	Lot 2195 DP 720530	Local	1670004
Hanwood	McWilliam's Winery	268 Jack McWilliam Rd	Lot 171 DP 751709	Local	1670099
Yenda	Uniting Church	14-16 Bingar Street	Lot 1 DP 263094	Local	1670168
Yenda	McWilliam's Winery	14 Doug McWilliam Rd	Lot 778 DP 751728	Local	1670037
Yenda	St George's Anglican Church	7-9 East Av	Lot 10 & 11 Section 1 DP759138	Local	1670146
Yenda	St Therese Catholic School	10 Mirrool Ave	Lot 14 Section 9 DP 759138	Local	1670057
Yenda	Fruit Inspector's Residence	40 Mirrool Avenue	Lot 18 Section 1 DP 759138	Local	1670012
Yenda	Water Filtration Plant (Old)	Whitton Rd	Lot 471 DP 751728	Local	1670274
Yenda	Yenda Hotel	1-2 Yenda Pl	Lot 1 DP48775	State	1670045
Yenda	Yenda Supermarket	19-20 Yenda Pl	Lot 8 Section 2 DP 759138	Local	1670127
Yoogali	Our Lady of Pompeii Church	15-17 Edon Street	Lot 2194 DP 720520	State (SHR.....)	1670061
Yoogali	Yoogali Catholic Presbytery	19 Edon St	Lot 460 DP751709	Local	1670114
Yoogali	Yoogali Club	647 Mackay Ave	Lot 1093 DP 751709	Local	1670203

## Part 2 Aboriginal

SUBURB	DESCRIPTION	ADDRESS	PROPERTY DESCRIPTION	SIGNIFICANCE	ITEM No.
Griffith	Frog Hollow (community camp site)			Local	1670097
Hanwood	Condo Lane (itinerant worker camp site)		Leonards Rd, Hanwood	Local	1670193

## Part 3 Archaeological

SUBURB	DESCRIPTION	ADDRESS	PROPERTY DESCRIPTION	SIGNIFICANCE	ITEM No.
Griffith	Griffith General Cemetery	83-111 Wakaden St	Lot 7027 DP 1024272	Local	1670175
Griffith	Hermit's Cave	Scenic Hill	Lot 7008 DP 1024076:2	State (SHR....)	1670089
Hanwood	Bagtown Cemetery	466 Pedley Rd	Lot 731 DP 751709	Local	1670010
Hanwood	Cheese Factory	Kendall Ln	Lot 259 DP 751709	Local	1670008
Yenda	Yenda General Cemetery	Cemetery Rd	Lot PT77 DP 751728	Local	1670176

## Part 4 Conservation Areas

SUBURB	DESCRIPTION	ADDRESS	PROPERTY DESCRIPTION	SIGNIFICANCE	ITEM No.
Griffith	Banna Avenue Precinct	Northern side of Banna Ave from Tranter Place to Wayeela Street and southern side of Banna Avenue from Jondaryan Avenue to Kookora Street		Local	1670013
Griffith	Carrathool/Hyandra Street Precinct	Carrathool/Hyandra Street Precinct including Sections		Local	1670205
Yenda	Yenda Town Centre	Yenda Town Centre including Yenda Place (Sections 2, 3 and 6)	Identification on Map 1 below.	Local	1670014



and North Avenue  
(Section 2 and 3)

## **Annexure 5**

# **Growth Strategy 2030 Rreview of Submissions**

Any other details across the bottom of the page

## **GROWTH STRATEGY 2030 REVIEW ASSESSMENT OF SUBMISSIONS**

### **BACKGROUND**

During 2000 Griffith City Council (GCC) prepared a thirty year plan for the growth of Griffith Local Government Area known as “Growth Strategy 2030” (GS2030). The strategy aimed to provide for long term land use and zoning direction for Griffith. The strategy proposed that it be reviewed at five yearly intervals. In March/April 2006 Council resolved to review GS2030. The review process was initiated by Council requesting that interested landholders prepare submissions of interest for their desired land use change (Geolyse Report, Phase 1 p 1.1).

Public notice to invite written submissions from interested parties for land use changes appeared in the local papers on the following dates:

**31 March 2006**

**7 April 2006**

**5 May 2006**

**12 May 2006**

The date for closure of submissions was 30 June 2006.

A total of 67 written submissions were received as part of the first phase of consultation.

Geolyse Pty Ltd was commissioned by GCC to undertake an independent assessment of the submissions received as part of the review of GS2030 which was submitted to council during May 2007. The independent assessment done by Geolyse Pty Ltd was then re-assessed by Council’s City Strategy and Development Services in terms of the proposed draft GS2030 and LEP.

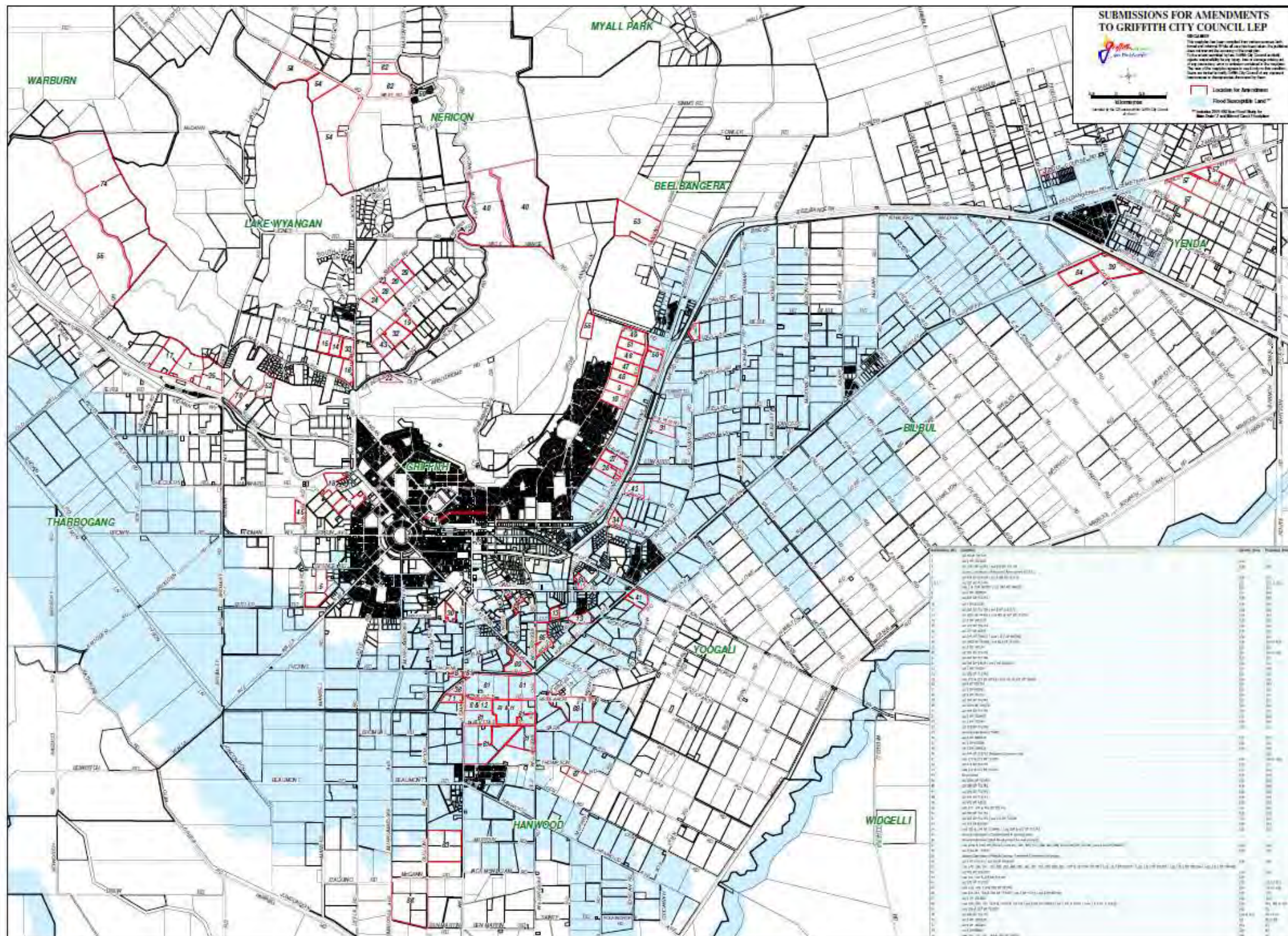
This section of the GS2030 include the review of submissions as submitted to council by Geolyse Pty Ltd as well as comments related to the review done by Council’s City Strategy and Development Services further referred to as (CS&D).

During April 2009 a further 6 submissions were received. These submissions were not subjected to an independent review other than Council’s Department of Planning and Environment. These submissions are dealt with separately towards the end of the report indicated as **Site 68 – 74 (new submission). The following map on page 3 indicates the position of all the submissions within the Griffith Study area received for this period.**

**During September 2012 Department of Planning and Industry indicated that Council may proceed with Public exhibition and Council then granted consent to proceed. A review of submissions received as part of this process is attached to the back of Annexure 5 with a map indicating the respective positions.**









**Site No: 1**

**Street Address:** Farm 611 Bilbul Rd, Bilbul

**Property Address:** Lot 46 DP 751743

**Property Size** 5.119ha

**Current Zoning:** 1(b) Rural Agricultural Protection

**Current Land Use:** grapes

**Proposal:**

Applicant requesting their land is considered through the GS2030 review to enable a dwelling entitlement. The applicant would like to sell the property with a dwelling entitlement as they contend the farm is currently not viable.



**Source:** Google Earth

## Independent Assessment

No	Address	Existing	Proposed	Recommendation Geolyse Review Report	Comments Geolyse Review Report
1	Bilbul Road Beelbangera	1(b) Rural Agricultural Protection	Dwelling entitlement	×	<ul style="list-style-type: none"> <li>• Installation of a dwelling would further reduce the agricultural capability of the land</li> <li>• The location of the site does not provide for reinforcement of existing centres</li> <li>• Site entirely flood affected</li> <li>• Largely &lt;0.5% gradient, resulting in significant issues for servicing.</li> </ul>

## GCC City Strategy and Development Services Comment

It is proposed that the independent recommendation be supported in terms of the regulatory factors contained in SEPP (Rural Lands) 2008. The legislation does not affect existing entitlements but do not allow for the creation of a new entitlement as contained within this submission.

**Site No: 2**

**Street Address:** 41-45 Animoo Ave, Griffith

**Property Address:** Lot 1 DP 1043580

**Property Size** 0.5Ha

**Current Zoning:** 2(a) Residential

**Current Land Use:** Seniors Living Development

**Proposal:**

The owners propose to refurbish and alter the existing buildings to accommodate a Medical Centre for health care professionals and allied health care facilities/services. The applicant requests an amendment to the GLEP 2002 definition of a medical centre and requests that a portion of the Animoo Avenue road reserve be reclassified from community land to operational land.



**Source:** Google Earth

## Independent Assessment

No	Address	Existing	Proposed	Recommendation Geolyse Review Report	Comments Geolyse Review Report
2	Animoo Avenue Griffith	2(a) Residential	Change definition of 'Medical Centre' in LEP and reclassify portion of Animoo Road from community to operational land	√	<ul style="list-style-type: none"> <li>• Not an inconsistent land use – compatible with adjacent hospital &amp; reinforces the land use</li> <li>• Need to assess impacts of such an intensification on locality, in particular adjacent residential development</li> <li>• How would this be facilitated – ramifications for change of definition on other areas throughout LGA. Perhaps rezoning to special uses would be more appropriate</li> </ul>

## GCC City Strategy and Development Services Comment

The original proposal developed further to the concept of a Private Hospital and Medical Training facility. The process to establish this facility is well underway.

### **Site No: 3**

**Street Address:** Farm 1290 Harward Rd, Griffith

**Property Address:** Lot 1791 DP 41291 and Lots 810 and 978 DP 751709

**Property Size:** Respectively 4.7Ha & 5Ha

**Current Zoning:** 1(g) Rural Mixed Use

**Current Land Use:** Grapes & 1 dwelling

### **Proposal:**

Rezoning of land to allow for residential subdivision.



**Source:** Google Earth



### Independent Assessment

No	Address	Existing	Proposed	Recommendation Geolyse Review Report	Comments Geolyse Review Report
<b>3</b>	Harwood Road Griffith	1(g) Rural Mixed Use	Residential subdivision	√	<ul style="list-style-type: none"> <li>• Logical location for extension of residential area</li> <li>• Need to further consider buffer constraints and servicing</li> </ul>

### GCC City Strategy and Development Services Comment

Current oversupply of Rural Residential land and land interface constraints relating to the existing winery opposite the subject land does not justify support for the submission.

**Site No: 4**

**Street Address:**  
**Property Address:**  
**Property Size**  
**Current Zoning:**  
**Current Land Use:**

**Proposal:**

General submission regarding buffer widths in DCP 1.

**Independent Assessment**

No	Address	Existing	Proposed	Recommendation Geolyse Review Report	Comments Geolyse Review Report
4			General submission regarding buffer widths in DCP 1		

**GCC City Strategy and Development Services Comment**

CS&D takes note of the submission. The submission does not fall within the scope of this report and would be dealt with separately when DCP1 is reviewed. Mrs. LA Rocca would be informed accordingly.

## **Site No: 5**

**Street Address:** Spence Road

**Property Address:** Lot 843 DP 751709 and Lot 2168 DP 723174

**Property Size** 10.02ha and 9.92ha

**Current Zoning:** 1(g) Rural Mixed Use

**Current Land Use:** Citrus

### **Proposal:**

The applicant wishes to rezone land from Rural Mixed Use to Rural Res.



**Source:** Google Earth

### Independent Assessment

No	Address	Existing	Proposed	Recommendation Geolyse Review Report	Comments Geolyse Review Report
5	Spence Road Griffith	1(g) Rural Mixed Use	Rural Residential	√	<ul style="list-style-type: none"><li>• Logical expansion to existing rural residential to the east</li><li>• Potential conflict with future industrial to the west</li><li>• Need to further consider buffer constraints</li></ul>

### GCC City Strategy and Development Services Comment

Current oversupply of Rural Residential land does not justify support for the submission.

**Site No: 6**

**Street Address:** 18 Pedley Road (Farm 468)

**Property Address:** Lots 1 & 2 DP 1098689

**Property Size** 1.62ha and 10.18ha

**Current Zoning:** 1(i) Investigation

**Current Land Use:** Citrus, shed, dwelling

**Proposal:**

Applicant would like to rezone their land from 1(i) investigation to 3(b) Highway Service to conform with the 3(b) zone along the Kidman Way closer to the City.



**Source:** Google Earth



## Independent Assessment

No	Address	Existing	Proposed	Recommendation Geolyse Review Report	Comments Geolyse Review Report
6	Pedley Road Hanwood	1(i) Investigation	3(b) Highway Service Zone	√	<ul style="list-style-type: none"> <li>• Consistent with proposed land use under GS2030, although somewhat earlier than proposed 2030+</li> <li>• Need to review demand for such and potentially review timing</li> <li>• Further information on servicing and impact of flood affectation</li> </ul>

## GCC City Strategy and Development Services Comment

Process completed

**Site No: 7**

**Street Address:** 256 Slopes Road, Tharbogang

**Property Address:** Lot 244 DP 756035 and Lots 1 & 3 DP 857497

**Property Size:** 2.5ha

**Current Zoning:** 1(b) Rural Agricultural Protection

**Current Land Use:** Citrus and dwelling

**Proposal:**

No zone indicated but in lieu of the adjoining submissions a staging 1(c) Rural Residential may be most appropriate (Rezoning of 3 lots zoned 1(b) Rural Agricultural Protection to 1(c) Rural Residential)



**Source:** Google Earth

## Independent Assessment

No	Address	Existing	Proposed	Recommendation Geolyse Review Report	Comments Geolyse Review Report
7	Slopes Road Tharbogang	1(b) Rural Agricultural Protection	Rural Residential	√	<ul style="list-style-type: none"> <li>• Consistent with adjacent submissions</li> <li>• Near to existing rural residential development, although on opposite side of railway line.</li> <li>• Need to further consider buffer constraints and servicing in this location</li> </ul>

## GCC City Strategy and Development Services Comment

Current oversupply of Rural Residential land does not justify support for the submission further more the subject properties form part of an area currently utilized as primary production. CS&D would like to emphasize the fact that rural residential development should be contained within reasonable precincts related to availability of services and consideration of adjacent land uses. Support for such development would open up another Rural Residential precinct isolated from other existing Rural Residential precincts stretching services unnecessary.

**Site No: 8**

**Street Address:** Farm 904 Thorne Road

**Property Address:** Lot 2 DP 1030697

**Property Size** Area of Lot 2 DP 1030697 is 2.43ha.

**Current Zoning:** 1(i) Investigation

**Current Land Use:** Cleared

**Proposal:**

Rezoning of land from 1(i) Investigation to 3(b) Highway Service Business.



**Source:** Google Earth

## Independent Assessment

No	Address	Existing	Proposed	Recommendation Geolyse Review Report	Comments Geolyse Review Report
8	Thorne Road Griffith	1(i) Investigation	3(b) Highway Service Zone	√	<ul style="list-style-type: none"><li>• Consistent with proposed land use under GS2030, although somewhat earlier than proposed (2030+)</li><li>• Need to review demand for such and potentially review timing</li><li>• Further information on servicing and impact of flood affectation required</li></ul>

## GCC City Strategy and Development Services Comment

North of the subject property land has been earmarked for an Enterprise corridor which can accommodated land uses as requested in the submission. Saturation percentage of this land earmarked for Enterprise corridor situated north of the subject property does not justify support of the submission.



**Site No: 9**

**Street Address:** Farm 1687 Citrus Road, Griffith

**Property Address:** Lot 593 DP 751743

**Property Size** The subject site has an area of 11.24ha and has access from Clifton Boulevard.

**Current Zoning:** 1(d) General Expansion

**Current Land Use:** Citrus

**Proposal:**

Propose to change the current staging of the GS2030 for release of residential land from 2011- 2020 to 2006-2011, therefore bringing forwarding the rezoning of the subject site to 2(a) Residential.



**Source:** Google Earth

**Independent Assessment**

No	Address	Existing	Proposed	Recommendation Geolyse Review Report	Comments Geolyse Review Report
9	Citrus Road Griffith	1(d) General Expansion	2(a) Residential	√	<ul style="list-style-type: none"> <li>• Consistent with proposed land use under GS2030, although somewhat earlier than proposed 2011-2020</li> <li>• Need to review demand for such and potentially review timing</li> </ul>

### **GCC City Strategy and Development Services Comment**

Due to delays with stage 10 relating to land claims and possible contamination issues it does make sense to move the proposed staging forward which includes the subject portion.

**Site No: 10**

**Street Address:** Farm 1689, Collina

**Property Address:** Lot 1 DP 827055

**Property Size** The area of the subject site is 11.3ha and has access from Clifton Boulevard.

**Current Zoning:** 1(d) General Expansion

**Current Land Use:** Citrus

**Proposal:**

Propose to change the current staging of the GS2030 for release of residential land from 2011- 2020 to 2006-2011, therefore bringing forwarding the rezoning of the subject site to 2(a) Residential.



**Source:** Google Earth

### Independent Assessment

No	Address	Existing	Proposed	Recommendation Geolyse Review Report	Comments Geolyse Review Report
10	Citrus Road Griffith	1(d) General Expansion	2(a) Residential	√	<ul style="list-style-type: none"><li>• Consistent with proposed land use under GS2030, although somewhat earlier than proposed 2011-2020</li><li>• Need to review demand for such and potentially review timing</li></ul>

### GCC City Strategy and Development Services Comment

Due to delays with stage 10 relating to land claims and possible contamination issues it does make sense to move the proposed staging forward which includes the subject portion.

**Site No: 11**

**Street Address:** Farm 108 Beverley Rd

**Property Address:** Lot 283 DP 751709 and Lot 1 DP 1084981

**Property Size** The subject site has a total area of 23.7ha.

**Current Zoning:** 1(b) Rural Agricultural Protection

**Current Land Use:** Grapes, citrus

**Proposal:**

Rezoning of subject site from 1(b) to 3(b) for the purpose of a ‘truck port’ in Griffith for the movement of goods via Griffith from/to Sydney, Melbourne, Adelaide and Western NSW.



**Source:** Google Earth



## Independent Assessment

No	Address	Existing	Proposed	Recommendation Geolyse Review Report	Comments Geolyse Review Report
11	Beverly Road Hanwood	1(b) Rural Agricultural Protection	3(b) for a truck port	×	<ul style="list-style-type: none"> <li>• Not consistent with GS2030</li> <li>• Not adjacent to the highway and as such results in sprawl of the zone away from the highway.</li> <li>• Issues of flood affectation and gradient &lt;0.5% resulting in servicing/infrastructure issues – extent of impacts requires further investigation</li> </ul>

## GCC City Strategy and Development Services Comment

CS&D supports the independent assessment.

**Site No: 12**

**Street Address:** Part Farm 108 Beverly Road, Hanwood

**Property Address:** Ptn of Lot 2 DP 1123771

**Property Size** 13ha

**Current Zoning:** 1(b)

**Current Land Use:** Citrus

**Proposal:**

Rezone to 3(b) for the purpose of a ‘truck port’



**Source:** Google Earth

## Independent Assessment

No	Address	Existing	Proposed	Recommendation Geolyse Review Report	Comments Geolyse Review Report
12	Beverly Road Hanwood	1(b) Rural Agricultural Protection	3(b) for a truck port	×	<ul style="list-style-type: none"><li>• Not consistent with GS2030</li><li>• Not adjacent to the highway and as such results in sprawl of the zone away from the highway.</li><li>• Issues of flood affectation and gradient &lt;0.5% resulting in servicing/infrastructure issues – extent of impacts requires further investigation</li></ul>

## GCC City Strategy and Development Services Comment

CS&D supports the independent assessment.

**Site No: 13**

**Street Address:** Farm 654 Eipper Road, Yoogali

**Property Address:** Lot 1907 DP 44486 and Lots 401 & 407 DP 751709

**Property Size**

Lot 401 DP 751709 has an area of 3.63ha. Lot 407 DP 751709 has an area of 3.44ha. Lot 1907 DP 44486 has an area of 3.89ha.

**Current Zoning:** 1(h) Rural Small Holdings

**Current Land Use:** Citrus

**Proposal:**

Would like to subdivide into 1 acre lots (1 acre is approx. = 0.40ha).



**Source:** Google Earth

### Independent Assessment

No	Address	Existing	Proposed	Recommendation Geolyse Review Report	Comments Geolyse Review Report
13	Eipper Road Yoogali	1(d) General Expansion	1© rural residential	√	<ul style="list-style-type: none"> <li>• Adjacent to residential and similar size lot subdivision</li> <li>• Issue of flood affectation and compatibility with adjacent industrial zone and developments needs further consideration</li> </ul>

### GCC City Strategy and Development Services Comment

Current oversupply of Rural Residential land does not justify support for the submission further more CS&D do not support the independent assessment. Flood affectation and adjacent Industrial use do not justify support in favour of the submission.



**Site No: 14**

**Street Address:** Druitts Rd, Lake Wyangan

**Property Address:** Lot 2 DP 1093210

**Property Size** 7.82ha

**Current Zoning:** 1(d) General Expansion

**Current Land Use:** Citrus

**Proposal:**

Rezoning of land from 1(d) to 2(a) to allow subdivision for residential development. The land is currently earmarked for residential release with the Growth Strategy during 2011-2020. The applicant would like this staging brought forward. Proposed lot sizes are envisaged at 750m<sup>2</sup> to 1,500m<sup>2</sup>.



**Source:** Google Earth

## Independent Assessment

No	Address	Existing	Proposed	Recommendation Geolyse Review Report	Comments Geolyse Review Report
<b>14</b>	Druitts Road Lake Wyangan	1(d) General Expansion	1© rural residential	√	<ul style="list-style-type: none"> <li>• Inconsistent with GS2030, which identifies the site for future rural residential development (2011-2020)</li> <li>• Consistent with adjacent submissions</li> <li>• Need to consider demand for rural residential vs. residential</li> <li>• Impacts of buffer, especially frost fan, requires further consideration</li> <li>• Impact of development within Lake Wyangan Catchment</li> </ul>

## GCC City Strategy and Development Services Comment

The subject property falls within the area proposed to provide room for village expansion in a southern direction towards Griffith. The proposed southern expansion of the village area is based on available infrastructure and desired urban form created by working towards a linkage between Lake Wyangan and Griffith.

**Site No: 15**

**Street Address:** Farm 1822 Druitts Rd, Lake Wyangan

**Property Address:** Lot 125 DP 751743

**Property Size** 9.10ha

**Current Zoning:** 1(d) General Expansion

**Current Land Use:** Citrus

**Proposal:**

Rezoning of land from 1(d) to 2(a) to allow subdivision for residential development. The land is currently ear marked for residential release with the Growth Strategy during 2011-2020. The applicant would like this staging brought forward. Proposed lot sizes are envisaged at 750m<sup>2</sup> to 1,500m<sup>2</sup>.



**Source:** Google Earth  
**Independent Assessment**

No	Address	Existing	Proposed	Recommendation Geolyse Review Report	Comments Geolyse Review Report
15	Druitts Road Lake Wyangan	1(d) General Expansion	2(a) Residential	√	<ul style="list-style-type: none"> <li>• Inconsistent with GS2030, which identifies the site for future rural residential development (2011-2020)</li> <li>• Consistent with adjacent submissions</li> <li>• Need to consider demand for rural residential vs. residential</li> <li>• Impacts of buffer, especially frost fan, requires further consideration</li> <li>• Impact of development within Lake Wyangan Catchment</li> </ul>

### **GCC City Strategy and Development Services Comment**

The subject property falls within the area proposed to provide room for village expansion in a southern direction towards Griffith. The proposed southern expansion of the village area is based on available infrastructure and desired urban form created by working towards a linkage between Lake Wyangan and Griffith.

**Site No: 16**

**Street Address:** Corner of Boorga/Mallinson Rd

**Property Address:** Lot 727 DP 46245

**Property Size** 10.01ha

**Current Zoning:** 1(d) General Expansion

**Current Land Use:** Currently one dwelling plus an orange orchard exists on the site

**Proposal:**

Rezoning of 1(d) land to 2(a).



**Source:** Google Earth



## Independent Assessment

No	Address	Existing	Proposed	Recommendation Geolyse Review Report	Comments Geolyse Review Report
16	Corner Mallinson & Boorga Roads Lake Wyangan	1(d) General Expansion	2(a) Residential	√	<ul style="list-style-type: none"> <li>• Inconsistent with GS2030, which identifies the site for future rural residential development (2006-2010)</li> <li>• Consistent with adjacent submissions</li> <li>• Need to consider demand for rural residential vs. residential</li> <li>• Impacts of buffer, especially frost fan, requires further consideration</li> <li>• Impact of development within Lake Wyangan Catchment</li> </ul>

## GCC City Strategy and Development Services Comment

The subject property falls within the area proposed to provide room for village expansion in a southern direction towards Griffith. The proposed southern expansion of the village area is based on available infrastructure and a more desired urban form created by working towards a linkage between Lake Wyangan and Griffith.

**Site No: 17**

**Street Address:** 1744 Slopes Road Tharbogang

**Property Address:** Lot 245 DP 756035 and Lots 1 & 2 DP 809388

**Property Size**

Lot 245 DP 756035 has an area of 12.03ha, Lot 2 DP 809388 has an area of 15.77ha, and Lot 1 DP 809388 has an area of 0.88ha. Total area of the subject site is 28.68 ha.

**Current Zoning:** 1(b) Rural Agricultural Protection

**Current Land Use:** Citrus and packing shed

**Proposal:**

Rezoning of land from 1(b) to 1(c).



**Source:** Google Earth

### Independent Assessment

No	Address	Existing	Proposed	Recommendation Geolyse Review Report	Comments Geolyse Review Report
17	Slopes Road Tharbogang	1(b) Rural Agricultural Protection	1© Rural Residential	√	<ul style="list-style-type: none"> <li>• Consistent with adjacent submissions</li> <li>• Near to existing rural residential development, although on opposite side of railway line.</li> <li>• Need to further consider buffer constraints and servicing in this location</li> </ul>

### GCC City Strategy and Development Services Comment

Current oversupply of Rural Residential land does not justify support for the submission further more the subject property forms part of an area currently utilized as primary production. CS&D would like to emphasize the fact that rural residential development should be contained within reasonable precincts related to availability of services and consideration of adjacent land uses. Support for such development would open up another Rural Residential precinct isolated from other existing Rural Residential precincts stretching services unnecessary.

**Site No: 18**

**Street Address:** Farm 1287 Brayne Rd, Griffith

**Property Address:** Lot 1668 DP 257561 and Lot 812 DP 751709

**Property Size** Lot 1668 DP 257561 has an area of 6.25ha and Lot 812 DP 751709 has an area of 3.26ha.

**Current Zoning:** 1(g) Rural Mixed Use

**Current Land Use:** Currently 2 dwellings exist and citrus/grape farm.

**Proposal:**

Rezoning of 1(g) land to either 1(c) or 2(a). Would like to subdivide land into lots ranging from 2000m<sup>2</sup> to 4000m<sup>2</sup> according to sewerage disposal requirements and available services.



**Source:** Google Earth

### Independent Assessment

No	Address	Existing	Proposed	Recommendation Geolyse Review Report	Comments Geolyse Review Report
18	Brayne Road Griffith	1(g) Rural Mixed Use	1(c) or 2(a)	√	<ul style="list-style-type: none"> <li>• Logical location for extension of residential area, in combination with submission 3</li> <li>• Need to further consider buffer constraints</li> <li>• Issue of compatibility with adjacent industrial zone and developments needs further consideration.</li> </ul>

### GCC City Strategy and Development Services Comment

Current oversupply of Rural Residential land does not justify support for the submission further more the subject properties form part of an area currently utilized as primary production. CS&D would like to emphasize the fact that rural residential development should be contained within reasonable precincts related to availability of services and consideration of adjacent land uses. Support for such development would open up another Rural Residential precinct isolated from other existing Rural Residential precincts stretching services unnecessary.



**Site No: 19**

**Street Address:** Farm 1867 McCarthy Rd, Lake Wyangan

**Property Address:** Lot 2 DP 787159

**Property Size** The area of the subject site is 6.99ha

**Current Zoning:** 1(i) Investigation

**Current Land Use:** The subject site currently composed of a citrus farm

**Proposal:**

Rezoning of 1(i) land to 1(c) as the size of the farm is currently unviable.



Source: Google Earth

### Independent Assessment

No	Address	Existing	Proposed	Recommendation Geolyse Review Report	Comments Geolyse Review Report
19	McCarthy Road Lake Wyangan	1(i) Investigation	1(c)	√	<ul style="list-style-type: none"><li>• Generally consistent with GS2030 – Rural Residential ,although somewhat earlier than proposed</li><li>• Consistent with adjacent submissions</li><li>• Need to consider demand for rural residential – and future demand and supply of residential land</li><li>• Impacts of buffer, especially frost fan, needs further consideration</li><li>• Impact of development within Lake Wyangan Catchment</li></ul>

### GCC City Strategy and Development Services Comment

The subject property falls within the area proposed to provide room for village expansion in a southern direction towards Griffith. The proposed southern expansion of the village area is based on available infrastructure and a more desired urban form created by working towards a linkage between Lake Wyangan and Griffith.

**Site No: 20**

**Street Address:** Farm 1885 Smeeth Rd, Lake Wyangan

**Property Address:** Lot 187 DP 751743

**Property Size** The area of the site is 9.81ha.

**Current Zoning:** 1(i) Investigation (Rural Residential)

**Current Land Use:** The applicant states the current use of the land as turf farming.

**Proposal:**

The applicant would like to rezone the subject site to 1(c) or 2(a).



**Source:** Google Earth

## Independent Assessment

No	Address	Existing	Proposed	Recommendation Geolyse Review Report	Comments Geolyse Review Report
20	Smeeth Road Lake Wyangan	1(i) Investigation	1© or 2(a)	√	<ul style="list-style-type: none"> <li>• Generally consistent with GS2030 – Rural Residential (?), although somewhat earlier than proposed</li> <li>• Consistent with adjacent submissions</li> <li>• Need to consider demand for rural residential – and future demand and supply of residential land</li> <li>• Impacts of buffer, especially frost fan, needs further consideration</li> <li>• Impact of development within Lake Wyangan Catchment</li> </ul>

## GCC City Strategy and Development Services Comment

The portion of land falls just outside of the area proposed to provide room for village expansion in a southern direction towards Griffith.

**Site No: 21**

**Street Address:** Holt Rd Griffith

**Property Address:** Lot 495 DP 751709

**Property Size** The subject site has an area of 1.19ha.

**Current Zoning:** 4(a) General Industrial

**Current Land Use:** Current use: Fruit trees, dwelling house and shed.

**Proposal:**

Rezoning of 4(a) land to 1(c).



**Source:** Google Earth



## Independent Assessment

No	Address	Existing	Proposed	Recommendation Geolyse Review Report	Comments Geolyse Review Report
21	21 Holt Road Griffith	4(a) General Industrial	1© Rural Residential	√	<ul style="list-style-type: none"><li>• Conflict with adjacent industrial development</li><li>• Poor buffer with 4(a)</li><li>• 1(h) may be a more appropriate zoning</li></ul>

## GCC City Strategy and Development Services Comment

Current oversupply of Rural Residential land and land interface constraints relating to the existing winery opposite the subject land does not justify support for the submission.

**Site No: 22**

**Street Address:** Old Aerodrome Road, Griffith

**Property Address:** Lot 1 DP 1016907 and Lot 704 DP 43635

**Property Size** Lot 1 DP 1016907 has an area of 0.32ha and Lot 704 DP43635 has an area of 4.2ha.

**Current Zoning:** 1(b) Rural Agricultural Protection

**Current Land Use:** dwellings

**Proposal:**

Rezoning of 1(b) Rural Agricultural Protection land situated amongst 7(v) Environmental Protection – Scenic to an appropriate zoning that is compatible to the surrounding the current land uses.



**Source:** Google Earth

### Independent Assessment

No	Address	Existing	Proposed	Recommendation Geolyse Review Report	Comments Geolyse Review Report
22	Old Aerodrome Road Griffith	1(b) Rural Agricultural Protection	7(v)	√	<ul style="list-style-type: none"><li>• Considered to be more akin to 7(c)</li><li>• How to deal with existing dwellings in this location</li></ul>

### GCC City Strategy and Development Services Comment

CS&D support the independent assessment recommendation and an appropriate zoning would be proposed as part of the LEP process to accommodate the submission request.

**Site No: 23**

**Street Address:** Farm 1886 Smeeth Rd, Lake Wyangan

**Property Address:** Lot 1 DP 791024

**Property Size** The subject site has an area of 0.60ha.

**Current Zoning:** 1(i) Investigation (Rural Residential)

**Current Land Use:** Dwelling

**Proposal:**

Rezoning of subject site from 1(i) to 2(a).



**Source:** Google Earth

### Independent Assessment

No	Address	Existing	Proposed	Recommendation Geolyse Review Report	Comments Geolyse Review Report
23	Smeeth Road Lake Wyangan	1(i) Investigation	2(a)	√	<ul style="list-style-type: none"> <li>• Inconsistent with GS2030, which identifies the site for future rural residential development (?)</li> <li>• Consistent with adjacent submissions</li> <li>• Need to consider demand for rural residential vs. residential</li> <li>• Impacts of buffer, especially frost fan, needs further consideration</li> <li>• Impact of development within Lake Wyangan Catchment</li> </ul>

### GCC City Strategy and Development Services Comment

The subject property falls within the area proposed to provide room for village expansion in a southern direction towards Griffith. The proposed southern expansion of the village area is based on available infrastructure and a more desired urban form created by working towards a linkage between Lake Wyangan and Griffith.



**Site No: 24**

**Street Address:** Smeeth Rd, Lake Wyangan

**Property Address:** Lot 189 DP 751743

**Property Size** The subject site has an area of 8.71ha.

**Current Zoning:** 1(i) Investigation (Rural Residential)

**Current Land Use:** Currently the land is used for citrus farming.

**Proposal:**

Rezoning from 1(i) to 2(a).



**Source:** Google Earth

## Independent Assessment

No	Address	Existing	Proposed	Recommendation Geolyse Review Report	Comments Geolyse Review Report
24	Smeeth Road Lake Wyangan	1(i) Investigation	2(a)	√	<ul style="list-style-type: none"> <li>• Inconsistent with GS2030, which identifies the site for future rural residential development (?)</li> <li>• Consistent with adjacent submissions</li> <li>• Need to consider demand for rural residential vs. residential</li> <li>• Impacts of buffer, especially frost fan, needs further consideration</li> <li>• Impact of development within Lake Wyangan Catchment</li> </ul>

## GCC City Strategy and Development Services Comment

Proposed Zoning (Standard Instrument): RU5-Village

The subject property falls within the area proposed to provide room for village expansion in a southern direction towards Griffith. The proposed southern expansion of the village area is based on available infrastructure and desired urban form created by working towards a linkage between Lake Wyangan and Griffith.

## Site No: 25

**Street Address:** Farm 1832 corner of Slopes/Lakes Rd, Tharbogang

**Property Address:** Lot 272-273 DP 40713, Lot 241 DP 756035 and Lot 243 DP 704400

**Property Size**

Lot 272 DP 40713 – 0.2748ha

Lot 273 DP 40713 – 10.98ha

Lot 241 DP 756035 – 8.22ha

Lot 243 DP 704400 – 3.731ha

The total area of the site is 23.21ha.

**Current Zoning:** 1(b) Rural Agricultural Protection

**Current Land Use:** Citrus, dwelling, shed

## Proposal:

Rezoning of 1(b) land to 1(c).



**Source:** Google Earth

## Independent Assessment

No	Address	Existing	Proposed	Recommendation Geolyse Review Report	Comments Geolyse Review Report
25	Corner of Slopes & Lakes Roads Tharbogang	1(b) Rural Agricultural Protection	1© Rural Residential	√	<ul style="list-style-type: none"> <li>• Consistent with adjacent submissions</li> <li>• Near to existing rural residential development, although on opposite side of railway line.</li> <li>• Need to further consider buffer constraints and servicing in this location</li> </ul>

## GCC City Strategy and Development Services Comment

Current oversupply of Rural Residential land does not justify support for the submission further more the four subject properties form part of an area currently utilized as primary production. CS&D would like to emphasize the fact that rural residential development should be contained within reasonable precincts related to availability of services and consideration of adjacent land uses. Support for such development would open up another Rural Residential precinct isolated from other existing Rural Residential precincts stretching services unnecessary.

**Site No: 26**

**Street Address:** Farm 1691B Rankin Springs Road, Griffith

**Property Address:** Lot 5 DP 1128516

**Property Size** The subject site has an area of 9.12ha

**Current Zoning:** 1(i) Investigation (Residential)

**Current Land Use:** Currently the land is utilised for horticulture purposes.

**Proposal:**

Rezoning of 1(i) land to 1(c).



**Source:** Google Earth



## Independent Assessment

No	Address	Existing	Proposed	Recommendation Geolyse Review Report	Comments Geolyse Review Report
26	Rankin Springs Road Griffith	1(i) Investigation	1(c) Rural Residential	. √	<ul style="list-style-type: none"><li>• Inconsistent with GS2030, which identifies the site for future residential (2030+)</li><li>• Residential more appropriate considering adjacent land uses</li><li>• Issue of flood affectation &amp; predominant &lt;0.5% gradient require further consideration.</li></ul>

## GCC City Strategy and Development Services Comment

**Proposed Zoning ( Standard Instrument):** RU6-Transition

Current oversupply of Rural Residential land does not justify support for the submission further more the subject property forms part of an area currently utilized as primary production. CS&D would like to emphasize the fact that rural residential development should be contained within reasonable precincts related to availability of services and consideration of adjacent land uses. Support for such development would open up another Rural Residential precinct isolated from other existing Rural Residential precincts stretching services unnecessary.

**Site No: 27**

**Street Address:** Farm 1690 Calabria Road, Griffith

**Property Address:** Lot 2 DP 802981

**Property Size** The subject site has an area of 10.68ha.

**Current Zoning:** 1(i) Investigation (Residential)

**Current Land Use:** Existing use of the land includes horticulture, dwelling and farm sheds.

**Proposal:**

Rezoning of land from 1(i) Investigation to 1(c) Rural Residential.



**Source:** Google Earth

### Independent Assessment

No	Address	Existing	Proposed	Recommendation Geolyse Review Report	Comments Geolyse Review Report
27	Calabria Road Griffith	1(i) Investigation	1(c) Rural Residential	√	<ul style="list-style-type: none"> <li>• Inconsistent with GS2030, which identifies the site for future residential (2030+)</li> <li>• Residential more appropriate considering adjacent land uses</li> <li>• Issue of flood affectation &amp; predominant &lt;0.5% gradient require further consideration</li> </ul>

### GCC City Strategy and Development Services Comment

**Proposed Zoning ( Standard Instrument):** RU6-Transition

Current oversupply of Rural Residential land does not justify support for the submission further more the subject property forms part of an area currently utilized as primary production. CS&D would like to emphasize the fact that rural residential development should be contained within reasonable precincts related to availability of services and consideration of adjacent land uses. Support for such development would open up another Rural Residential precinct isolated from other existing Rural Residential precincts stretching services unnecessary.

**Site No: 28**

**Street Address:** Farm 2560 Smeeth Road, Lake Wyangan

**Property Address:** Lot 2 DP 791024

**Property Size** 9.21ha

**Current Zoning:** 1(i) Investigation

**Current Land Use:** Citrus

**Proposal:**

2(a) Residential



**Source:** Google Earth

### Independent Assessment

No	Address	Existing	Proposed	Recommendation Geolyse Review Report	Comments Geolyse Review Report
28	Smeeth Road Lake Wyangan	1(i) Investigation	2(a) Residential	√	<ul style="list-style-type: none"> <li>• Inconsistent with GS2030, which identifies the site for future rural residential development (?)</li> <li>• Consistent with adjacent submissions</li> <li>• Need to consider demand for rural residential vs. residential</li> <li>• Impacts of buffer, especially frost fan, require further consideration</li> <li>• Impact of development within Lake Wyangan Catchment</li> </ul>

### GCC City Strategy and Development Services Comment

The subject property falls within the area proposed to provide room for village expansion in a southern direction towards Griffith. The proposed southern expansion of the village area is based on available infrastructure and desired urban form created by working towards a linkage between Lake Wyangan and Griffith.



**Site No: 29**

**Street Address:** Farm 1884 Smeeth Road, Lake Wyangan

**Property Address:** Lot 186 DP 751743

**Property Size** 9.74ha

**Current Zoning:** 1(i) Investigation

**Current Land Use:** Citrus

**Proposal:**

1(c) Rural Residential or 2(a) Residential



**Source:** Google Earth

### Independent Assessment

No	Address	Existing	Proposed	Recommendation Geolyse Review Report	Comments Geolyse Review Report
29	Smeeth Road Lake Wyangan	1(i) Investigation	2(a) Residential	√	<ul style="list-style-type: none"> <li>• Inconsistent with GS2030, which identifies the site for future rural residential development (?)</li> <li>• Consistent with adjacent submissions</li> <li>• Need to consider demand for rural residential vs. residential</li> <li>• Impacts of buffer, especially frost fan, require further consideration</li> <li>• Impact of development within Lake Wyangan Catchment</li> </ul>

### GCC City Strategy and Development Services Comment

The portion of land falls just outside of the area proposed to provide room for village expansion in a southern direction towards Griffith.

**Site No: 30**

**Street Address:** Farm 1582 Stafford Road, Griffith

**Property Address:** Lot 2059 DP 704378

**Property Size** Area of land is 5.002ha

**Current Zoning:** 3(b) Highway Service Business

**Current Land Use:** Citrus, dwelling and shed

**Proposal:**

Rezone from 3(b) Highway Service Business to 2(a) Residential for residential subdivision.



**Source:** Google Earth

### Independent Assessment

No	Address	Existing	Proposed	Recommendation Geolyse Review Report	Comments Geolyse Review Report
30	30 Stafford Road Griffith	3(b) Highway Service Zone	2(a) Residential	√	<ul style="list-style-type: none"> <li>• Inconsistent with GS2030</li> <li>• Adjacent to residential development, which would reinforce an existing area. However, leaves a narrow allotment fronting Kidman Way – further consideration as to whether this is acceptable and appropriate for the remaining 3(b) zoned land. Can the remaining land be appropriately developed</li> </ul>

### GCC City Strategy and Development Services Comment

Current oversupply of Rural Residential land does not justify support for the submission.

**Site No: 31**

**Street Address:** 287A Macedone Rd, Bilbul

**Property Address:** Lot 684 DP 751709

**Property Size**

**Current Zoning:** 1(b) Rural Agricultural Protection

**Current Land Use:** Grapes

**Proposal:**

Rezone land from Rural Agricultural Protection to Rural Residential to create 1-2ha “lifestyle”lots.



**Source:** Google Earth

## Independent Assessment

No	Address	Existing	Proposed	Recommendation Geolyse Review Report	Comments Geolyse Review Report
31	Macedone Road Yoogali	Macedone Road Yoogali 1(b) Rural Agricultural Protection	1© Rural Residential	×	<ul style="list-style-type: none"> <li>• Inconsistent with zoning and would lead to an isolated pocket of rural residential development</li> <li>• Site entirely flood affected</li> <li>• Largely &lt;0.5% gradient which created infrastructure/servicing issues</li> </ul>

## GCC City Strategy and Development Services Comment

**Proposed Zoning ( Standard Instrument):** RUI Primary Production

CS&D supports the independent assessment.



**Site No: 32**

**Street Address:** Farm 1868 McCarthy Road, Lake Wyangan

**Property Address:** Lot 2 DP 1019423

**Property Size**

**Current Zoning:** 1(i) Investigation

**Current Land Use:** Current use is a citrus farm

**Proposal:**

Rezone Lot 2 DP 1019423 from an Investigation zone to Residential for subdivision.



**Source:** Google Earth

### Independent Assessment

No	Address	Existing	Proposed	Recommendation Geolyse Review Report	Comments Geolyse Review Report
32	McCarthy Road Lake Wyangan	1(i) Investigation	Residential	√	<ul style="list-style-type: none"> <li>• Inconsistent with GS2030, which identifies the site for future rural residential development (?)</li> <li>• Consistent with adjacent submissions</li> <li>• Need to consider demand for rural residential vs. residential</li> <li>• Impacts of buffer, especially frost fan, require further Consideration</li> <li>• Impact of development within Lake Wyangan Catchment</li> </ul>

### GCC City Strategy and Development Services Comment

The subject property falls within the area proposed to provide room for village expansion in a southern direction towards Griffith. The proposed southern expansion of the village area is based on available infrastructure and desired urban form created by working towards a linkage between Lake Wyangan and Griffith.

**Site No: 33**

**Street Address:** Farm 1824 Cnr Boorga & Druitts Rd, Lake Wyangan

**Property Address:** Lot 1 DP 792549

**Property Size**

**Current Zoning:** 1(d) General Expansion

**Current Land Use:** Citrus

**Proposal:**

Rezone General Expansion zone to Residential for subdivision.



**Source:** Google Earth

### Independent Assessment

No	Address	Existing	Proposed	Recommendation Geolyse Review Report	Comments Geolyse Review Report
33	Corner Druitts & Boorga Roads Lake Wyangan	1(d) General Expansion	Residential	√	<ul style="list-style-type: none"> <li>• Inconsistent with GS2030, which identifies the site for future rural residential development (2011-2020)</li> <li>• Consistent with adjacent submissions</li> <li>• Need to consider demand for rural residential vs. residential</li> <li>• Impacts of buffer, especially frost fan, require further consideration</li> <li>• Impact of development within Lake Wyangan Catchment</li> </ul>

### GCC City Strategy and Development Services Comment

The subject property falls within the area proposed to provide room for village expansion in a southern direction towards Griffith. The proposed southern expansion of the village area is based on available infrastructure and desired urban form created by working towards a linkage between Lake Wyangan and Griffith.

**Site No: 34**

**Street Address:** 629 Macedone Rd, Griffith

**Property Address:** Lot 379 DP 751709

**Property Size** Area of 5.99ha.

**Current Zoning:** 1(b) Rural Agricultural Protection

**Current Land Use:** Currently planted to citrus. Contains residence, garage, 2 storage sheds.

**Proposal:**

Rezone land from Rural Agricultural Protection to Rural Residential.



**Source:** Google Earth

### Independent Assessment

No	Address	Existing	Proposed	Recommendation Geolyse Review Report	Comments Geolyse Review Report
34	Macedone Road Yoogali	1(b) Rural Agricultural Protection	Rural Residential	√	<ul style="list-style-type: none"> <li>• Adjacent to existing rural residential development, thus logical expansion area.</li> <li>• Flood free land</li> <li>• Further assessment of demand for rural residential development in this location and where to draw the line between rural residential and rural.</li> </ul>

### GCC City Strategy and Development Services Comment

Current oversupply of Rural Residential land does not justify support for the submission further more provision for Large Lot Residential Development was made to the west of the village area.



**Site No: 35**

**Street Address:**  
**Property Address:**  
**Property Size**  
**Current Zoning:**  
**Current Land Use:**

**Proposal:**

Inappropriateness of trucks in the centre of town

No	Address	Existing	Proposed	Recommendation Geolyse Review Report	Comments Geolyse Review Report
35	General		Inappropriateness of trucks in the centre of town	√	

**GCC City Strategy and Development Services Comment**

This is a very valid submission and will be addressed as part of the 2030 Growth Strategy Document.

**Site No: 36**

**Street Address:** 470 Kidman Way, Hanwood

**Property Address:** Lot 1 DP 1060329

**Property Size** Area of land is 4.475ha.

**Current Zoning:** 1(i) Investigation

**Current Land Use:** Citrus, dwelling, sheds

**Proposal:**

Rezone from Investigation to General Industrial for subdivision



**Source:** Google Earth

## Independent Assessment

No	Address	Existing	Proposed	Recommendation Geolyse Review Report	Comments Geolyse Review Report
<b>36</b>	Kidman Way Hanwood	1(i) Investigation	4(a) General Industrial	×	<ul style="list-style-type: none"> <li>• Conflicts with GS2030 for Highway Service Zone</li> <li>• Not a suitable use on the highway and segregated from other industrial development</li> </ul>

## GCC City Strategy and Development Services Comment

CS&D supports the independent assessment recommendation and supports maximum utilization of existing available industrial land.

**Site No: 37**

**Street Address:** Golf Course Road, Yenda

**Property Address:** Lot 1 DP 835928

**Property Size** Area of land is 3.072ha

**Current Zoning:** 1(b) Rural Agricultural Protection

**Current Land Use:** Cleared

**Proposal:**

Rezone Rural Agricultural Protection to Rural Residential for subdivision (1-2 acre lots).



**Source:** Google Earth

### Independent Assessment

No	Address	Existing	Proposed	Recommendation Geolyse Review Report	Comments Geolyse Review Report
37	Golf Course Road Yenda	1(b) Rural Agricultural Protection	1© Rural Residential	√	<ul style="list-style-type: none"><li>• Adjacent to extension to Yenda Village</li><li>• Partially flood affected – extent of impacts requires further investigation.</li><li>• Sewage disposal issues</li></ul>

### GCC City Strategy and Development Services Comment

**Proposed Zoning ( Standard Instrument):** RU1 Primary Industry

Current oversupply of Rural Residential land does not justify support for the submission further more provision for Large Lot Residential Development was made to the east of the village area.

**Site No: 38 (Also see Site No 68)**

**Street Address:** 900 Watkins Ave, Griffith

**Property Address:** Lots 536/537 DP 751709

**Property Size** Area of land is 12.5ha.

**Current Zoning:** 1(g) Rural Mixed Use

**Current Land Use:** Currently used for horticulture, contains residence and farm sheds.

**Proposal:**

Rezone from Rural Mixed Use to Rural Residential for subdivision (17 lots ranging from 4,036m<sup>2</sup> to 7,260m<sup>2</sup>). If not rezoned, then a consideration of permissible uses in 1(g) zoning



**Source:** Google Earth



## Independent Assessment

No	Address	Existing	Proposed	Recommendation Geolyse Review Report	Comments Geolyse Review Report
38	Watkins Ave Griffith	1(g) Rural Mixed Use	1© Rural Residential	√	<ul style="list-style-type: none"> <li>• Flood prone land</li> <li>• Potential southern bypass – compatibility with such a land use.</li> <li>• Flood affectation – extent of impacts requires further investigation.</li> <li>• Impact on adjacent significant roadside vegetation?</li> <li>• Adjacent to other 1© land</li> </ul>

## GCC City Strategy and Development Services Comment

Refer to submission 69

**Site No: 39**

**Street Address:** 415 Wells Rd, Yenda

**Property Address:** Lot 2 DP 1084525

**Property Size** Area of land is 25.49ha.

**Current Zoning:** 1(b) Rural Agricultural Protection

**Current Land Use:** Currently planted out with grapes.

**Proposal:**

Rezone from Rural Agricultural Protection to Residential (or Rural Residential) for subdivision



**Source:** Google Earth

### Independent Assessment

No	Address	Existing	Proposed	Recommendation Geolyse Review Report	Comments Geolyse Review Report
39	Wells Road, Yenda	1(b) Rural Agricultural Protection	Residential or Rural Residential	×	<ul style="list-style-type: none"><li>• Separated from Yenda by channel</li><li>• Not considered orderly development due to separation from remainder of Yenda Township. Leading to sprawl of such land uses and encroachment into agricultural land</li></ul>

### GCC City Strategy and Development Services Comment

**Proposed Zoning ( Standard Instrument):** RU5- Village

CS&D does not support the Independent Assessment and the subject site is proposed as an area for future village expansion based on the following strategic aspects:

The proposed portion is not flood prone land, effective linkage with the existing village area already exists via Burley Griffin Way and minimizes the “channel effect”. The overwhelming strategic factor is the fact that this area minimizes potential land use conflict with current and future Industrial activity linked to the wine industry situated north of Doug McWilliam Road.

**Site No: 40**

**Street Address:** Rifle Range Road, Griffith

**Property Address:** Lot 494 DP 751743

**Property Size**

**Current Zoning:** 1(b) Rural Agricultural Protection

**Current Land Use:** Cleared

**Proposal:**

Rezone for 'Cemetery and Auxiliary Services'



**Source: Google Earth**

### Independent Assessment

No	Address	Existing	Proposed	Recommendation Geolyse Review Report	Comments Geolyse Review Report
40	Rifle Range Road Griffith	1(b) Rural Agricultural Protection	Rezone for cemetery and auxiliary uses	√	<ul style="list-style-type: none"><li>• Perhaps 5(a) or 6(a) would be suitable</li><li>• Good buffer uses for airport</li></ul>

### GCC City Strategy and Development Services Comment

CS&D supports the independent assessment recommendation.

**Site No: 41**

**Street Address:** Farm 228 Mackay Ave, Yoogali

**Property Address:** Lots 272 & 273 DP 751709

**Property Size** Area of land is 10.51ha.

**Current Zoning:** 1(b) Rural Agricultural Protection

**Current Land Use:** cleared

**Proposal:**

Rezone from Rural Agricultural Protection to General Expansion or Highway Service



**Source:** Google Earth

**Independent Assessment**



No	Address	Existing	Proposed	Recommendation Geolyse Review Report	Comments Geolyse Review Report
41	MacKay Avenue Yoogali	1(b) Rural Agricultural Protection	1(d) or 3(b)	√	<ul style="list-style-type: none"> <li>• Potential southern bypass – compatibility with such a land use.</li> <li>• Extends the “boundary” of urban zoned land into rural land</li> <li>• Perhaps 3(b) would be suitable once bypass route has been confirmed</li> <li>• Flood prone land – extent of impacts requires further investigation.</li> <li>• Gradient predominantly &lt;0.5%, which sees issues with infrastructure/servicing.</li> </ul>

### **GCC City Strategy and Development Services Comment**

CS&D is not in favour of extending the proposed zoning to the south of the Burley Griffin, Leeton Intersection. This intersection forms a distinctive barrier between urban and rural land uses.

**Site No: 42**

**Street Address:** Farm 2639 Cnr Dinicola & Macedone Rds, Yoogali

**Property Address:** Lot 372 DP 751709

**Property Size** Area of land is 9.3ha.

**Current Zoning:** 1(b) Rural Agricultural Protection

**Current Land Use:** Currently used for vineyard but not viable due to small lot size.

**Proposal:**

Rezone from Rural Agricultural Protection to Rural Residential for subdivision.



**Source:** Google Earth

**Independent Assessment**

No	Address	Existing	Proposed	Recommendation Geolyse Review Report	Comments Geolyse Review Report
42	Corner Dinicola & Macedone Roads Yoogali	1(b) Rural Agricultural Protection	Rural Residential	√	<ul style="list-style-type: none"> <li>• Logical extension with submission #34 to existing rural residential development</li> <li>• Flood free land</li> <li>• Further assessment of demand for rural residential development in this location and where to draw the line between rural residential and rural.</li> <li>• Gradient predominantly &lt;0.5%, which may have servicing Issues</li> </ul>

### **GCC City Strategy and Development Services Comment**

**Proposed Zoning ( Standard Instrument)** RU1 Primary Production

Current oversupply of Rural Residential land does not justify support for the submission further more provision for Large Lot Residential Development was made to the west of the village area.

**Site No: 43**

**Street Address:** 1870 McCarthy Rd, Lake Wyangan

**Property Address:** Lots 171 & 172 DP 751743

**Property Size** Area of land is 10.4ha

**Current Zoning:** 1(i) Investigation

**Current Land Use:** Currently used for citrus

**Proposal:**

Rezone from Investigation to Residential



**Source:** Google Earth

## Independent Assessment

No	Address	Existing	Proposed	Recommendation Geolyse Review Report	Comments Geolyse Review Report
43	McCarthy Road Lake Wyangan	1(i) Investigation	Residential	√	<ul style="list-style-type: none"> <li>• Inconsistent with GS2030, which identifies the site for future rural residential development (?)</li> <li>• Consistent with adjacent submissions</li> <li>• Need to consider demand for rural residential vs. residential</li> <li>• Impacts of buffer, especially frost fan, require further consideration</li> <li>• Impact of development within Lake Wyangan Catchment</li> </ul>

## GCC City Strategy and Development Services Comment

The subject property falls within the area proposed to provide room for village expansion in a southern direction towards Griffith. The proposed southern expansion of the village area is based on available infrastructure and desired urban form created by working towards a linkage between Lake Wyangan and Griffith.

**Site No: 44**

**Street Address:** Binya St, Griffith

**Property Address:** N/A

**Property Size** N/A

**Current Zoning:** 2(a) residential

**Current Land Use:** Mixture of dwellings

**Proposal:**

Rezone Binya Street to allow commercial use (3(a) General Business)



**Source:** Google Earth



## Independent Assessment

No	Address	Existing	Proposed	Recommendation Geolyse Review Report	Comments Geolyse Review Report
44	Binya Street Griffith	2(a) Residential	3(a) General Business	×	<ul style="list-style-type: none"> <li>• Other means are available to preserve older buildings</li> <li>• More appropriate location for commercial development, likely on the southern side of the railway line</li> <li>• Commercial development and association impacts, i.e. parking and traffic generation, not suitable for adjacent uses</li> </ul>

## GCC City Strategy and Development Services Comment

A rezoning for full business rights for the whole area south of Binya is not supported. It is proposed that the Standard Instrument B4 zoning be investigated this allows for wide range of land uses including retail, employment, residential, community and others which is probably a fair reflection of the current land use already situated in the subject area.

**Site No: 45**

**Street Address:** Duchatel St, Griffith

**Property Address:** Lot 1038 DP 751709

**Property Size** Area of land is 18.5 acres

**Current Zoning:** 1(b) Rural Agricultural Protection

**Current Land Use:** Currently used as vineyard

**Proposal:**

Rezone from Rural Agricultural Protection to General Industrial.



**Source:** Google Earth

### Independent Assessment

No	Address	Existing	Proposed	Recommendation Geolyse Review Report	Comments Geolyse Review Report
45	Duchatel Street Griffith	1(b) Rural Agricultural Protection	4(a) General Industrial	√	<ul style="list-style-type: none"> <li>• Suitable adjacent use for STP and other 1(e) rural industry and employment adjacent to the site</li> <li>• Conflict with adjacent residential development</li> <li>• Perhaps a light industrial zone is more appropriate</li> <li>• Gradient predominantly &lt;0.5%</li> </ul>

### GCC City Strategy and Development Services Comment

The Independent assessment proposal is not supported. It has been proposed in the Griffith Land Use Strategy that land be made available south of Kidman Way to accommodate larger Industrial Development. Kidman Way should be used as a buffer between such developments and the area north of it.

**Site No: 46**

**Street Address:** Farm 2749 Citrus Rd, Griffith

**Property Address:** Lot 590 DP 751743

**Property Size:** 11.3Ha

**Current Zoning:** 1(d) General Expansion

**Current Land Use:** citrus

**Proposal:**

Rezone from General Expansion to Residential



**Source:** Google Earth

### Independent Assessment

No	Address	Existing	Proposed	Recommendation Geolyse Review Report	Comments Geolyse Review Report
46	Citrus Road Griffith	1(d) General Expansion	Residential	√	<ul style="list-style-type: none"><li>• GS2030 identifies it as Residential 2021-2030 – ahead of its time</li><li>• Suitable, but needs to be done in a logical manner from south to north for the area for infrastructure provision and the like.</li><li>• Need to review demand for such.</li></ul>

### GCC City Strategy and Development Services Comment

CS&D supports the independent assessment recommendation and the Griffith Land Use Strategy also recommends Zoning of the area for Residential purposes.

**Site No: 47**

**Street Address:** Farm 1685 Citrus Rd, Griffith

**Property Address:** Lot 591 DP 751743

**Property Size** Area of land is 11.2ha (28 acres)

**Current Zoning:** 1(d) General Expansion

**Current Land Use:** Currently used for citrus.

**Proposal:**

Rezone from General Expansion to Residential.





**Source: Google Earth  
Independent Assessment**

No	Address	Existing	Proposed	Recommendation Geolyse Review Report	Comments Geolyse Review Report
47	Citrus Road Griffith	Citrus Road Griffith 1(d) General Expansion	Residential	√	<ul style="list-style-type: none"> <li>• GS2030 identifies it as Residential 2021-2030 – ahead of its time</li> <li>• Suitable, but needs to be done in a logical manner from south to north for the area for infrastructure provision and the like.</li> <li>• Need to review demand for such</li> </ul>

**GCC City Strategy and Development Services Comment**

CS&D supports the independent assessment recommendation and the Griffith Land Use Strategy also recommends Zoning of the area for Residential purposes.

**Site No: 48**

**Street Address:** Beelbangera

**Property Address:** Lot 592 DP 751743

**Property Size** Area of land is 11.33ha.

**Current Zoning:** 1(d) General Expansion

**Current Land Use:** Currently used for citrus farming.

**Proposal:**

“Fast track” the rezoning from General Expansion to Residential.



Source: Google Earth

### Independent Assessment

No	Address	Existing	Proposed	Recommendation Geolyse Review Report	Comments Geolyse Review Report
48	Citrus Road Griffith	Citrus Road Griffith 1(d) General Expansion	Residential	√	<ul style="list-style-type: none"><li>• GS2030 identifies it as Residential 2021-2030 – ahead of its time</li><li>• Suitable, but needs to be done in a logical manner from south to north for the area for infrastructure provision and the like.</li><li>• Need to review demand for such.</li></ul>

### GCC City Strategy and Development Services Comment

CS&D supports the independent assessment recommendation and the proposed zoning for the area is supportive to the submission

**Site No: 49**

**Street Address:** Citrus Road, Griffith

**Property Address:** Lot 695 DP 43610

**Property Size** Area of land is 10.86ha.

**Current Zoning:** 1(d) General Expansion

**Current Land Use:** Currently used for citrus.

**Proposal:**

Residential - relates to Submission 47 & 48



**Source:** Google Earth

### Independent Assessment

No	Address	Existing	Proposed	Recommendation Geolyse Review Report	Comments Geolyse Review Report
49	Citrus Road Griffith	1(d) General Expansion	Residential	√	<ul style="list-style-type: none"> <li>• GS2030 identifies it as Residential 2021-2030 – ahead of its time</li> <li>• Suitable, but needs to be done in a logical manner from south to north for the area for infrastructure provision and the like.</li> <li>• Need to review demand for such.</li> </ul>

### GCC City Strategy and Development Services Comment

CS&D supports the independent assessment recommendation and the proposed zoning for the area is supportive to the submission

**Site No: 50**

**Street Address:** Farm 1683 Rankins Springs Rd, Griffith

**Property Address:** Lots 371, 470 & 491 DP 751743

**Property Size** Area of land is 12.8ha.

**Current Zoning:** 1(i) Investigation

**Current Land Use:** Currently used for citrus.

**Proposal:**

Residential - relates to Submission 51( same owner)



**Source:** Google Earth



## Independent Assessment

No	Address	Existing	Proposed	Recommendation Geolyse Review Report	Comments Geolyse Review Report
50	Rankin Springs Road Griffith	1(i) Investigation	Residential	√	<ul style="list-style-type: none"> <li>• GS2030 identifies the site for future residential (2030+) – ahead of its time</li> <li>• Issue of flood affectation needs further consideration</li> <li>• Suitable, but needs to be done in a logical manner from south to north for the area for infrastructure provision and the like.</li> <li>• Need to review demand for such</li> </ul>

## GCC City Strategy and Development Services Comment

Current oversupply of Rural Residential land does not justify support for the submission further more the subject property forms part of an area currently utilized as primary production. CS&D would like to emphasize the fact that rural residential development should be contained within reasonable precincts related to availability of services and consideration of adjacent land uses. Support for such development would open up another Rural Residential precinct isolated from other existing Rural Residential precincts stretching services unnecessary.

**Site No: 51**

**Street Address:** Farm 1683, Rankin Springs Road, Griffith

**Property Address:** Lot 589 DP 751743

**Property Size** Area of land is 11.2ha.

**Current Zoning:** 1(d) General Expansion

**Current Land Use:** Currently used for horticulture.

**Proposal:**  
Residential



**Source:** Google Earth

## Independent Assessment

No	Address	Existing	Proposed	Recommendation Geolyse Review Report	Comments Geolyse Review Report
51	Citrus Road Griffith	1(d) General Expansion	Residential	√	<ul style="list-style-type: none"><li>• GS2030 identifies it as Residential 2021-2030 – ahead of its time</li><li>• Suitable, but needs to be done in a logical manner from south to north for the area for infrastructure provision and the like.</li></ul>

## GCC City Strategy and Development Services Comment

**Proposed Zoning ( Standard Instrument)** RI General Residential

CS&D supports the independent assessment recommendation and the proposed zoning for the area is supportive to the submission

**Site No: 52**

**Street Address:** Farm 1303 Mallinson Road, Lake Wyangan

**Property Address:** Lot 582 DP 751743 and Lot 730 DP 720269

**Property Size** Area of land is 9.57ha

**Current Zoning:** 7(v) Environmental Protection - Scenic

**Current Land Use:** Currently used for citrus

**Proposal:**

Rezone from Environmental Protection – Scenic to Rural Living or Rural Residential for 22 lot (from 3,009m<sup>2</sup> to 3,787m<sup>2</sup>) subdivision.



Source: Google Earth

### Independent Assessment

No	Address	Existing	Proposed	Recommendation Geolyse Review Report	Comments Geolyse Review Report
52	Mallinson Road Lake Wyangan	7(v) Environmental Protection - scenic	7(c) Environmental Protection - Rural Living or 1(c) Rural Residential	√	<ul style="list-style-type: none"><li>• Need visual impact assessment to see whether residential encroachment into range area would have an adverse impact</li><li>• 7(c) may be more appropriate</li><li>• Bushfire and buffer impacts need further consideration.</li></ul>

### GCC City Strategy and Development Services Comment

Current oversupply of Rural Residential land does not justify support for the submission further more the subject properties form part of an area currently utilized as primary production. CS&D would like to emphasize the fact that rural residential development should be contained within reasonable precincts related to availability of services and consideration of adjacent land uses. Support for such development would open up another Rural Residential precinct isolated from other existing Rural Residential precincts stretching services unnecessary.

**Site No: 53**

**Street Address:** Rankin Springs, Griffith

**Property Address:** Lot 775 DP 821564

**Property Size** Area of land is 45ha

**Current Zoning:** 7(v) Environmental Protection - Scenic

**Current Land Use:** Currently used for citrus, contains a residence.

**Proposal:**

Rezone portion of Environmental Protection – Scenic to Rural Agricultural Protection





**Source: Griffith City Council – note not to scale**  
**Independent Assessment**

No	Address	Existing	Proposed	Recommendation Geolyse Review Report	Comments Geolyse Review Report
53	Rankin Springs Road Griffith	7(v) Environmental Protection - scenic	1(b) Rural Agricultural Protection	×	• Further information to ensure no impact on scenic protection

**GCC City Strategy and Development Services Comment**

In terms of the two proposed zonings applicable council could support the development of a dwelling unit in the precinct indicated with due consideration of any possible environmental constraints.

**Site No: 54**

**Street Address:** Farm 2398 Boorga Rd, Nericon

**Property Address:** Lots 102 & 104 DP 1018460 and Lots 309 & 610 DP 751743

**Property Size**

**Current Zoning:** 1(d) General Expansion

**Current Land Use:** Currently used for farming/grazing.

**Proposal:**

Rezone from General Expansion to Rural Residential for subdivision and community facilities



**Source:** Google Earth

## Independent Assessment

No	Address	Existing	Proposed	Recommendation Geolyse Review Report	Comments Geolyse Review Report
54	Boorga Road Nericon	1(d) General Expansion	Rural Residential and community facilities	√	• See separate assessment report

## GCC City Strategy and Development Services Comment

This was approved by council.

### Independent Assessment

No	Address	Existing	Proposed	Recommendation Geolyse Review Report	Comments Geolyse Review Report
55	various		Contaminated Site		

### GCC City Strategy and Development Services Comment

The actual submission requested a look at vegetation offsets with regards to the expansion of Tharbogang Quarry/Landfill. Possibly look at rezoning certain sites as Environmental Protection for this purpose.

### Independent Assessment

No	Address	Existing	Proposed	Recommendation Geolyse Review Report	Comments Geolyse Review Report
56	general		Reserve land for future level crossing strategy		

### GCC City Strategy and Development Services Comment

Land would be reserved for future level rail crossings in accordance with the level crossing strategy.

**Site No: 57**

**Street Address:** Burley Griffin Way, Yenda

**Property Address:** Lots 582, 588, 833, 491, 492, 493, 572, 580 & 940 DP 751728  
Lots 1 & 2 DP 808870 and Lots 1066 & 1067 DP 257193

**Property Size**

**Current Zoning:** 1(b) Rural Agricultural Protection

**Current Land Use:** Grapes, winery

**Proposal:**

Rezoning from Rural Agricultural Protection to Rural Industry and Employment.



**Source:** Google Earth

## Independent Assessment

No	Address	Existing	Proposed	Recommendation Geolyse Review Report	Comments Geolyse Review Report
57	Burley Griffin Way Yenda	1(b) Rural Agricultural Protection	1(e) Rural Industry & Employment	√	<ul style="list-style-type: none"><li>• Logical extension to adjacent winery uses</li><li>• Impact of &lt;0.5% gradient requires further consideration</li></ul>

## GCC City Strategy and Development Services Comment

CS&D is of the opinion that all certain wineries in the Griffith area equals the scale of development that justifies an Industrial zoning of some type. This could be addressed in more detail during the LEP process.



**Site No: 58**

**Street Address:** Farm 865 Holt Rd, Griffith

**Property Address:** Lot 2218 DP 725647

**Property Size**

**Current Zoning:** 1(h) Rural Small Holdings

**Current Land Use:** Dwelling, citrus

**Proposal:**

Rezone from Rural Small Holdings back to Rural Residential



**Source:** Google

## Independent Assessment

No	Address	Existing	Proposed	Recommendation Geolyse Review Report	Comments Geolyse Review Report
58	Holt Road Griffith	1(h) Rural Small Holdings	Rural Residential	×	• Based on flooding constraints and proximity to residential zoned land, best to retain as larger holdings

## GCC City Strategy and Development Services Comment

### Proposed Zoning ( Standard Instrument) RU4 Rural Small Holdings

Current oversupply of Rural Residential land does not justify support for the submission. CS&D supports the independent recommendation of maintaining the current status.

### Independent Assessment

No	Address	Existing	Proposed	Recommendation Geolyse Review Report	Comments Geolyse Review Report
59	Nericon		Provision of a sewerage system in Nericon	√	

### Independent Proposal

Area of land is 23ha. Owned by Department of Lands, proposed for residential village extension. Consider the proposed extension when determining requirements for expansion of sewerage treatment.

### GCC City Strategy and Development Services Comment

Noted

**Site No: 60**

**Street Address:** Battista Road, Yoogali

**Property Address:** Lot 2 DP 872103 and Lot 20 DP 10092909

**Property Size**

**Current Zoning:** 1(d) Investigation

**Current Land Use:** Cleared with dwelling

**Proposal:**

Rezoning from Investigation to Highway Service Business as outlined in the proposed structure plan.



**Source:** Google

## Independent Assessment

No	Address	Existing	Proposed	Recommendation Geolyse Review Report	Comments Geolyse Review Report
60	Battista Road Yoogali	1(d) Investigation	1(c) or 1(h)	√	<ul style="list-style-type: none"> <li>• GS2030 identifies the site for Highway Service Zone 2011- 2020 – ahead of its time</li> <li>• Issue of flood affectation – extent of impacts requires further investigation.</li> <li>• Suitable, but needs to be done in a logical manner for the area for infrastructure provision and the like.</li> <li>• Requires further consideration for demand of such development</li> </ul>

## GCC City Strategy and Development Services Comment

CS&D see this area as a logic opportunity for expansion of the adjacent Industrial area to the west should the need arise. The site is flood affected which limits development options.

**Site No: 61**

**Street Address:** Leonard, Beverley and Pedley Roads, Hanwood

**Property Address:** N/A

**Property Size**

**Current Zoning:** Part 1(b) part 1(i)

**Current Land Use:** Citrus, grapes, dwellings, sheds, etc

**Proposal:**

Landholders opposed to industrial development that would increase traffic volume in the area, not opposed to rural residential.



**Source:** Google Earth



## Independent Assessment

No	Address	Existing	Proposed	Recommendation Geolyse Review Report	Comments Geolyse Review Report
61	Leonard, Beverly & Pedley Roads Hanwood	Part 1(b), Part 1(i)	Opposed to industrial development that would increase traffic volumes in the area	√	<ul style="list-style-type: none"> <li>• Any change to zoning would need to consider impacts, including traffic</li> <li>• Part Identified by GS2030 for Highway Service Zone</li> <li>• Impact of &lt;0.5% gradient for servicing</li> <li>• Flood affectation – extent of impacts requires further investigation</li> </ul>

## GCC City Strategy and Development Services Comment

Lot 1 and 2 DP 1098689 have been rezoned to accommodate the development of a Regional Transport Service Centre. Properties located adjacent to Kidman Way might have future potential regarding Agri Industry subject to further studies and strategies.

**Site No: 62**

**Street Address:** 167 Masonwells Rd, Nericon

**Property Address:** Lot 401 DP 1012337

**Property Size** Area of land is 108 acres.

**Current Zoning:** 1(b) Rural Agricultural Protection

**Current Land Use:**

Currently used for garlic farming (1.5 acres) with proposed expansion to 10 acres but limited by available water. 80% of land identified as “dry area only”. Attempting to obtain more water (currently has 35ML allocated). Not viable to farm or graze.

**Proposal:**

Rezone to 1(c) or 1(h)



**Source:** Google Earth

### Independent Assessment

No	Address	Existing	Proposed	Recommendation Geolyse Review Report	Comments Geolyse Review Report
62	Masonwells Road Nericon	1(b) Rural Agricultural Protection	1(c) or 1(h)	√	<ul style="list-style-type: none"> <li>• Potentially suitable land use. Limited constraints</li> <li>• Impact on Lake Wyangan catchment</li> <li>• Need to look at demand for such land. A lot of supply identified for rural residential land in the locality.</li> </ul>

### GCC City Strategy and Development Services Comment

Current oversupply of Rural Residential land does not justify support for the submission. It should further be noted that a large amount of land has been earmarked for Large Lot Residential in the Lake Wyangan area. The request for small holdings could be accommodated within the LEP process when minimum Lot sizes for agricultural land is determined.

**Site No: 63**

**Street Address:** Kidman Way, Hanwood

**Property Address:** Lots 191, 192 & 355 DP 751709

**Property Size** Area of land is 20ha.

**Current Zoning:** 1(b) Rural Agricultural Protection

**Current Land Use:** Currently used as vineyard, contains residence and sheds.

**Proposal:**

Rezone from Rural Agricultural Protection to Highway Service Business for “mixed rural industries”.



**Source:** Google Earth

## Independent Assessment

No	Address	Existing	Proposed	Recommendation Geolyse Review Report	Comments Geolyse Review Report
63	Kidman Way Hanwood	1(b) Rural Agricultural Protection	Mixed rural industries	√	<ul style="list-style-type: none"> <li>• Potentially 1(e) would be suitable, reinforcing existing adjacent uses</li> <li>• Impact of traffic generation on Kidman Way needs to be considered</li> <li>• Also sprawl south along Kidman Way is a concern.</li> <li>• Impact of &lt;0.5% gradient on servicing requires further consideration</li> </ul>

## GCC City Strategy and Development Services Comment

The area also falls within a proposed agricultural corridor area where it is envisaged to encourage agricultural related enterprises. This will form part of a separate future study to determine the viability of such development.

**Site No: 64**

**Street Address:** Burley Griffin Way, Yenda

**Property Address:** Lot 203 DP 751728

**Property Size** 19.6ha

**Current Zoning:** 1(b)

**Current Land Use:** cleared

**Proposal:**

1(c) or 2(a)/(v)



**Source:** Google Earth



## Independent Assessment

No	Address	Existing	Proposed	Recommendation Geolyse Review Report	Comments Geolyse Review Report
64	Burley Griffin Way Yenda	1(b) Rural Agricultural Protection	Residential or Rural Residential	×	<ul style="list-style-type: none"> <li>• Separated from Yenda by channel</li> <li>• Not considered orderly development due to separation from remainder of Yenda Township Leading to sprawl of such land uses and encroachment into agricultural land.</li> <li>• Predominantly &lt;0.5% gradient, which sees issues with infrastructure/servicing</li> </ul>

## GCC City Strategy and Development Services Comment

CS&D support the view reflected by the independent assessment

## Site No: 65

**Street Address:** Old Willbriggie Road & Bishop Road, Griffith

**Property Address:** Lots 410, 718, 719 & 996, DP 751709

**Property Size**

**Current Zoning:** 1(h) – Rural Small Holdings

**Current Land Use:**

Lot 410, DP 751709 has an existing single storey residential dwelling and associated outbuildings located in the north-west corner of the site. The remainder of the site is currently used for horticulture production (oranges). Lot 719, DP 751709 has no existing dwelling or structures and is currently used for horticulture production (oranges). Lot 718, DP 751709 has no existing dwelling or structures and is currently used for horticulture production (oranges). Lot 996, DP 751709 is currently vacant and was previously used for horticulture production (oranges).

## Proposal:

Rezone to 1(c) or 1(g)



Source: Google Earth

## Independent Assessment

No	Address	Existing	Proposed	Recommendation Geolyse Review Report	Comments Geolyse Review Report
65	Corner Old Willbriggie & Bishop Roads Griffith	1(h) Rural Small Holdings	1 (c) Rural Residential or 1(g) Rural Mixed Use	√	<ul style="list-style-type: none"> <li>• Adjacent to some rural residential size allotments</li> <li>• Issues of flooding and buffers require further consideration</li> <li>• Also adjacent to industrial land</li> <li>• Need to review future planning for this whole precinct</li> </ul>

## GCC City Strategy and Development Services Comment

Current oversupply of Rural Residential land does not justify support for the submission. CS&D would like to emphasize the fact that rural residential development should be contained within reasonable precincts related to availability of services and consideration of adjacent land uses. Support for such development would open up another Rural Residential precinct isolated from other existing Rural Residential precincts stretching services unnecessary.

**Site No: 66**

**Street Address:** McGanns Road, Hanwood

**Property Address:** Lots 211, 213, 356 & 358, DP 751709, Lot 1, DP 42514 and Lot 2, DP 802982

**Property Size**

**Current Zoning:** *1(b) – Rural Agricultural Protection*

**Current Land Use:**

Lot 1, DP 42514 relates to a portion of former road reserve (formerly Gulloni Road). Whilst Lot 1, DP 42514 has separate title, it forms part of a property that is used as a wastewater treatment facility associated with Bartter's operations on the eastern side of the Kidman Way. It is understood that Lots 211 & 356, DP 751709 and the northern portion of Lot 213, DP 751709 and Lot 2, DP 802982 are occupied by wastewater treatment ponds. The remaining southern portion of Lot 213, DP 751709 and Lot 2, DP 802982 and all of Lot 358, DP 751709 are used for the purpose of irrigating wastewater/cropping activities.

**Proposal:**

The subject land be re-zoned from *1(b) – Rural Agricultural Protection* to the more appropriate zone of *1(e) – Rural Industry & Employment* under the provisions of GLEP2002.



**Source: Google Earth  
Independent Assessment**

No	Address	Existing	Proposed	Recommendation Geolyse Review Report	Comments Geolyse Review Report
66	66 McGanns Road Hanwood	1(b) Rural Agricultural Protection	1(e) Rural Industry & Employment	√	<ul style="list-style-type: none"> <li>• Adjacent to existing 1(e) development</li> <li>• Suitable use considering adjacent buffers</li> </ul>

**GCC City Strategy and Development Services Comment**

An appropriate zoning would be recommended as part of the LEP process.

Site No: 67

**Street Address:** Farm 24 Thompson Road, Hanwood

**Property Address:** Lot 1 DP 1052081

**Property Size**

**Current Zoning:** 1(b) Rural Agricultural Protection

**Current Land Use:** cleared

**Proposal:**

Rezone to 1(e) rural industrial area



**Source:** Google Earth



## Independent Assessment

No	Address	Existing	Proposed	Recommendation Geolyse Review Report	Comments Geolyse Review Report
67	Thompson Road Hanwood	1(b) Rural Agricultural Protection	1(e) Rural Industry & Employment	×	<ul style="list-style-type: none"><li>• Inconsistent with GS2030</li><li>• Results in sprawl away from highway and encroachment into rural land</li></ul>

## GCC City Strategy and Development Services Comment

**Proposed Zoning (Standard Instrument) RU I Primary Industry**

CS&D supports the independent assessment proposal

### **RECENT SUBMISSIONS APRIL 2009**

As mentioned a further 6 submissions were received during April 2009. These submissions were not subjected to an independent review other than Council's Department of Planning and Environment. These submissions are dealt with separately as **Site 68 – 74 (new submission)**.

**Site No:** 68 (new submission)

**Street Address:** Research Station Road

**Property Address:** Lot 254, 256, 730, 1026, 1083 DP 751709, Lot 1256 DP 209683, Lot 2 DP 1116228

**Property Size** 12 Ha

**Current Zoning:** 1(b) Rural Agricultural Protection

**Current Land Use:** Offices and agricultural research plots.

**Proposal:**

Rezone to IN 1, IN 2, or IN 3.



### **GCC City Strategy and Development Services Comment**

The proposed zone accommodates the current use as a major research facility with accompanying offices. The fact that office uses which are usually located within town has been allowed to re-locate to this area indicate that council was prepared to accommodate a reasonable request in the past to allow offices for the CSIRO, Land & Water Australia, Murrumbidgee Irrigation and Country Energy. CS&D can however not support

the current submission calling for industrial rights which would create an isolated industrial node which is in total contrast with existing surrounding land uses. This would be in total disregard of existing rural surroundings.

**Site No:** 69 (new submission) Also see **Site No 38**

**Street Address:** Watkins Avenue

**Property Address:** Lot 536 & 537 DP 751709

**Property Size:** 12Ha

**Current Zoning:** 1(g) Rural Mixed Use

**Current Land Use:** Farming, Dwelling House and shed(s)

**Proposal:**

Rezone to R5 (Rural Residential)





## **GCC City Strategy and Development Services Comment**

Current oversupply of Rural Residential land does not justify support for the submission. CS&D would like to emphasize the fact that rural residential development should be contained within reasonable precincts related to availability of services and consideration of adjacent land uses. Support for such development would open up another Rural Residential precinct isolated from other existing Rural Residential precincts stretching services unnecessary.

**Site No: 70** (new submission)

**Street Address:** Slopes Road, Lake Wyangan

**Property Address:** Lot 546, DP 751743

**Property Size:** 8.5 Ha

**Current Zoning:** 1(b) Rural Agricultural Protection and 7(v) Scenic Protection

**Current Land Use:** Horticulture without any Dwelling

### **Proposal:**

RU – 4 Rural Small Holdings or E4 Environmental living.



### **GCC City Strategy and Development Services Comment**

The subject property form part of an area currently utilized as primary production. CS&D would like to emphasize the fact that development should be contained within reasonable precincts related to availability of services and consideration of adjacent land uses.

**Site No: 71** (new submission)

**Street Address:** Kidman Way Hanwood

**Property Address:** Lot 2 DP 1060329

**Property Size:** 6 Ha

**Current Zoning:** 1(i) Investigation (Highway Service Business)

**Current Land Use:** Potato processing and packing facility

### **Proposal**

B5 – Business Development or B6 – Enterprise Corridor



### **GCC City Strategy and Development Services Comment**

To the north of the subject site ample land has been earmarked as B6- Enterprise corridor and until saturation levels dictate further extension such uses should be contained north of Thorn Road.

**Site No: 72** (new submission)

**Street Address:**

**Property Address:** Lot 5, DP 1050291

**Property Size:** 8.1Ha

**Current Zoning:** 1(h) Rural Small Holdings

**Current Land Use:** Single Dwelling and some sheds

**Proposal**

R5 – Large Lot Residential



### **GCC City Strategy and Development Services Comment**

Current oversupply of Rural Residential land does not justify support for the submission. However considering that only one additional Lot could be created in addition to the other already existing 6 Lots surrounding the property consideration could be given to this specific Lot as part of the LEP process and review of the current zoning.



**Site No: 73** (new submission)

**Street Address:** Jondaryan Avenue

**Property Address:** Lot 3 DP 89069

**Property Size:** 1390m<sup>2</sup>

**Current Zoning:** Zone 3(a) General Business

**Current Land Use:** NSW Fire Brigades Station

### **Proposal**

A submission was made requesting council not to convert the site to SP 2-Infrastructure.

### **GCC City Strategy and Development Services Comment**

CS&D propose that the site maintain its status as a business site and that the SP2 zoning not be applied during the LEP zoning review.

**Site No: 74** (new submission)

**Street Address:** Undeveloped; Tharbogang

**Property Address:** Lot 181; 182; 183; 184; 185; DP 756035

**Property Size:** 1390m<sup>2</sup>

**Current Zoning:** 1(b) Rural Agricultural Protection

**Current Land Use:** Possible grazing

### **Proposal**

A submission was made requesting council not to convert the site to 1(c) Rural residential captured under (R5) Large lot residential in the new Planning Instrument.



### **GCC City Strategy and Development Services Comment**

**Proposed Zoning (Standard Instrument) (E2) Environmental Conservation**

CS&D proposed that the area be zoned (E2) due to the attached conservation value observed. As mentioned previously CS&D is of the view that Rural Residential development should take place in sensible precincts where services could be provided and planned for if expansion should occur. One of the criteria used to earmark land for future Rural Residential development was the locality of such existing developments. Once such areas reach a satisfactory saturation level new areas can be identified.

It should also be noted that the subject area is severely hampered by the 500m landfill buffer zone indicated on the Buffer Map for Rural Development, Hazards and Buffers.

## **SUBMISSION REVIEW 2012**

### **Submission No: 1 (Attachment 2 Map 1)**

**Lot No:** Lot 1 DP:1024102

**Owner:** Debortoli Wines Pty Ltd (Submission by Budd & Partners Architects)

**Submission Request:**

The owner objected to the fact the residence on the property has been listed as a proposed heritage item in Annexure 4 of the Strategy.

**Strategic Response:**

The listing of heritage items will be finalised as part of the upcoming review of the Local Environmental Plan. The Heritage list exhibited as part of the Land Use Strategy is currently under review in consultation with all effected owners. No items will be listed in the new Local Environmental Plan without proper consultation with affected owners.

### **Submission No: 2 (Attachment 2 Map 2)**

**Lot No:** Lot 2 DP 1157308 & 1and 2 DP:1063362

**Owner:** Wyangan Valley Estates Pty Ltd (Submission by Budd & Partners Architects)

**Submission Request:**

The owner requests to have an option of developing retail related business within this area and stresses the fact that it is ideal for large scale retail development with the need for enough on-site car parking.

**Strategic Response:**

In Part C (page 13) of the Strategy document the established commercial component in this area is acknowledged and further development of the component is not discouraged. Specific uses related to the proposed zoning of this area will be finalised as part of the Local Environmental Plan. This submission is noted and the owner will be advised in writing to re-submit during exhibition of the Local Environmental Plan. More detailed analyses will be done as part of the Griffith Local Environmental Plan proposal when considering an appropriate zoning. The fact that this is not included as part of the Central Business District does not exclude future retail business from this area. Applications should be considered on merit. The Land Use Strategy map "Future Land Uses for Griffith" will be amended to ensure that an applicable zoning is introduced. **(Note Recommendations)**

### **Submission No: 3 (Attachment 2 Map 3)**

**Lot No:** Lots 886- 887 DP 751709

**Owner:** Mrs.M Dinicola (Submission by Budd & Partners Architects)

**Submission Request:**

The owner requests that the mentioned properties be considered as rural small holdings opposed to a purely agricultural zone.

**Strategic Response:**

One of the focus points of the Land Use Strategy is land use interface challenges. Proposed areas for "small holdings" were used as a mechanism to address these challenges where possible between urban and agricultural land uses. Thorne Road is an appropriate boundary between small holdings to the north which are fragmented and varies in size as opposed to larger horticultural lands to the south with significant horticultural operations. This

creates a buffer zone between urban and rural land uses. The submission is not supported as this would set a precedent for further fragmentation to the south.

#### **Submission No: 4 (Attachment 2 Map 4)**

**Lot No:** General Areas

**Owner:** Non Specific (Submission by Peter Budd /Budd & Partners Architects)

##### **Submission Request:**

- a) No heritage listings should take place without the property owners written consent as stated in the community based heritage study the listing is based on.
- b) No need to have a heritage conservation area in Hyandra/Carrathool Streets.
- c) Maintain dwelling densities to stop multi-unit developments in Hyandra/Carrathool Streets.
- d) Retail Commercial Core of CBD to Extend to Lenehan Road/Blumer Avenue
- e) Do not list Mirrool Creek as Environmental Protection.

##### **Strategic Response:**

- a) The listing of heritage items will be finalised as part of the upcoming review of the Local Environmental Plan. The Heritage list exhibited as part of the Land Use Strategy is currently under review in consultation with all effected owners. No items will be listed in the new Local Environmental Plan without proper consultation with affected owners.
- b) See above.
- c) Dwelling densities in the specific two streets are currently controlled by DCP 21 limiting infill to a maximum of two dwellings per lot. Detail regarding infill in the future would be guided by the new combined DCP and special consideration would be given to the mentioned area and its existing character. In order to maintain the status of the area the strategy should be amended to support the existing limited infill. **(Note Recommendations)**
- d) In Part C (page 13) of the Strategy document the established commercial component in this area is acknowledged and further development of the component is not discouraged. Specific uses related to the proposed zoning of this area will be finalised as part of the Local Environmental Plan. This submission is noted and the owner will be advised in writing to re-submit during exhibition of the Local Environmental Plan. More detailed analyses will be done as part of the Griffith Local Environmental Plan proposal when considering an appropriate zoning. The fact that this is not included as part of the Central Business District does not exclude future retail business from this area. Applications should be considered on merit. The Land Use Strategy map "Future Land Uses for Griffith" will be amended to ensure that an applicable zoning is introduced.
- e) A Final Zoning will be allocated as part of the Griffith Local Environmental Plan process. Further discussions with the relevant State Agency will clarify whether a specific zone should be allocated or whether it will fall under the adjacent agricultural zone.

#### **Submission No: 5 (Attachment 2 Map 5)**

**Lot No:** Lot 8 Sect. 64 DP 758476

**Owner:** Mrs. Melissa Budd (Submission by Peter Budd /Budd & Partners Architects)

##### **Submission Request:**

The owner objected to the fact the a residence on the property has been listed as a proposed heritage item in Annexure 4 of the Strategy.

##### **Strategic Response:**

The listing of heritage items will be finalised as part of the upcoming review of the Local Environmental Plan. The Heritage list exhibited as part of the Land Use Strategy is currently



under review in consultation with all effected owners. No items will be listed in the new Local Environmental Plan without proper consultation with affected owners.

**Submission No: 6 (Attachment 2 Map 6)**

**Lot No:** Lot 2204 DP 723186

**Owner:** Brett Polkinghorne

**Submission Request:**

a) The owner would like to retain the option of residential development on the area earmarked as "Future and Existing Mixed Use Area". The owner anticipate that this area would be zoned "Mixed Use" under the standard instrument and is concerned that the ability to do residential development would not be an option.

The owner request that residential as a right of use be included under any future zoning of the land.

b) The owner also request that council waive all "deferred" rates on the land due to the fact that it is and has always been used for farming purposes.

**Strategic Response:**

a) Specific uses related to the proposed zoning of this area will be finalised as part of the Local Environmental Plan. This submission is noted and the owner will be advised in writing to re-submit during exhibition of the Local Environmental Plan. A more detailed analyses related to the subject property will be done as part of the Griffith Local Environmental Plan proposal.

There is scope to permit some residential development in the area.

b) This request falls outside the scope of this report and the owner would be advised to contact council's rate bureau to clarify any issues regarding deferred rates related to the property.

**Submission No: 7 (Attachment 2 Map 7)**

**Lot No:** Lot 1791 DP 41291

**Owner:** Dino Salvestrin

**Submission Request:**

Mr & Mrs Salvestrin correctly indicated in their submission that the Land Use Strategy Map "Future Land Uses for Griffith" indicates the Lot as existing Residential. They propose that another 12 residential lots be allowed to develop adjacent to Rose Road and that the rest of the property be developed at a later stage.

**Strategic Response:**

The map indicating this Lot as existing residential is a mapping error and is not supported by the existing Local Environmental Plan zoning maps or the Land Use Strategy Document (Part E proposes specific candidate sites for future residential development and this area is not included).

One of the areas on which the Land Use Strategy focus is land use interface challenges.

Development of this Lot for residential purposes would encourage further land use interface conflict with the existing winery and agricultural activities.

Although there are existing residential developments opposite Rose road that in itself does not justify further residential development in this vicinity. It is proposed that the Land Use Strategy Map "Future Land Uses for Griffith" be rectified to correspond with the written contents of the strategy. **(Note Recommendations)**

### **Submission No: 8 (Attachment 2 Map 8)**

**Lot No:** Various (Yambil Street Corridor)

**Owner:** Various (Submission by Mr. Brian Young)

**Submission Request:**

Mr. Young proposed that Yambil street be extended in an eastern direction using the vacant railway easement and portions of properties adjacent to it. He indicated that this would create sensible room for further future extension of the Central Business District. He proposed extension from Crossing Street to Lenehan Street.

**Strategic Response:**

The submission is noted as valuable input. Although the Land Use Strategy does not deal with detail road linkages, this suggestion could be investigated further as part of the Central Business District Strategy which focus on specific precincts within and adjacent to the Central Business District offering development potential. It is proposed that Mr. Young be informed accordingly.

### **Submission No: 9 (Attachment 2 Map 9)**

**Lot No:** Lots 593 DP 751743 & 1 DP 827055

**Owner:** Mr RJ& MB Vico and Mr P& E Pangallo

**Submission Request:**

The owners requested immediate release of the land for development

**Strategic Response:**

These Lots are situated within Candidate Site No 1 in Collina and are proposed to be released as a priority on approval of the Local Environmental Plan amending the zoning to residential.

### **Submission No: 10 (Attachment 2 Map 10)**

**Lot No:** Various

**Owner:** Various (Submission by Steven Murray Architect)

**Submission Request:**

- a) The area between Crossing Street and Lenehan Road/Blumer Avenue should be rezoned to allow for extension of the Central Business District.
- b) The proposed sites for heritage listing are a disappointment.

**Strategic Response:**

a) ) In Part C (page 13) of the document the established commercial component in this area is acknowledged and further development of the component is not discouraged. Specific uses related to the proposed zoning of this area will be finalised as part of the Local Environmental Plan. This submission is noted and the owner will be advised in writing to re-submit during exhibition of the Local Environmental Plan. More detailed analyses will be done as part of the Griffith Local Environmental Plan proposal when considering an appropriate zoning. The fact that this is not included as part of the Central Business District does not exclude future retail business from this area. Applications should be considered on merit.

The Land Use Strategy map "Future Land Uses for Griffith" will be amended to ensure that an applicable zoning is introduced.

b) The listing of heritage items will be finalised as part of the upcoming review of the Local Environmental Plan. The Heritage list exhibited as part of the Land Use Strategy is currently

under review in consultation with all effected owners. No items will be listed in the new Local Environmental Plan without proper consultation with affected owners.

**Submission No: 11 (Attachment 2 Map 11)**

**Lot No:** Lot 861 DP 751709

**Owner:** Mr. F Rogato (Submission by Planning Matters on behalf of owner)

**Submission Request:**

a) The submission states support to rezoning of the land to any of the following:

- General Industrial
- Light Industrial
- Heavy Industrial
- Enterprise Corridor
- Business Park
- Rural Small Holdings

b) In the Submission conclusion, preference is given to an Industrial or Rural Industry zoning

**Strategic Response:**

The subject property has been included in the area identified as an industrial precinct west of Griffith along Kidman Way (candidate site 5). As such the appropriate zoning of the land will form part of the Griffith Local Environmental Plan review process.

**Submission No: 12 (Attachment 2 Map 12)**

**Lot No:** Lots 1 DP 627584, 14- 15 DP 751743, 953-956 DP 751709, 1424 DP 751709

**Owner:** Griffith Abattoirs PTY LTD (Submission by Mr. Gary Codemo)

**Submission Request:**

Mr. Codemo pointed out the fact that his property is currently zoned Rural Industry and Employment (1e) and that they would like all existing land use rights to continue under any new proposed zoning.

**Strategic Response:**

Specific uses related to the proposed zoning of this area will be finalised as part of the Local Environmental Plan. This submission is noted and the owner will be advised in writing to re-submit during exhibition of the Local Environmental Plan. A more detailed analysis will be done as part of the Griffith Local Environmental Plan proposal. It is the view of Council to preserve all existing land use rights as far as possible and in this specific instance an appropriate zoning related to the standard instrument will be proposed to preserve existing land use rights.

**Submission No: 13 (Attachment 2 Map 13)**

**Lot No:** Lot 230 DP 751728

**Owner:** Mr. Alvise Minato

**Submission Request:**

a) The owner made an initial submission in 2006 requesting that the property be utilised for Rural Residential purposes. The owner request that this submission be withdraw.

b) The owner request that the property be used for urban residential lots and that the property be included as part of Candidate site 4.

**Strategic Response:**

a) Withdrawal of the previous submission is noted.

b) The demand and supply analysis set out in Part E of the Strategy do not justify additional land for urban residential lots. However if land is situated adjacent to a specific candidate site and satisfies the selection criteria it makes sense to investigate further. Proposed candidate site 4 consists of Lot 2 DP 1084525 and Lot 5 DP 838460. Lot 2 DP 1084525 is situated adjacent to Burley Griffin Way with the adjacent Lot 5 DP 838460 situated adjacent to the south of Lot 2. The two lots are separated by a supply canal.

Lot 230 DP 751728 is situated adjacent to Burley Griffin Way and adjacent to the western side of Cotterril Road and Lot 2 DP 1084525. Combining Lot 230 DP 751728 with Lot 2 DP 1084525 to form Candidate site 4 will not effect the supply and demand analyses significantly on condition that Lot 5 DP 838460 be eliminated from Candidate Site 4. Considering the fact that this arrangement would free up Candidate Site 4 from the impediment of the irrigation canal the following is proposed:

- That Lot 5 DP 838460 be eliminated as part of Candidate Site 4.
- That Lot 230 DP 751728 be included as part of Candidate Site 4
- That the necessary amendments be made in the Strategy text and maps.

**Submission No: 14 (Attachment 2 Map 14)**

**Lot No:** Lot 1068-1069 DP 257211 & 693 DP 751728

**Owner:** Trevlands Investments Pty Ltd (Submission by Gavin & Natalie Raccanello)

**Submission Request:**

The owner requested that these properties be included for further development of Yenda village.

**Strategic Response:**

In terms of the candidate site selection criteria there are three listed aspects effecting the viability of these properties which should be considered as major impediments:

- The property is flood effected.
- Supply canals create an impediment.
- Railway and associated noise and traffic impacts are present.

The submission is not supported as an option for further village expansion.

**Submission No: 15 (Attachment 2 Map 15)**

**Lot No:** Lots 1 DP 1107843 & 775 DP 821564

**Owner:** David & Sonya Villata

**Submission Request:**

The owners request that the land be made available for "Environmental Living/Rural Residential" type of development.

**Strategic Response:**

Part C of the Land Use Strategy addresses supply and demand of Rural Residential land. The analyses indicated that only 32.4% of all land already zoned for purposes of Rural Residential development has been developed which suggests an over supply.

In addition to the over supply of Rural Residential lots within Griffith City Council, there are other reasons to consider before creating additional further rural residential areas. The provision and long term maintenance of infrastructure and services required for dispersed Rural Residential development is less economically viable compared to urban residential

development. These services include water and sewer, road infrastructure, public transportation (school bus etc.), and community facilities and open space (parks):

**Submission No: 16 (Attachment 2 Map 16)**

**Lot No:** Lot 2 DP 1030697

**Owner:** Mr.N Mancini

**Submission Request:**

The owner requests that the property be included in the existing and proposed Enterprise Corridor situated north of Thorne Road.

**Strategic Response:**

The amount of land available for commercial development and the current saturation percentage does not justify inclusion of this portion as part of the enterprise corridor north of Thorne Road. Furthermore Thorne Road has been identified as the southern urban edge for all urban related development.

It should however be noted that the potential of properties along Kidman Way between Hanwood and Griffith should not be ignored in total. This potential will be considered as part of the Griffith Local Environmental Plan process and an appropriate zoning allowing light and rural industries and associated outlets will be investigated. It is however not recommended that the area south of Thorne Road be considered for further large scale commercial Development.

**Submission No: 17 (Attachment 2 Map 17)**

**Lot No:** Lot 3 DP 14591

**Owner:** Amberley Management Pty Ltd

**Submission Request:**

The owner requests council to consider this property as a potential site for the proposed "Western Riverina Intermodal Freight Terminal"

**Strategic Response:**

This submission has been referred to Council's Economic Development Manager for consideration in selecting a preferred site for the freight intermodal.

It is not within the scope of this report to deal with or to recommend a specific site for this purpose. We should however note that Council have already rezoned land next to Irrigation Way specifically for this purpose and that this zoning will be rolled over to the next Griffith Local Environmental Plan. In the process of establishing such facility the relevant parties may or may not investigate alternative sites as part of the process.

**Submission No: 18 (Attachment 2 Map 18)**

**Lot No:** Various

**Owner:** Various (Submission made by Bill Lancaster)

**Submission Request:**

- a) The size and technical nature of the document justifies a short summary " dummies guide" to the Strategy so more people would understand what it is all about.
- b) The term medium density used in the strategy does not reflect or indicate the actual density per hectare so what does it mean?
- c) Shouldn't we have written to all those properties that will no longer be Residential 2(a)?

- d) Areas within the higher density precincts which have heritage value should be re-considered.
- e) Why have we identified only one exclusive area as "Low Density"
- f) What triggers decision making regarding development for higher or lower density development, would it be the strategy or the Griffith Local Environmental Plan.
- g) The area south of Crossing Street would be better tagged "mixed commercial/industrial use"
- h) Lengthening of Yambil street along the abandoned railway reserve cutting through the old industrial blocks.
- i) Heritage listing should be done in full consultation with all effected owners.
- j) General proof reading to eliminate spelling mistakes.

**Strategic Response:**

- a) This is a valid input and a plan English summary will be prepared.
- b) The Strategy document merely reflects the actual existing situation using general planning terminology. In the Local Environmental Plan there will be only one residential zone. Actual densities would be detailed within the Griffith Local Environmental Plan document and will be identified by the minimum Lot Size maps that will form part of the Griffith Local Environmental Plan document. The future comprehensive DCP would also assist with density control in specific areas. The "Future Land Uses for Griffith" map can be amended to refer only to "Residential" without any contradiction with the text. **(Note Recommendations)**
- c) The different areas of density within the Strategy would all be accommodated under R1 (General Residential) which is equivalent to the existing Residential 2(a). This will be addressed in the Griffith Local Environmental Plan.
- d) Noted and will be considered as part of the Griffith Local Environmental Plan.
- e) This refer to the area of Collina west of Clifton Boulevard. The map can be changed to "existing and future residential development" without any strategic contradiction with the context of the document. **(Note Recommendations)**
- f) The Strategy reflects the current situation with a strategic response. The Griffith Local Environmental Plan and Combined DCP would introduce measures to control densities within residential precincts.
- g) In Part C (page 13) of the Strategy document the established commercial component in this area is acknowledged and further development of the component is not discouraged. As mentioned in the strategic response (submission 4) the fact that this is not included as part of the Central Business District does not exclude future retail business from this area. Applications would be considered on merit and an appropriate zoning would be allocated as part of the Griffith Local Environmental Plan process. The word commercial can be added to the "Future Land Uses for Griffith" map.
- h) The submission is noted as valuable input and although the Land Use Strategy does not deal with detailed road linkages this suggestion could be investigated further as part of the upcoming Central Business District Strategy which focus on specific precincts within and adjacent to the Central Business District.
- i) The listing of heritage items will be finalised as part of the Local Environmental Plan. This submission is noted and as mentioned before all effected owners will be made aware of the listing in writing during the Griffith Local Environmental Plan process.
- j) The draft document will be proof read again prior to submission to Dept. of Planning and Infrastructure.

**Submission No: 19** (Attachment 2 Map 19)

**Lot No:** 14 DP 1022235

**Owner:** Mrs. C Del Gigante

**Submission Request:**

To include a portion of Lot 14 DP 1022235 as Rural Residential for subdivision of a further 11 Lots as approved by Council on 13 August 2002.



**Strategic Response:**

Documentation submitted as part of the request clearly indicates that council omitted the approved application (13 August 2002) from the previous Griffith Local Environmental Plan finalised in 2002. Council also advised the owner in a formal letter dated 21 June 2010 that the situation would be rectified in the new proposed Griffith Local Environmental Plan.

It is proposed that council rectify this error and allocate the appropriate zoning in the new Griffith Local Environmental Plan. The owner would then be able to lodge a new Development Application for subdivision once the Griffith Local Environmental Plan has been finalised.

**Submission No: 20 (Attachment 2 Map 20)**

**Lot No:** 714&721 DP 751709

**Owner:** Mr.M Catanzariti

**Submission Request:**

That council considers including Lots 714 & 721 DP 751709 as a potential "candidate site" for residential development in the final version of the Griffith Land Use Study 2012.

**Strategic Response:**

The owner of the property did approach Council during 2011 seeking "in principle approval" for residential development on the subject property.

At council's ordinary meeting held on 22 November 2011, Clause 13, council resolved as follows:

*Council does not possess the necessary legislative power in terms of any planning legislation applicable, to provide "in principle approval" as requested by the applicant. However the applicant has the following options:*

*(a) the applicant submit a submission to be considered as part of the Griffith Local Environmental Plan review addressing the following issues;*

- *Demand and supply issues*
- *Fragmentation*
- *Justification for non compliance with the Land Use Strategy*
- *Flooding issues*

*(b) the applicant submit, make a request to submit an application for a spot rezoning accompanied by all prescribed documentation, and that the applicant should note that both (a) and (b) are subject to applicable assessment procedures.*

It is proposed that the owner makes a submission as part of the Griffith Local Environmental Plan process addressing the above-mentioned issues as determined by the above-mentioned council resolution. Application for a spot rezoning is not an option at this point in time considering the upcoming Griffith Local Environmental Plan review process.

**Submission No: 21 (Attachment 2 Map 21)**

**Lot No:** Various (Lots fronting the western side of Beelbanger Road between Clifton Boulevard and Calabria Road)

**Owner:** Various (Submission made by Planning Matters on behalf of the land owners)

**Submission Request:**

That council considers including lots fronting the western side of Beelbangera Road between Clifton Boulevard and Calabria Road as a potential "candidate site" for rural residential development in the final version of the Griffith Land Use Study 2012.

**Strategic Response:**

Part C of the Land Use Strategy addresses supply and demand of Rural Residential land. The analyses indicated that only 32.4% of all land already zoned for purposes of Rural Residential development has been developed which suggests an over supply.

In addition to the over supply of Rural Residential lots within Griffith City Council, there are other reasons to consider before creating additional further rural residential areas. The provision and long term maintenance of infrastructure and services required for dispersed Rural Residential development is less economically viable compared to urban residential development. These services include water and sewer, road infrastructure, public transportation (school bus etc.), and community facilities and open space (parks):

The specific area referred to is also flood effected which effects its potential for further residential densification. The area could be investigated for small holding purposes and act as a buffer between Collina and large scale horticulture operations. Within a potential future small holdings zone and through the provisions of the minimum lot size maps of the future Local Environmental Plan smaller lot sizes could be permitted This option would be further investigated as part of the Local Environmental Plan amendment process.

It is proposed that Planning Matters be informed to make a submission as part of the Griffith Local Environmental Plan review process. It is further proposed that the whole area including the lots north of Calabria Road be included as part of the investigation.

**Submission No: 22 (Attachment 2 Map 22)**

**Lot No:** Various

**Owner:** Various (General comments from Dept. Roads and Maritime Services)

**Submission Request:**

- a) For areas with potential for subdivision, Roads & Maritime Services encourage preparation of a structure plan in order to provide effective service and access linkage with existing development and to avoid ad-hoc development.
- b) Consideration of anticipated traffic impacts and required treatment of the intersection of Rifle Range Road with Rankins Springs Road and associated funding should be undertaken prior to release of Candidate Site 1 for development.
- c) Intersection treatment related to the development of Candidate Site 3 at Hanwood should also consider existing undeveloped land as a sum of the total development.
- d) Access to Candidate Site 4 at Yenda is preferred to be off Dredge Street.
- e) Any future development of the proposed new Industrial Area (Candidate Site 5) which would consider access to the classified road network would be dependent on a merit assessment of the proposed development to be considered at that stage.
- f) The Roads & Maritime Services supports the proposed by-pass as part of the future road network subject to the required treatment at all intersections concerned. The Roads & Maritime Services also indicated that they would not fund any part of such process and that funding should be obtained prior to the release of any land related to such a project.
- g) An access and parking management strategy should be investigated to provide for a coordinated interaction with Kidman Way prior to the release of the subject area for development.

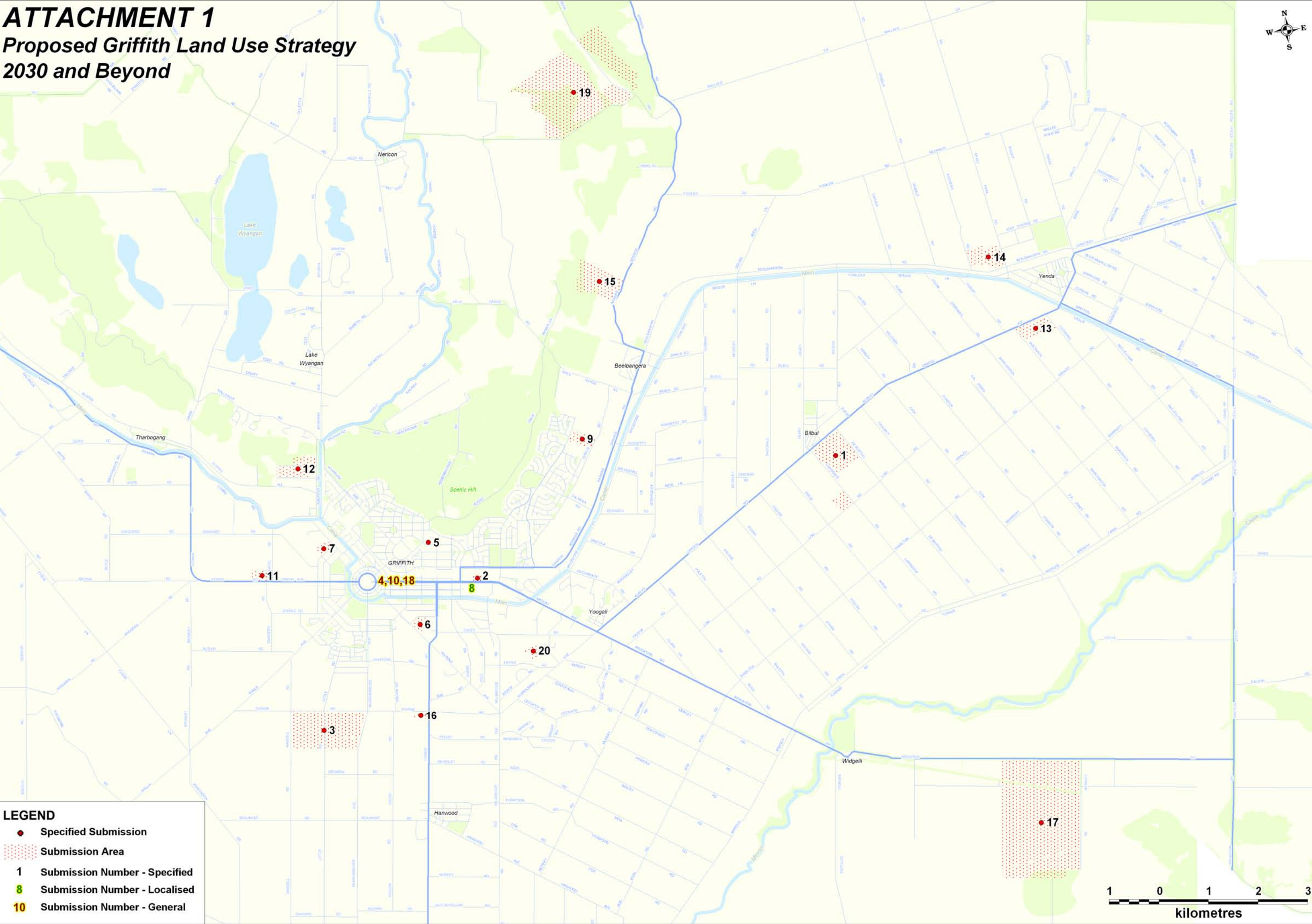
**Strategic Response:**

- a) Development Applications related to potential release areas will be accompanied by a Master Plan to ensure effective service and access linkage with existing development and to avoid ad-hoc development.
- b) Council's engineering design team indicated that a preliminary design has already been done. Funding of the intersection upgrade
- c) Any intersection treatment would consider the total sum of the additional development it needs to serve.
- d) This will make a development within this precinct unfeasible. Other alternatives do exist such as access from the existing road infrastructure subject to speed zone alterations and intersection treatment. The alternatives were discussed with Roads & Maritime Services who indicated that although a bridge over the canal would be the preferable option other alternatives is not ruled out.
- e) This is noted as normal procedure.
- f) Noted as normal procedure.
- g) Such a study would be done if and when council has more clarity on the type and scale of possible development in this proposed corridor.

# ATTACHMENT 1

## Proposed Griffith Land Use Strategy

### 2030 and Beyond





# ATTACHMENT 2

Submission No.1

Lot 1 DP 1024102





# ATTACHMENT 2

Submission No.2

Lot 2 DP 1157308 and

Lots 1 & 2 DP 1063362



Banna

Avenue

50 0 50 100  
metres



# ATTACHMENT 2

Submission No.3

Lots 886 & 887 DP 751709





# ATTACHMENT 2

Submissions No.4, 10 & 18  
Various





# ATTACHMENT 2

Submission No.5

Lot 8 Sec 64 DP 758476

BOONAH STREET

CARRATHOOL

STREET

25 0 25 50

metres





# ATTACHMENT 2

Submission No.6  
Lot 2204 DP 723186





# ATTACHMENT 2

Submission No.7  
Lot 1791 DP 41291





# ATTACHMENT 2

Submission No.8

Various - Extension of Yambil St





# ATTACHMENT 2

Submission No.9  
Lot 593 DP 751743 and  
Lot 1 DP 327055





# ATTACHMENT 2

Submission No.11

Lot 861 DP 751709





# ATTACHMENT 2

Submission No.12

Lots 1 DP 627584, 14 & 15 DP 751743,  
953-956 & 1424 DP 751709





# ATTACHMENT 2

Submission No.13

Lot 230 DP 751728



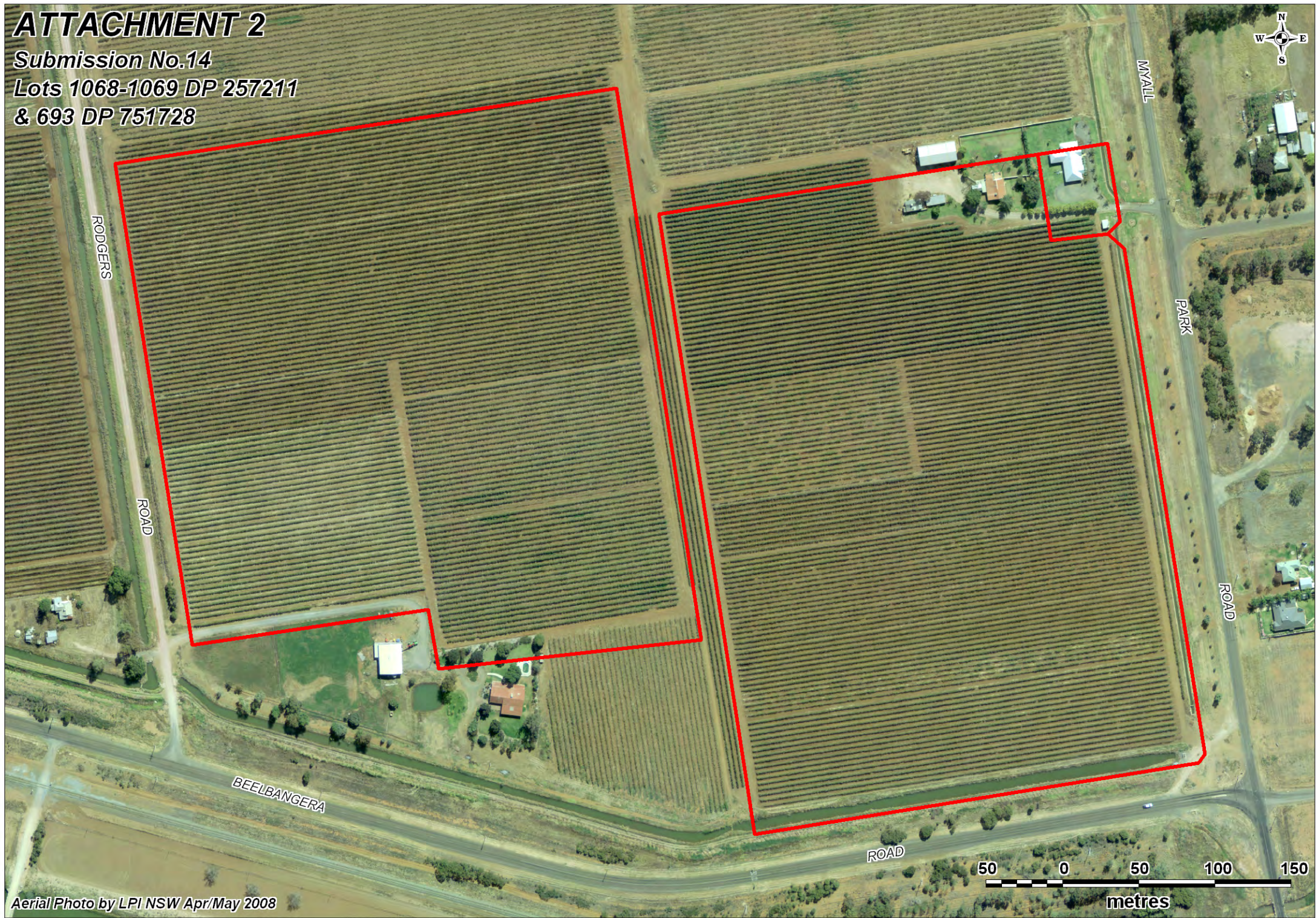


# ATTACHMENT 2

Submission No.14

Lots 1068-1069 DP 257211

& 693 DP 751728



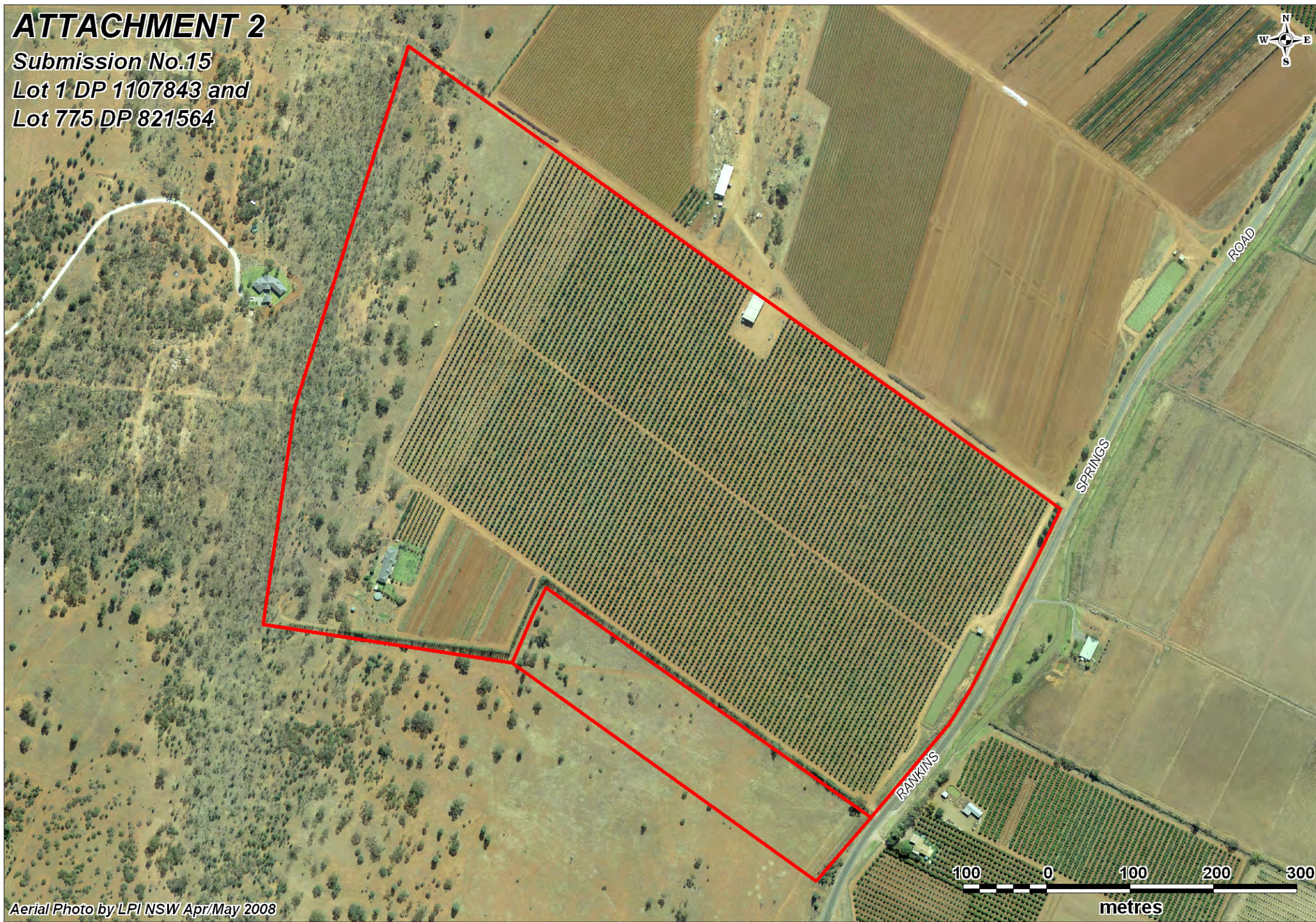


# ATTACHMENT 2

Submission No.15

Lot 1 DP 1107843 and

Lot 775 DP 821564





# ATTACHMENT 2

Submission No.16

Lot 2 DP 1030697





# ATTACHMENT 2

Submission No.17

Lot 3 DP 14591





# ATTACHMENT 2

Submission No.19

Lot 14 DP 1022235

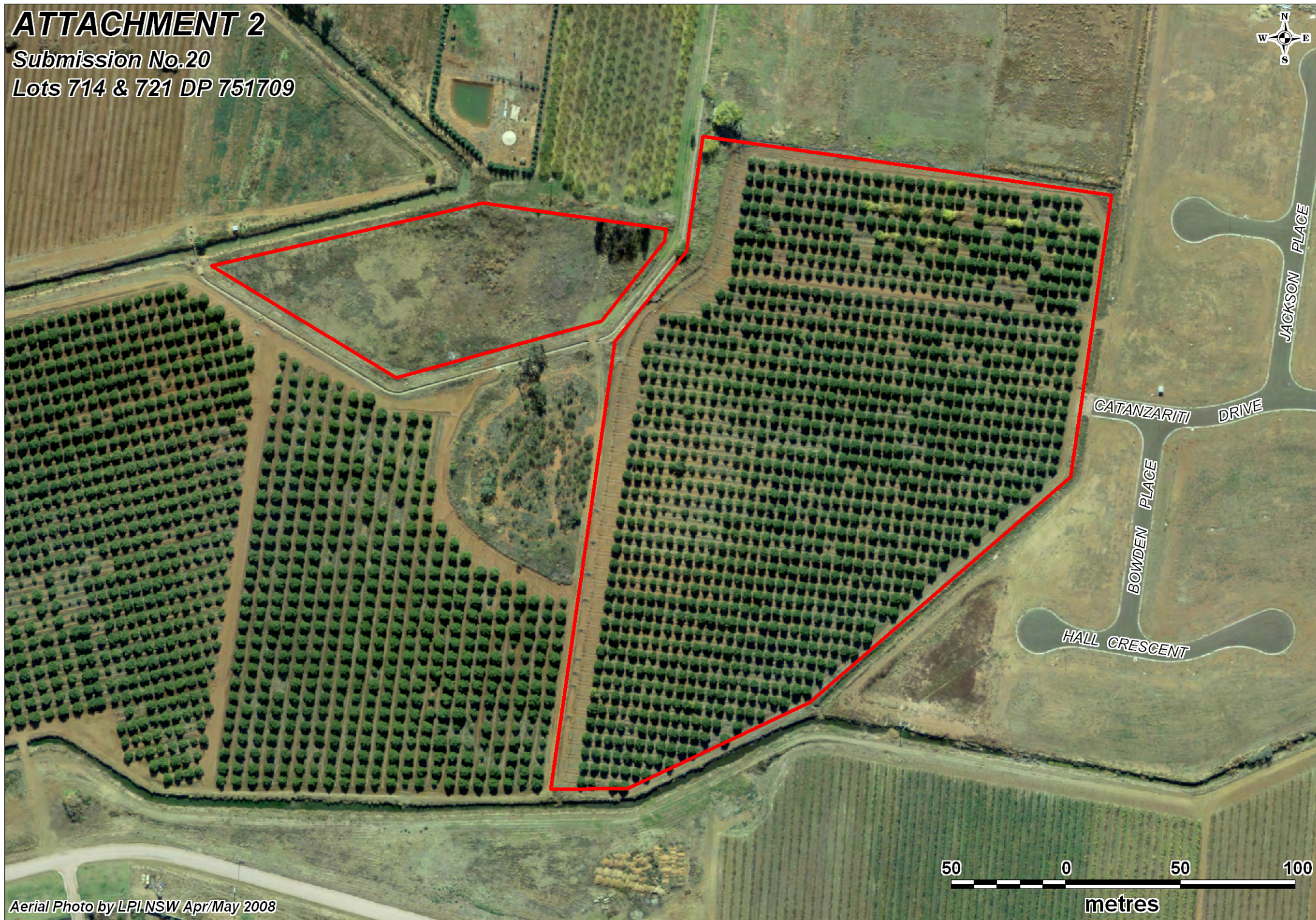




# ATTACHMENT 2

Submission No.20

Lots 714 & 721 DP 751709





# ATTACHMENT 2

Submission No.21

Various - Rankins Springs Rd





# ATTACHMENT 2

Submission No.22b

Intersection of Rifle Range  
& Rankins Springs Roads





# ATTACHMENT 2

Submission No.22d

Candidate Site 4 (LUS)

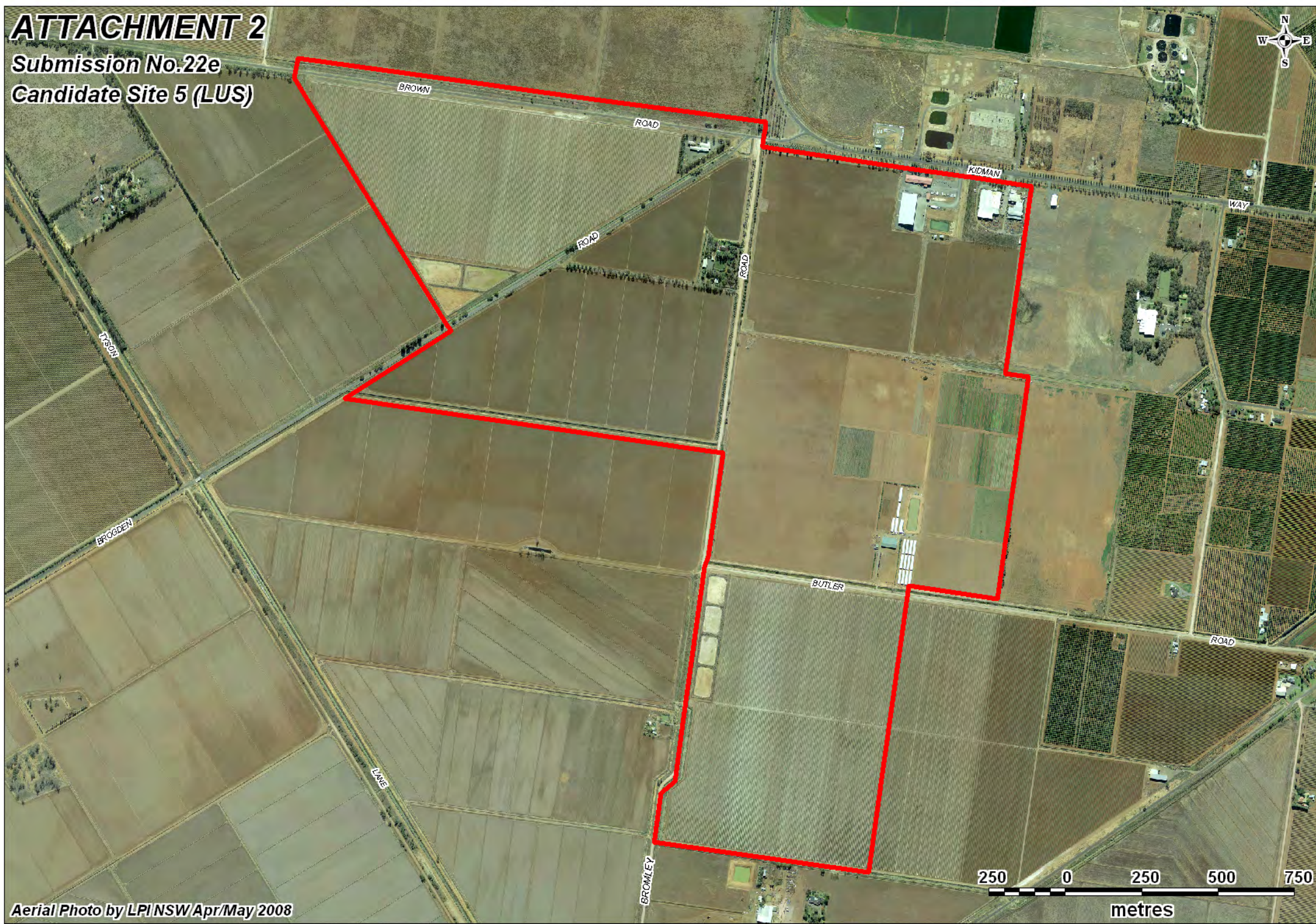




# ATTACHMENT 2

Submission No.22e

Candidate Site 5 (LUS)







## Annexure 6

# Comments: State Agencies & Neighbouring Council's

Prepared by City Strategy and Development Group as an Annexure to the GCC Land Use Strategy 2012



## STATE AGENCIE'S AND NEIGHBOURING COUNCIL'S INPUT

Prior to the arrangement of Planning Focus meetings with the State Agencies and neighbouring council's Department of Planning provided a list of State Agencies to be invited. Apart from the input received at the Planning Focus meeting Council also received written responses from Agencies who did not attend the Planning Focus meeting:

The following Agencies and Council responded and attended the Planning Focus meetings held on 29 March 2012 and 17 April 2012. Awareness making included frequent reminders and a second alternative date.

- Murrumbidgee Catchment Management Authority
- Department of Primary Industries – Catchment and Lands
- Roads and Maritime Services
- Leeton Shire Council
- NSW Rural Fire Services
- Department of Environment and Heritage
- Civil Aviation Authority
- Murrumbidgee Local Health District
- Transport for NSW

### **Summary of Input Received**

<b>State Agencies and Neighbouring Council's</b>	<b>Input Received</b>	<b>Action Taken</b>
Murrumbidgee Catchment Management Authority	<ul style="list-style-type: none"> <li>-Remnant vegetation to remain within Protected zones.</li> <li>-Pay attention to the correct zoning of Mirool Creek.</li> </ul>	<ul style="list-style-type: none"> <li>- The Biodiversity Map has been refined to include these detailed areas.</li> <li>- Appropriate zone allocated as part of the LEP zoning profile.</li> </ul>
Department of Primary Industries – Catchment and Lands	<ul style="list-style-type: none"> <li>- Crown Land north of Rifle Range road RU2 zoning may impede on land value</li> <li>-Mentioned possible relocation of shooting range to Rankin Springs</li> </ul>	<ul style="list-style-type: none"> <li>- Noted, DPI to submit submission as part of the LEP process</li> <li>- Noted</li> </ul>
Roads and Maritime Services	<ul style="list-style-type: none"> <li>- Council to consider long time funding for intersection at Rifle Range &amp; Beelgara Road</li> <li>- Development of Candidate site 4 should at least include two dedicated access points</li> </ul>	<ul style="list-style-type: none"> <li>- Noted</li> <li>- Noted</li> </ul>

NSW Rural Fire Services	<ul style="list-style-type: none"> <li>- All planning proposals to consider Sec. 117(2) of the EP&amp;A Act</li> <li>- Bush fire prone land maps to be updated every 5 years. Current plan to be updated.</li> <li>- <i>"Farm Stay Accommodation and Home Day Care"</i> situated on bushfire prone land will require Bush Fire Safety Authority from NSW RFS</li> <li>- Australian Standard AS 3959-2009 <i>"Construction of Buildings in Bush Fire Prone land"</i> includes grasslands as hazardous vegetation</li> <li>- Adequate access, water and utilities to lots should be ensured at all times to enable evacuation and other procedures.</li> </ul>	<ul style="list-style-type: none"> <li>- Noted</li> <li>-Noted</li> <li>-Noted</li> <li>-Noted</li> <li>- Noted</li> </ul>
Department of Environment and Heritage	<ul style="list-style-type: none"> <li>-Need for development standards in existing developed areas within flood effected areas</li> <li>- Dept will assist with any flood mitigation measures if needed.</li> <li>-Biodiversity Map to be updated with more detail information</li> <li>-Concern regarding spray drift and noise as land interface problems.</li> <li>- Advised that candidate sites do not raise red flags.</li> </ul>	<ul style="list-style-type: none"> <li>- Griffith Flood Management Plan and related Development Control Plan will set applicable standards. Further development in these areas are not supported.</li> <li>- Noted (Several flood mitigation measures have already been identified by GCC)</li> <li>-Map has been updated in consultation with the Dept.</li> <li>- Noted, to be addressed in Council's new Development Control Plan.</li> <li>- Noted</li> </ul>
Leeton Shire Council	<ul style="list-style-type: none"> <li>-Took part in general discussion, no issues raised</li> </ul>	<ul style="list-style-type: none"> <li>- None</li> </ul>
Civil Aviation Authority	<ul style="list-style-type: none"> <li>-The 1995 Obstacle Limitation Surface drawing is out dated</li> </ul>	<ul style="list-style-type: none"> <li>- The 1995 OLS drawings has been replaced by the 2007 OLS drawings in .</li> </ul>
Murrumbidgee Local Health	<ul style="list-style-type: none"> <li>- Provided positive input</li> </ul>	<ul style="list-style-type: none"> <li>- To be considered as part of the LEP</li> </ul>

District	related to the LEP	Process
Transport for NSW	Provided positive input related to the study and encouraged the re-location of the Griffith Freight Terminal to the proposed new position.	- Noted