PLANNING PROPOSAL



Planning Proposal – Minimum Lot Size Amendment Butterbush Road, Lake Albert, NSW 2650

Lot 2 DP1046774







Prepared for J Duke Rev 2.0 - Dec 2017



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The following planning proposal is to be read in conjunction with the attached supporting reports and maps. It has been prepared in respect to the subject land identified in the figure below. Discussions have occurred with Council over the past 9 years including submissions to the draft LEP2010 and draft Spatial Plan 2013. In addition, several meetings have been held with Council representatives in relation to varying the minimum lot size provision over the land.



Figure 1: Subject Land (Source: Six Maps 2017)

1 OBJECTIVES

The objectives of this planning proposal are:

- To amendment the minimum lot size provision that applies to the subject land from 8 hectares to 4 hectares;
- To optimise the management and use of the land to create further choice and opportunities for development of the land for future residents of the City;
- To ensure development is consistent with the principles of ecologically sustainable development and the management of climate change;
- To create opportunities for development that sustain the natural attributes of the local area, avoids or minimises impacts on environmental values and protects environmentally sensitive areas; and
- To enable the development of land that is adequately serviced by public infrastructure and connected to essential community resources and support networks.

The above objectives are consistent with the aims of the Wagga Wagga Local Environmental Plan 2010 and will support the objectives of Zone RU4 Primary Production Small Lots, being:

- To enable sustainable primary industry and other compatible land uses.
- To encourage and promote diversity and employment opportunities in relation to primary industry enterprises, particularly those that require smaller lots or that are more intensive in nature.

• To minimise conflict between land uses within this zone and land uses within adjoining zones.

The objectives are also consistent with the objects of the Environmental Planning and Assessment Act 1979 including those that encourage:

- The proper management, development and conservation of natural and artificial resources;
- The promotion of social and economic welfare of the community and a better environment;
- The coordination of orderly and economic use and development of land;
- The provision and coordination of communication and utility services; and
- The protection of the environment.

2 EXPLANATION OF PROVISIONS

The proposed outcome of this planning proposal will be achieved by amending the minimum lot size provision that applies to the subject land from 8 hectares to 4 hectares. This will involve preparing an amendment to Wagga Wagga Local Environmental Plan 2010 - Map LSZ_004G. The proposed Minimum Lot Size map changes are shown below.

There are no other amendments required to the LEP2010 to progress this Planning Proposal. The existing RU4 zoning will remain unaltered.



Figure 2: Existing Minimum Lot Size map extract (Source: WWCC GIS 2017)



Figure 3: Proposed Minimum Lot Size amendment (Source: SP/WWCC GIS 2017)

3 JUSTIFICATION

Justification for the proposal, including its strategic relevance, is outlined in the sections below. The planning proposal seeks to reduce the minimum lot size currently applicable to the subject land in order to be consistent with the subdivision pattern and character of development along Butterbush Road, and to optimise the use of the land.

There is a limited stock of available land to develop at this density under the RU4 zone, particularly as there have been no significant rezonings of this type of land since the implementation of LEP2010. A supply-demand analysis has indicated a significant shortfall of appropriately zoned and serviced rural "lifestyle" lots to meet ongoing demand and choice.

3.1 Need for the planning proposal

3.1.1 Is the planning proposal a result of any strategic study or report?

The planning proposal is not the result of a specific strategy study or report. However, it is consistent with other relevant strategy studies and reports, as outlined further below and discussed in greater detail in *Attachment 1: Strategic Environmental Analysis Report*.

The land was historically used for cropping and grazing agricultural production. However, due to expansion of the city's rural residential land use and urban infrastructure, fragmentation of the land has occurred over time. Earlier city-wide land use studies, including the Wagga Wagga Local Environmental Study 2008, noted the need for further serviced residential land to accommodate population growth and to provide lifestyle/housing choice, taking into account interface issues with rural land and the presence of adequate urban infrastructure.

The subject land is not used for prime agricultural production and has limited potential to be utilised for prime agricultural purposes in the future due to the fragmented nature of surrounding rural residential land and potential conflicting land use activities.

3.1.2 Is the planning proposal the best means of achieving the objectives or intended outcomes, or is there a better way?

The planning proposal is considered to be the best means to achieve the objectives and intended outcomes for the subject land. There is no zoning change proposed as the scale and density of the proposed minimum lot size change is consistent with the objectives of the existing RU4 zoning that applies to the land.

It is considered that the amenity of the area is currently appropriately zoned as RU4, given the transitional nature of the site from the existing R5 land to the west and the RU1 land to the south and east of the site.

Subdivision of the subject land at the current minimum lot size was analysed, however, it was concluded that subdivision under the current LEP provisions would be an inefficient use of land and resources, given the anticipated growth of the city and the supply and demand for lots of the type. In addition, the minimum lot size proposed for the subject land is consistent with the emerging subdivision pattern of the area. The planning proposal is not proposing a precinct wide change to the minimum lot size provisions as there is little benefit for adjoining allotments to be included, considering allotments along Butterbush Road are already approximately 4 hectare in size, or have site constraints that would make further subdivision difficult.

3.2 Relationship to strategic planning framework

3.2.1 Is the planning proposal consistent with the objectives and actions of the applicable regional, sub-regional or district plan or strategy (including any exhibited draft plans or strategies)?

The proposal is consistent with the directions of relevant plans, including the *NSW State Plan, Premiers Priorities and Riverina Murray Regional Plan 2036* (see further discussion and detail in Attachment 1).

With the Riverina Murray Regional Plan 2036, relevant goals include:

- Direction 1: Protect the region's diverse and productive agricultural land Action 1.2, protect important agricultural land identified in the regional agricultural development strategy from land use conflict and fragmentation, and manage the interface between important agricultural lands and other land uses.
- Direction 22: Promote the growth of regional cities and local centres increase the supply of housing
- Direction 25: Build housing capacity to meet demand single detached dwellings, with some larger residential lots and rural lifestyle options. As the population grows and changes, there will be demand for new housing and a greater variety of housing. Making more housing available in existing urban areas will be more sustainable because it takes advantage of existing infrastructure and services.
- Direction 26: Provide greater housing choice
- Direction 27: Manage rural residential development identify suitable locations for new rural residential development, to avoid fragmentation of productive agricultural land, potential impacts on high environmental value assets, cultural and heritage assets or areas with important rural landscape values. Rural residential development should not increase pressures on infrastructure and services and should be located on land free from natural hazards.

Of particular note are Direction 1 and Direction 27. The subject land supports these directions by:

- Protecting existing prime agricultural by focusing on land that has been previously fragmented and not part of active prime agricultural production.
- Being located within an existing urban settlement area with access to existing infrastructure and services including roads, water, electricity, communications, waste, social and community.
- Avoids landuse conflicts with productive agricultural land uses by being located adjoining other rural residential land of sufficient size to sustain small lot primary production.
- Does not impact upon areas of high environmental value and cultural heritage significance.

In relation to Wagga Wagga City in general, the regional plan notes as a priority to increase the range of housing options within the existing urban area. The subject land is located within the existing urban area.

3.2.2 Is the planning proposal consistent with a council's local strategy or other local strategic plan?

<u>Spatial Plan 2013-2043</u>

The planning proposal is consistent with the *Wagga Wagga Spatial Plan 2013-2043*, meeting the key components and initiatives outlined under 'Resilient and Sustainable Built Environments' and 'Plan for a Growing Community'. The proposal satisfies the objective of 'a variety of housing options to achieve housing choice and affordability' under this plan, addressing the accommodation of anticipated population growth. The housing options

provided by the proposal include large lots capable of supporting a rural lifestyle and small scale agricultural activities.

The subject land was also the subject of a number of submissions to the Spatial Plan, detailing the capacity of the land to support a smaller lot size, including 1ha and 4ha lots. The land was identified on prior plans, including the 2008 Spatial Plan, as being an option for future residential land use.

Draft Activation Strategy 2040

The proposal has been discussed with Council's strategic planning staff and measured against the Draft Activation Strategy 2040 for Wagga Wagga.

The Draft Activation Strategy 2040 has been prepared by Council to aid and direct the future growth of the city. It provides a blue print to cater for a growing economy and population. The Draft Strategy has been referenced during the preparation of this planning proposal to ensure it has strategic merit when measured against the relevant intentions and objectives of the strategy.

The subject land is located within the "Urban Containment Line" as indicated within the Draft Strategy, satisfying the overall objective of Planning Sustainable Growth. It is also located within the Lake Albert, Tatton Precinct as identified in the Draft Strategy (see figure below).

The strategic statement for the Lake Albert, Tatton Precinct has been defined as providing "a mixture of low density and rural lifestyle housing. The Lake will continue to be a popular recreation area. The precinct will continue to be an attractive area and will benefit from:

- A small amount of additional rural lifestyle lots that maintain and preserve the rural lifestyle character
- Improvements to connectivity and playgrounds
- Better use of Lake Albert to provide commercial opportunities
- Promotion of Lake Albert
- Green street planting
- Small scale development
- Improving corridors and connectivity
- Development of Rawlings Park as a major regional event facility for soccer
- Street tree planting
- Additional water stations

The local area has the following key characteristics as identified in the draft Strategy:

- Primary and secondary schools
- Childcare centre, playgroup and preschool
- Local shopping centre
- Sewerage treatment plant
- Low density housing
- Rural lifestyle lots
- Seniors living
- Golf course and club
- Boat club
- Medical centre
- Aged care facilities
- Lake and boat ramps
- Walking track and fitness equipment
- Cemetery
- Sports ovals and playgrounds
- Dog park
- Scout hall
- Wiradjuri Walking Track and Willans Hill reserve
- Vegetated boulevard

The development of the subject land in accordance with the objectives of this planning proposal will assist in achieving the identified outcomes of the draft strategy. The proposal has strategic merit and is consistent with the intent of efficiently utilising available, serviceable land and avoiding further expansion of the urban footprint of the City. The proposal will facilitate a small amount of additional rural lifestyle lots that will complement the existing character of the area.



Figure 4: Lake Albert, Tatton Precinct Mapping (Source: Draft Activation Strategy 2017)

It is considered that the planning proposal is consistent with Council's strategic landuse direction as indicated the Draft Strategy.

The key strategic element that this proposal addresses is the contribution to housing supply required to accommodate future growth, whilst utilising land that currently has access to essential services. The Draft Activation Strategy also encourages diversity in housing types and the preservation of rural lifestyle values through the development of land that is considered to have minimal impact on high value environmental areas and significant rural areas, which is supported by this planning proposal. The proposal will facilitate, in a more efficient manner, small scale primary production and rural activities to be conducted on the land, potentially supporting the local boutique produce market and associated rural lifestyles.

3.2.3 Is the planning proposal consistent with the applicable State Environmental Planning Policies?

The proposal is consistent with applicable State Environmental Planning Policies (SEPPs), as identified in the table below.

Table 1: Appli	cable SEPPs	
SEPPs Applic	able to the Planning Proposal	
SEPP Title	Applicability	Consistency
SEPP55 – Remediation of Land	6) Contamination and remediation to be considered in zoning or rezoning proposal	The subject land is identified as having agricultural uses conducted in the past. This landuse is a purpose specified in Table 1 of the Contaminated Land Planning guidelines. It is considered that the potential for contamination of the subject land to be low, given the past landuse for general cropping

Table 1: Applicable SEPPs

	The following classes of land are	and grazing activities. There are no storage
	identified for the purposes of this clause: (a) land that is within an investigation area, (b) land on which development for a	facilities or other contaminating activities known to have occurred on the subject land. There is no evidence to suggest that the site was used for anything other than grazing and cropping.
	purpose referred to in Table 1 to the contaminated land planning guidelines is being, or is known to have been, carried out, (c) to the extent to which it is proposed to carry out development on it for	It is considered that the potential for impact from contamination to be low, given that a rural residential/small lot primary production type subdivision is to be proposed.
	residential, educational, recreational or child care purposes, or for the purposes of a hospital—land: (i) in relation to which there is no knowledge (or incomplete knowledge) as to whether development for a	
	purpose referred to in Table 1 to the contaminated land planning guidelines has been carried out, and (ii) on which it would have been lawful to carry out such development during	
	any period in respect of which there is no knowledge (or incomplete knowledge).	
SEPP Rural Lands	 7 Rural Planning Principles The Rural Planning Principles are as follows: (a) the promotion and protection of opportunities for current and potential productive and sustainable economic activities in rural areas, (b) recognition of the importance of rural lands and agriculture and the changing nature of agriculture and of trends, demands and issues in agriculture in the area, region or State, (c) recognition of the Significance of rural land uses to the State and rural communities, including the social and economic benefits of rural lands, to balance the social, economic and environmental interests of the community, (e) the identification and protection of native vegetation, the importance of water resources and avoiding constrained land, (f) the provision of opportunities for rural lifestyle, settlement and housing that contribute to the social and economic welfare of rural communities, (g) the consideration of impacts on services and infrastructure and appropriate location when providing for rural housing, 	 a) The proposal will promote and protect opportunities for productive and sustainable economic activities in rural areas through the introduction of additional small primary production lots suitable for the area. b, c) The proposal recognises the importance and significance of rural lands to the State and the local rural community and the proposal seeks to implement changes to enable greater social and economic benefits to small rural holdings in the locality. d) It is considered that the proposal represents a balanced outcome for the community, addressing social, economic and environmental aspects of the local area. e) The site does not contain significant natural resources, especially with regard to biodiversity, native vegetation or water resources. The proposal will not impact on the ability of surrounding rural land to protect these natural resources. f) The proposal represents a significant opportunity to provide a rural lifestyle, settlement and housing option that contributes to the economic welfare of the existing rural community. g) The attached Service Feasibility report makes an assessment of the impacts on servicing and infrastructure, advising that the proposal can be adequately serviced. h) The proposal is consistent with the applicable regional strategy, as discussed above.
	(h) ensuring consistency with any applicable regional strategy of the Department of Planning or any applicable local strategy endorsed by the Director-General.	 a) The proposal minimises the fragmentation of rural lands, utilising an existing portion of land that has previously been zoned RU4. b) The proposal will not generate land use conflicts between rural and residential landuses. The land previously before restriction between and residential landuses.
	8 Rural Subdivision Principles The Rural Subdivision Principles are as follows:	provides a buffer between residential land and rural lands.

3.2.4 Is the planning proposal consistent with applicable Ministerial Directions (s117 directions)?

The following table outlines the relevant s117 directions and the level of consistency of this planning proposal to them.

Table 2: s117 Directions

Ministerial Directi	ons applicable to the developmer	ht line in the second se
Direction title	Direction objectives	Consistency
1.2 Rural Zones	The objective of this direction isto:1) Protectthe agriculturalproduction value of rural land	The proposal is inconsistent with the objectives outlined within Directive 1.2. The planning proposal contains provisions that will increase the permissible density of land within a rural zone.
	A planning proposal must: (a) not rezone land from a rural zone to a residential, business, industrial, village or tourist zone. (b) not contain provisions that will increase the permissible density of land within a rural zone (other than land within an existing town or village).	It is considered that the inconsistency is of minor significance given that the surrounding subdivision pattern and existing character is consistent with the proposal. The inconsistency has also been justified by the content of this report.
1.5 Rural Lands	The objectives of this direction are to: (a) protect the agricultural production value of rural land, (b) facilitate the orderly and economic development of rural lands for rural and related purposes.	Consistent, the proposal is consistent with the Rural Planning Principles and the Rural Subdivision Principles as listed in the SEPP (Rural Lands) 2008. The consistency of the proposal with these principles has been outlined in the section above.
	This direction applies when: (a) a relevant planning authority prepares a planning proposal that will affect land within an existing or proposed rural or environment protection zone (including the alteration of any existing rural or environment protection zone boundary) or (b) a relevant planning authority prepares a planning proposal that changes the existing minimum lot size on land within a rural or environment protection zone.	
	<i>A planning proposal to which clauses 3(a) or 3(b) apply must be consistent with the Rural Planning Principles listed in State</i>	

	Environmental Planning Policy (Rural Lands) 2008.	
	A planning proposal to which clause 3(b) applies must be consistent with the Rural Subdivision Principles listed in State Environmental Planning Policy (Pural Lands) 2008	
2.1 Environmental Protection Zones	Policy (Rural Lands) 2008. The objective of this direction is to protect and conserve environmentally sensitive areas.	Consistent, the proposal does not reduce the environmental protection standards that apply to the land.
2.3 Heritage Conservation	The objective of this direction is to conserve items, areas, objects and places of environmental heritage significance and indigenous heritage significance.	Consistent, the proposal does not alter provisions that relate to heritage conservation matters that apply to the land.
2.4 Recreation Vehicle Areas	The objective of this direction is to protect sensitive land or land with significant conservation values from adverse impacts from recreation vehicles.	Consistent, the proposal does not alter provisions applying to the land that relate to the protection of sensitive land or land with significant conservation values from adverse impacts from recreation vehicles.
3.2 Caravan Parks	The objectives of this direction are: (a) to provide for a variety of housing types, and (b) to provide opportunities for caravan parks and manufactured home estates.	Consistent, the proposal does not alter provisions relating to Caravan Parks.
3.3 Home Occupations	The objective of this direction is to encourage the carrying out of low- impact small businesses in dwelling houses.	Consistent, the proposal does not alter provisions relating to Home Occupations.
3.5 Development Near Licensed Aerodromes	The objectives of this direction are: (a) to ensure the effective and safe operation of aerodromes, and (b) to ensure that their operation is not compromised by development that constitutes an obstruction, hazard or potential hazard to aircraft flying in the vicinity, and (c) to ensure development for residential purposes or human occupation, if situated on land within the Australian Noise Exposure Forecast (ANEF) contours of between 20 and 25, incorporates appropriate mitigation measures so that the development is not adversely affected by aircraft noise.	Consistent, the proposal is in relation to land that is of sufficient distance from the existing Wagga Wagga Airport to ensure continued effective and safe operation of the aerodrome. The land is located outside of the ANEF 25 contour and OLS mapping indicates negligible impact on the operation of the aerodrome under current and future scenarios.
5.10 Implemenatation of Regional Plans	The objective of this direction is to give legal effect to the vision, land use strategy, goals, directions and actions contained in Regional Plans.	The proposal is consistent with this direction by ensuring the proposal achieves relevant Goals/Directions of the Riverina Murray Regional Plan 2036.
6.1 Approval and Referral Requirements	The objective of this direction is to ensure that LEP provisions encourage the efficient and appropriate assessment of development.	The proposal is consistent with this direction as it does not introduce any unnecessary provisions to the development assessment process.
6.3 Site Specific Provisions	The objective of this direction is to discourage unnecessarily restrictive site specific planning controls.	The proposal is generally consistent with this direction as it does not propose additional permissible uses other than as exist under the current land zoning, rezone the land or introduce any other development standards in additional to those that are already contained in the LEP.

	The site specific minimum lot size change is a minor inconsistency, as the existing zoning will remain unchanged and the proposal will achieve the objectives of that zone.
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3.3 Environmental, Social and Economic Impact

3.3.1 Is there any likelihood that critical habitat or threatened species, populations or ecological communities, or their habitats, will be adversely affected as a result of the proposal?

No, there are no critical habitat or threatened species, populations or ecological communities, or their habitats located on the site that are likely to be significantly affected as a result of this proposal (see further discussion and detail in Attachment 1).

3.3.2 Are there any other likely environmental effects as a result of the planning proposal and how are they proposed to be managed?

There are no significant environmental effects anticipated as a result of the planning proposal (see further discussion and detail in Attachment 1). The site is not identified as subject to flooding or bushfire hazard.

The subject land is located approximately 5.0km from Wagga Airport. Obstacle limitation (OLS) and noise affectation contours (ANEF) indicate negligible impact to the subject land.

There are no known items or places of European or Aboriginal cultural heritage located within proximity to the subject site.

3.3.3 Has the planning proposal adequately addressed any social and economic effects?

A supply-demand analysis was undertaken to ascertain that creation of additional lots were warranted under current land development conditions (see further discussion and detail in Attachment 1). Available data indicated that progressing the planning proposal will meet a justifiable need for this type of land development and help balance the current land supply/value equation. Development of this land will also contribute positively to the local construction industry through employment and supply of materials. Higher density settlement of area will also make more economic use of valuable resources and services, also contributing to ongoing income generation for local businesses and public agencies.

The proposal will contribute to building community in the local area, building stronger connections with established infrastructure including schools, neighbourhood centres and transportation networks.

3.4 State and Commonwealth Interests

3.4.1 Is there adequate public infrastructure for the planning proposal?

There is adequate public infrastructure to support the outcomes of the planning proposal, as demonstrated in the attached Service Feasibility Report (see Attachment 8). The nature of the development will result in more efficient use of existing infrastructure services currently installed adjacent to and nearby the site. The attached Service Feasibility Report explores the location and capacity of the nearby servicing infrastructure.

Service providers were contacted to comment on future subdivision development generated by this proposal and the works that may be required to facilitate servicing the anticipated number of lots. The report concludes that any future lots would be able to be adequately serviced by existing electricity, water and telecommunications networks.

Some additional works may be required to provide water servicing to lots higher than 240AHD, but minimal to no loss of service level is expected, as confirmed in the Service Feasibility Report. Future subdivision development will need to identify building envelopes

that are below 240m AHD for water servicing, or alternatively, the local water authority is to provide written confirmation of the adequacy of reticulated water services to each lot containing land above 240m AHD. Current Council subdivision development policy requires cerfication from the water authority prior to finalisation of development that adequate water supply has been provided to a newly created allotment.

Future lots are large enough and the soil structure adequate to accommodate onsite effluent disposal systems. Geotechnical information on the soil profile in immediate local area indicates that the operation of onsite effluent disposal systems may be supported, subject to detail design for each site specific system.

Other infrastructure networks and services, including public transport/school bus, roads, waste management/recycling, health, education, emergency, mail and other community services are accessible to the subject site.

3.4.2 What are the views of State and Commonwealth public authorities consulted in accordance with the Gateway determination?

The views of State and Commonwealth public authorities will be sought following the issue of a Gateway determination on this matter.

4 MAPPING

The planning proposal seeks to amend the following map:

• Lot Size Map - LSZ_004G

5 COMMUNITY CONSULTATION DETAILS

Community consultation will be undertaken in accordance with relevant sections of the Act and Regulations. In addition, the Gateway determination will confirm the extent and nature of community consultation to be undertaken for the purposes of this proposal.

6 PROJECT TIMELINE

Following lodgement of the planning proposal, Council will develop a project timeline including Council acceptance, Gateway determination, public exhibition, reporting, Ministerial (or delegated) approval and implementation.

16009: Document History

Revision No.	Date	Authorised By		
		Name/Position	Signature	Notes
Rev 1.0 – Draft	9/10/17	Rohan Johnston Town Planner	R. Johnston	For internal review
Rev 1.3 – Final Draft	17/10/17	Garry Salvestro Director	do.	For preliminary review by WWCC & client
Rev 1.4 – Revised Draft	31/10/17	Garry Salvestro Director	des.	For further review by WWCC & client
Rev 1.5 – Revised Draft	11/12/17	Garry Salvestro Director	des.	For further review by WWCC & client
Rev 2.0 – Final	14/12/17	Garry Salvestro Director	dos.	For lodgement with WWCC.



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ATTACHMENT 1: STRATEGIC ENVIRONMENTAL ANALYSIS REPORT

A strategic environmental analysis has been undertaken in the preparation of this planning proposal to ensure the proposal has strategic merit when measured against State, regional and local plans and strategies.

A1.1 The Subject Land & Locality

The subject land involves Lot 2 DP 1046774, Butterbush Road, Lake Albert. It comprises an area of 76.64 hectares, as shown in the deposited plan extract below.



Figure A1-5: Extract of DP1046774 (Source: WWCC GIS 2017)

The land is located in the south-eastern edge of the current City urban area, approximately 12.7 kilometres by road (or 9.5km direct) southeast of the Wagga Wagga CBD as indicated in the figure below.



Figure A1-6: Location Map (Source: Google Maps 2017)



Figure A1-7: Existing Zoning LEP2010 (Source: WWCC GIS 2017)



Figure A1-8: Existing Minimum Lot Size LEP2010 (Source: WWCC GIS 2017)

The subject land is currently zoned RU4 Primary Production Small Lots, with a Minimum Lot Size provision of 8 hectares under WWLEP2010.

The land is bound by existing rural residential development along Dukes Road (north), Mitchell Road (west), and Butterbush Road (south), as shown in the aerial image below. A crown road exists along the eastern boundary (southern extension to Cummins Road), that provides separation to the rural land to the east. The primary site access is via Butterbush Road.



Figure A1-9: Aerial Locality Map (Source: SIX Maps 2017)

The land is gently sloping, having an elevation of 252 AHD on the southern boundary of the site. The land falls predominantly away from this point to the north, east and west. A topographical composite image of the subject land is provided in Attachment 3, with an extract provided in the figure below.



Figure A1-10: Topographical Map Overlay extract (Source: SIX Maps and XP)

Butterbush Road is a formed and sealed public road that extends to the southern boundary of the subject land. It provides a future access point for continuing rural residential development on the subject land. The surrounding land has a character and amenity typical of a rural living environment in this locality. The image below shows Butterbush Road viewed from the subject land, looking south towards the Gregadoo Hills.



Figure A1-11: View south along Butterbush Road (Source: SP 2017)

The site comprises cleared land, utilised historically for agricultural pursuits of grazing stock and the production of crops during post European settlement.

The figures below are images of the subject land and locality.



Figure A1-12: View north-east (across site) from southern boundary towards Willans Hill (Source:SP 2017)



Figure A1-13: View south-west (across site) from eastern property boundary (Source: SP 2017)

A crown road (extension of Cummins Road and accessed via Dukes Road) forms a separation buffer to agricultural land adjacent to the east. The crown road also potentially provides access for any future development of smaller lot subdivision of rural residential land adjoining the subject site, to the north.



Figure A1-14: View south along eastern property boundary/crown road (Source: SP 2017)

The subject land contains a storage dam, located on the eastern property boundary, and a small storage shed, located on the southern property boundary. These site elements are indicated on the attached Site Analysis Plan (Attachment 2) with extract provided in the figure below.



Figure A1-15: Site Analysis Plan extract (Source: SP 2017)

A1.2 Strategic Overview

A1.2.1 <u>Relevant Strategic Plans</u>

The proposed minimum lot size amendment is consistent with the goals and directions contained in the following State, regional and local strategic planning documents:

NSW State Plan 2021:

Relevant goals include the following extracted from the NSW State Plan 2021.

- Drive economic growth in regional NSW
- Protect our natural environment
- Increase opportunities for people to look after their own neighbourhoods and environments
- Make it easier for people to be involved in their communities

In 2017, the NSW Premier reinforced the delivery of the State Plan by advising on 12 critical priorities including the following relevant areas.

- Making housing more affordable through faster housing approvals and facilitating dwelling capacity through rezoning proposals.
- Building infrastructure through increasing housing supply.

Riverina Murray Regional Plan 2036:

"The Riverina Murray Regional Plan 2036 (the Plan) establishes a framework to grow the region's cities and local centres, supports the protection of high-value environmental assets and makes developing a strong, diverse and competitive economy central to building prosperity and resilience in the region. The Plan will guide the NSW Government's land use priorities and decisions over the next 20 years."

Relevant goals include the following.

- Direction 22: Promote the growth of regional cities and local centres increase the supply of housing
- Direction 25: Build housing capacity to meet demand single detached dwellings, with some larger residential lots and rural lifestyle options. As the population grows and changes, there will be demand for new housing and a greater variety of housing. Making more housing available in existing urban areas will be more sustainable because it takes advantage of existing infrastructure and services.
- Direction 26: Provide greater housing choice
- Direction 27: Manage rural residential development identify suitable locations for new rural residential development, to avoid fragmentation of productive agricultural land, potential impacts on high environmental value assets, cultural and heritage assets or areas with important rural landscape values. Rural residential development should not increase pressures on infrastructure and services and should be located on land free from natural hazards.

Of particular note is Direction 27. The subject land supports this direction by:

- Being located within an existing urban settlement area with access to existing infrastructure and services including roads, water, electricity, communications, waste, social and community.
- Avoids landuse conflicts with productive agricultural land uses by being located adjoining other rural residential land of sufficient size to sustain small lot primary production.
- Does not impact upon areas of high environmental value and cultural heritage significance.

In relation to Wagga Wagga City in general, the regional plan notes as a priority to increase the range of housing options within the existing urban area. The subject land is located within the existing urban area.

Wagga Wagga Community Strategic Plan 2040:

The Community Strategic Plan paints a picture of what the local community want the future to look like. The plan aligns with the NSW Premier's Priorities. In relation to the key strategic direction for the environment, the proposal is consistent with the targeted outcomes of:

- Sustainable urban development by ensuring planned development, considering environmental impacts, ensuring availability of appropriate infrastructure and services and enabling innovation in primary production landuse and lifestyle choices.
- Housing that suits our needs by providing an alternative range of housing choice and living lifestyles.

Draft Activation Strategy 2040:

The Draft Activation Strategy was outlined above in section 3. The proposal is consistent with the draft strategy by:

- Being with the "*urban containment line*" to ensure sustainable growth of the City
- Being consistent with the intent of efficiently utilising available, serviceable land and avoiding further expansion of the urban footprint
- Facilitating a small amount of additional rural lifestyle lots that will complement the existing character of the Lake Albert area.

A1.2.2 Strategic Analysis

In support of the proposal's strategic appropriateness, a series of plans have been prepared to demonstrate the property's connectedness to the surrounding landuse structure, environmental attributes and essential linkages. These plans are included as Attachments 4 - 6. The following figures provide extracts from those plans.



Figure A1-16: Strategic Spatial Analysis Plan extract (Source: SP 2017)



Figure A1-17: Subdivision Pattern Analysis Plan extract (Source: SP 2017)



Figure A1-18: Connections & Links Analysis Plan extract (Source: SP 2017)

Subdivision pattern analysis indicates that the emerging subdivision pattern approved along Butterbush Road has created allotments that would be consistent with a 4 hectare minimum policy. There is little benefit for a precinct wide minimum lot size provision as allotments are already approximately 4 hectares in size, or have site constraints that would make further subdivision difficult.

Based on the strategic analysis plans prepared for this property, the proposal would demonstrate:

- Consistency with the spatial form of this sector of the urban footprint
- Consistency with the subdivision pattern emerging for the surrounding area
- Opportunities to connect with essential linkages including open space, transport, community and infrastructure.

A1.2.3 Landuse Considerations

Population Growth & Residential Landuse Mix:

Wagga Wagga's current population of 65,000 is expected to grow beyond 80,000 by 2036 based on expected growth rates. To accommodate this growth, the City needs to sustainably ensure the creation of at least 300 – 350 dwelling lots per year, including a mix of allotment sizes to cater for lifestyle choices appropriate for a regional centre.

Rural lifestyle lots are a legitimate part of a sustainable residential lifestyle mix. Historic research indicates that an appropriate component of rural lifestyle lots to satisfy legitimate demand would be between 12-15% of residential dwelling lots. This suggests an annual creation of up to 50 vacant serviced lots per year.

Best practice guidelines for rural residential land supply recommend regional centres to aim for at least 10 years supply of appropriately zoned land to meet expected demand.

Supply and Demand Analysis:

RU4 zoned land is provided in three locations across the city, covering 932.6 hectares including land at Brucedale, Byrnes Road/Hillary Street and Mitchell Road/Dukes Road areas, as shown on the attached RU4 Zone Analysis Plan (see Attachment 7). An extract is provided below for reference.



Figure A1-19: RU4 Zone Analysis Plan extract (Source: SP 2017)

The range of lot sizes included in the RU4 zones vary from 2 to 8 hectares. They would generally be included as part of the "*rural lifestyle"* or "*rural* residential" lot description that also includes land zoned R5 – Large Lot Residential and RU2 – Rural Landscape. They cater for a range of living lifestyles from large lot residential to hobby farm and legitimate intensive agricultural production activities.

A survey of the existing RU4 zones indicates that:

- Brucedale has no vacant lots available for development (either dwelling construction or subdivision)
- Byrnes Road/Hillary Street has one (1) vacant 3 hectare lot and another parcel of land comprising 10.57 hectares that would potentially allow 4 additional lots if subdivided.

- Mitchell Road/Dukes Road area has 4 vacant subdivided lots as well as the subject land that would potentially create 9 lots.
- Based on the above, a total of 5 vacant subdivided lots exist together with the potential for an additional 13 lots that may be created under current planning provisions.
- None of the identified vacant land is available for sale.



Figure A1-20: Brucedale – RU4 area (Source: WWCC GIS 2017)



Figure A1-21: Byrnes Road/Hillary Street RU4 area (Source: WWCC GIS 2017)



Figure A1-22: Mitchell Road/Dukes Road RU4 area (Source: WWCC GIS 2017)

In addition to the above, a survey of selected local real estate agents together with an online search was conducted to ascertain the stock of available vacant rural residential/lifestyle lots currently for sale within the Wagga Wagga local urban area. The criteria applied in conducting this survey included:

- Site area from 0.5ha to 8ha
- Vacant land, ready to be developed (construction of a dwelling)

- All essential services available to the site
- Within close proximity to the CBD (less than 10km)

At the time of preparing this report only one (1) parcel of land was on the market. This confirmed that there is a significant shortage of this type of residential/rural lifestyle allotment.

Agents confirmed that demand is continually strong, and with limited supply, any land of this type is generally sold "off the plan" in a very short time period. This is reflected in the price for any lots coming onto the market, with prices increasing significantly over the past few years as supply decreases and no further rezonings occur. A typical "lifestyle" lot is now priced in the \$250,000 - \$350,000 range, depending on size and location.

A review was also made of available historical Council records in relation to rural residential land supply, in particular data from Council's Rural Residential Review 2001, Rural Residential Supply Data 2001 and Rural Residential Landuse Strategy 2002. The zoned areas identified in those documents are similar to the land currently zoned under WWLEP2010, both in respect of spatial extent and density. For the subject land and other RU4 zoned areas the follow figures were extracted and compared with 2017 data.

Area	Subdiv Vacan		Subdiv Lots dwelli	with	Total Subdiv Lots	vided	Potent Lots Unsub	ial - divided	Total I	ots.
	2001	2017	2001	2017	2001	2017	2001	2017	2001	2017
Brucedale 2ha	2	0	10	20	12	20	10	0	22	20
North Wagga/Byrnes Rd 2ha	0	1	38	38	38	39	0	4	38	43
Kyeamba/Mitchell Rd	6	4	66	89	72	93	23	9	95	102
TOTAL ALL AREAS	8	5	114	147	122	152	33	13	155	165

Table A1-3: RU4 Land Supply (zoned areas) – March 2001 v October 2017

(Source: WWCC & SP)

Data from 2001 indicated that approximately 1166 vacant lots were potentially available across all rural living zoned areas, including vacant subdivided lots and potential unsubdivided lots. Of this land bank, approximately 41 lots were available in the current RU4 zones. Today there are 18 potential RU4 lots, including 5 subdivided and 13 unsubdivided, representing 44% of the original potential supply.

As there have not been any additions to these land stocks since this time, the subject proposal is a justified addition to the rural living land-bank available across the city.

Additional supply for these large, rural living lots will also have a positive effect on the housing and land affordability equation across the residential development industry, helping to soften disproportionate price increases in the local housing and real estate market.

A1.3 Environmental Context

A1.3.1 Soil Classification & Agricultural Land Quality

The soil landscape of the subject and surrounding land is identified as *Forest Hill (fh)*, as shown in the figure below. The soil qualities are described as having moderate erosion hazard, and is moderately acid and locally shallow soil. This soil group presents 'slight' limitations for urban development, however suitable for combined dwelling and agricultural activities. It is considered that the subject site is suitable for the proposed

type and scale of development, being for rural lifestyle and primary production small lots.



Figure A1-23: Extract of Soil Map & with site identified (Source: DLWC Landscape Series 8327)

The agricultural suitability of the subject land is predominantly Class 2 as indicated in the figure below.

Class 2 Land is defined by NSW Agriculture (Agfact AC.25, 2002) as:

Arable land suitable for regular cultivation for crops but not suited to continuous cultivation. It has a moderate to high suitability for agriculture but edaphic (soil factors) or environmental constraints reduce the overall level of production and may limit the cropping phase to a rotation with sown pastures.



Figure A1-24: Agricultural Suitability Map (Source: WWCC GIS 2017)

A1.3.2 Flora/Fauna and Threatened Species

The local environment has been significantly modified through historic land clearing practices. The subject land contains very few existing trees. The majority of trees are

located on the property boundaries except for a single species (no understorey) located in the northwest corner of the site.

OEH Mapping indicates there are no threatened species located on or near the subject land (see figure below).



Figure A1-25: Wildlife Atlas Map extract (Source: OEH 2017)

A1.3.3 Environmentally Sensitive Land (LEP2010)

Part 7 of the LEP2010 includes additional local provisions for land identified as being environmentally sensitive. LEP2010 mapping indicates that sensitive areas for biodiversity are contained within the subject land as identified in the figure below.

It is noted that the subject land is located outside of Council's *Biocertification Area* and consideration of potential adverse impacts of this land is required as a result of any future proposal for development. It is considered that the size of the subject land and the proposed minimum lot size will enable any future development to adequately consider and mitigate any potential impacts to environmentally sensitive land.

No removal of native vegetation is proposed to facilitate the planning proposal. The land has been historically cleared for agricultural uses and has been cropped and used for grazing purposes during post European settlement times.



Figure A1-26: Natural Resources Sensitivity Map – Biodiversity (Source: WWCC GIS 2017)

The subject land is partly located within the Lake Albert Catchment area. LEP mapping identifies the land as being partly environmentally sensitive with regard to water and riparian land, as indicated in the figure below.



Figure A1-27: Natural Resources Sensitivity Map - Water (Source: WWCC GIS 2017)

The objectives of this clause are to protect or improve:

- a. water quality within waterways, and
- b. stability of the bed and banks of waterways, and
- c. aquatic and riparian habitats, and
- d. ecological processes within waterways and riparian areas, and
- e. threatened aquatic species, communities, populations and their habitats,
- f. scenic and cultural heritage values of waterways and riparian areas, and
- g. catchment protection to prevent increased sediment loads and stream bank erosion from entering lakes, rivers and waterways.

Any future development will require incorporation of effective measures and incorporate water sensitive design strategies to limit and minimise any potential adverse impacts on groundwater, catchment areas and waterways.

The subject land is not mapped as containing environmentally sensitive land issues such as salinity, as shown in the figure below.



Figure A1-28: Natural Resources Sensitivity Map – Land (Source: WWCC GIS 2017)

The subject land is not mapped as being environmentally sensitive with regard to groundwater in the area, as shown in the figure below.



Figure A1-29: Natural Resources Sensitivity Map – Groundwater (Source: WWCC GIS 2017)

A1.3.4 <u>Natural Hazards</u>

The subject land is not subject to flood inundation, as indicated in the figure below.



Figure A1-30: Flood Mapping (Source: WWCC GIS 2017)

The site is not mapped as being subject to bushfire hazards, as shown in the Council Mapping below.



Figure A1-31: Bushfire Mapping (Source: WWCC GIS 2017)

A1.3.5 Land Contamination

In determining the likelihood of contamination, it is understood that the subject land, being rural, has been historically utilized for grazing and for the production of crops. Also, in discussions with the landowner, it was advised that cattle / sheep dipping or other activities which may impact on the soil environment, have not been carried out on the site. There is no evidence of soil contamination over the site.

The information has been provided on the basis of the long-term management of the land by the current landowner, and the information is provided to the best of his knowledge and expertise.

A1.3.6 <u>Heritage</u>

Council records indicate there are no items of Aboriginal Cultural Heritage sites on the subject land and the land is not located in the vicinity of any other significant Aboriginal Cultural Heritage sites, as shown in the figure below.



Figure A1-32: Aboriginal Heritage Sites (Source: WWCC GIS 2017)

An AHIMS search also confirms the above information, as shown in the figure below.



Figure A1-33: AHIMS Search extract (Source: AHIMS 2017)

Council records indicate there are no post European settlement 'Heritage Items' on the subject land. The figure below indicates the subject land and its proximity to identified heritage items.



Figure A1-34: Listed Heritage Items (Source: WWCC GIS 2017)

A1.3.7 Other Matters – Airport & Flight Path Considerations

The subject site is located approximately five (5) kilometres southwest of the Wagga Wagga airport. Whilst the site is within the general flight path of the airport, the distance and proposed density of development do not pose any potential negative impact on the

operation of the airport. Similarly, impact from the operation of the airport on the subject land would be negligible. OLS and ANEF mapping is shown below.



Figure A1-35: OLS Mapping – Wagga Airport (Source: WWCC GIS 2017)



Figure A1-36: ANEF Contour Mapping – Wagga Airport (Source: WWCC GIS 2017)

The current Wagga Wagga Airport Masterplan provides OLS and ANEF conditions for both existing and envisaged future operations of the airport. The subject land is located immediately southwest of the OLS inner horizontal surface, which has a height datum of 262mAHD existing and 258mAHD future. This is approximately 29 - 33 metres above the AHD level of the eastern boundary of the subject land. It is highly unlikely that any building development on the subject land will have any impact on the OLS limitations of the airport operation, now or in the future.

ANEF contours were modelled on various scenarios for both existing and ultimate capacity operation of the airport. The modelling indicates that the subject site is not negatively impacted by noise from aircraft operation during both existing and future capacity scenarios of the airport.

A1.4 Infrastructure & Essential Services

A servicing strategy has been prepared by Xeros Piccolo Engineers in relation to the provision of sewer/effluent disposal, drainage, water, electricity, gas and communication services to the site (see Attachment 8). In addition, investigations were undertaken in relation to the provision of, or access to, other essential services and network connections to enable development and settlement of the land in accordance with the zone and LEP objectives.

A summary of the servicing arrangements available to the site is provided below. Investigations confirm that public infrastructure and services are available to the site and may be established to adequately service the proposed development in a coordinated manner.

A1.4.1 <u>Roads & Stormwater Drainage</u>

Access to the site will be via Butterbush Road, which is an existing sealed rural road constructed to current Council engineering standards. The road has adequate capacity to accommodate the additional traffic to be potentially generated by the proposed development. The site also fronts an unformed Crown Road. There are no immediate plans to utilise this road reserve for access purposes, however, may be incorporated into an overall road servicing strategy if and when adjoining/adjacent land is rezoned or developed in the future.

Engineering investigations indicate there are no major limitations to the construction of appropriate road and drainage systems to this land. Stormwater drainage will be directed to existing swales, watercourses and dams, with additional on-site detention able to be established within the boundaries of the developable land (see figure below).



Figure A1-37: Potential Detention Dams Locations extract (Source: XP 2017)
A1.4.2 Sewer/Effluent Disposal

The existing Butterbush Road allotments use onsite systems to dispose of domestic effluent. The nearest sewer reticulation line is located near the Gregadoo Road/Mitchell Road intersection. It is not economically feasible to extend the existing sewer network to service the subject land. It is also not essential for land containing 4 hectares to be serviced by reticulated sewer. Existing onsite effluent systems in this locality perform satisfactorily and are an appropriate option for the proposed development site.



Figure A1-38: Existing Sewer Reticulation Network (Source: WWCC/XP 2017)

A1.4.3 <u>Water</u>

Local water supply is provided by Riverina Water County Council. Water supply can be made available to the subject land in accordance with similar arrangements established with the creation of other existing lots in Butterbush Road. This would include the requirement for any properties above 240m AHD to have on-site tanks and pressure pumps.



Figure A1-39: Existing Water Supply Network (Source: RWCC 2017)

A1.4.4 Electricity

There are no major impediments to the supply of electricity to the proposed development area. Essential Energy has advised that the existing reticulation network has adequate capacity to accommodate the proposed additional allotments, subject to usual design and construction procedures.



Figure A1-40: Existing Electricity Supply Network (Source: Essential Energy 2017)

A1.4.5 <u>Gas</u>

The APA group advised that the nearest gas main is located approximately 2.8km from the subject land. Is highly unlikely that reticulated gas supply would be feasible and there are no immediate intentions to extend gas in this area. Bottled gas may be provided if requested by future landowners/occupiers.



Figure A1-41: Existing Gas Reticulation Network (Source: APA/XP 2017)

A1.4.6 <u>Telecommunications</u>

Telstra advised that the existing telecommunications network is located in close proximity to the proposed development site. There are no major impediments to the provision of telecommunication in this area.



Figure A1-42: Telstra Network (Source: Telstra/XP 2017)

A1.4.7 Walkway/Cycleway Network

There are no designated walkways or cycleways within the immediate environs of the subject site. Existing roads are of sufficient width to accommodate cyclist and pedestrians, with low traffic volumes to ensure safe sharing of the existing corridors. The nearest designated walkway/cycleway network is located within the Lake Albert Common area (Pony Club), which connects with other networks including connections to neighbourhood and community facilities at Lake Albert Village.



Figure A1-43: Cycleway Network (Source: WWCC GIS 2017)

A1.4.8 Bus Services

<u>Public:</u> There are no public bus services along Butterbush and Mitchell Roads. The nearest bus stop and connection to the urban bus network system is located at Lake Albert Village.



Figure A1-44: Public Bus Network (Source: BusAbout 2017)

<u>School</u>: Bus-a-bout provide school bus services in the local area including pickup points along Butterbush Road. The proposed development site will have access to those services.

A1.4.9 Waste/Garbage Services

Butterbush Road is serviced weekly by Council's Waste service contractor (SUEZ), including general, recyclable and green waste. The proposed development site will have access to those services, as indicated in the figure below.



Figure A1-45: Garbage Service Areas (Source: WWCC GIS 2017)

A1.4.10 <u>Postal Services</u>

Australia Post provides postal services to the area. The proposed development site will have access to those services.

A1.5 Concept Development Plan

Based on the location attributes and constraints, together with the benefit of existing infrastructure services as outline above, the below concept development plan presents an appropriate response.



Figure A1-46: Concept Development Plan (Source: WWCC GIS 2017)

The concept development plan proposes 19 lots under the amended Minimum Lot Size provision of 4 hectares. All lots would be suitable for the purposes of primary production small lots, and their use would meet the objectives of the RU4 zone.

ATTACHMENT 2: SITE ANALYSIS PLAN









ATTACHMENT 2:

SITE ANALYSIS PLAN

J & J Duke Lot 2, DP1046774 Butterbush Road, Gregadoo

Reference 16009 Scale 1:6500 (A3), 1:9000 (A4) Site Area: 76.64ha

Rev	Date	Initials - Comment
А	29/9/17	RJ – For Review
В	5/10/17	RJ – For PP

- Notes: 1 All dimensions in metres 2 All dimensions subject to survey 3 Refer to Planning Proposal for further details 4 Photo credit: SP 5/10/17









ATTACHMENT 3: TOPOGRAPHIC PLAN



ATTACHMENT 3:

TOPOGRAPHIC PLAN

J & J Duke Lot 2, DP1046774 Butterbush Road, Gregadoo

Reference 16009 Scale 1:6000 (A3), 1:8500 (A4) Site Area: 76.64ha

Rev	Date	Initials - Comment
А	30/9/17	RJ – For Review
В	6/10/17	RJ – For PP

Notes:

- 1 All dimensions in metres
 2 All dimensions subject to survey
 3 Refer to Planning Proposal for further details
 4 AHD Contours shown at 1m

- intervals



ATTACHMENT 4: STRATEGIC SPATIAL ANALYSIS PLAN





ATTACHMENT 4:

Strategic Spatial Analysis Plan

J & J Duke Lot 2, DP1046774 Butterbush Road, Gregadoo

Reference 16009 Scale 1:40,000 (A3), 1:55,000 (A4) Site Area: 76.64ha

Rev	Date	Initials - Comment
А	6/10/17	RJ – For PP

Notes:

- All dimensions in metres
 All dimensions subject to survey
 Refer to Planning Proposal for further details





1km

0km

2km

ATTACHMENT 5: SUBDIVISION PATTERN ANALYSIS PLAN



ATTACHMENT 5:

Subdivision Pattern Analysis Plan

J & J Duke Lot 2, DP1046774 Butterbush Road, Gregadoo

Reference: 16009 Scale 1:15,000 (A3), 1:20,000 (A4) Site Area: 76.64ha

Rev	Date	Initials - Comment
А	29/9/17	RJ – For PP

Notes:

- All dimensions in metres
 All dimensions subject to survey
 Refer to Planning Proposal for further details







ATTACHMENT 6: CONNECTIONS & LINKS ANALYSIS PLAN







Connections and Links Analysis Plan

J & J Duke Lot 2, DP1046774 Butterbush Road, Gregadoo

Reference 16009 Scale 1:40,000 (A3), 1:55,000 (A4) Site Area: 76.64ha

Rev	Date	Initials - Comment
А	6/10/17	RJ – For PP

- Notes: 1 All distances from Subject Land
- 2 All dimensions subject to survey3 Refer to Planning Proposal for
- further details

.....



Legend

Main Connection Route

Secondary Connection Route

Alternative **Connection Route**

Open Space & Pedestrian Links

Activity Hub/Node

0km 1km











ATTACHMENT 7: RU4 LAND SUPPLY PLAN



ATTACHMENT 7:

RU4 Land Supply Plan

J & J Duke Lot 2, DP1046774 Butterbush Road, Gregadoo

Reference: 16009 Scale 1:150,000 (A3), 1:200,000 (A4)

Rev	Date	Initials - Comment
А	29/9/17	RJ – For PP

Notes:

- All dimensions in metres
 All dimensions subject to survey
- 3 Refer to Planning Proposal for further details







ATTACHMENT 8: SERVICE FEASIBILITY REPORT (XP)

XEROS PICCOLO

CONSULTING ENGINEERS





SERVICE FEASIBILITY REPORT

PROPOSED SUBDIVISION LOT 2 DP1046774 BUTTERBUSH ROAD GREGADOO NSW 2650

CLIENT:	Јони & Јирітн Дике
PROJECT NO.:	170572
ISSUE:	C
DATE:	10 [™] October 2017
OFFICE:	WAGGA WAGGA NSW

SERVICE FEASIBILITY REPORT

PROPOSED SUBDIVISION LOT 2 DP1046774 Butterbush Road Gregadoo NSW 2650

CLIENT:	ЈОНИ & ЈИОІТН DUKE
PROJECT NO.:	170572
ISSUE:	G
DATE:	10 TH OCTOBER 2017
OFFICE:	WAGGA WAGGA NSW

Issue	Date	Description	Approved By	Signed
Issue A	17.08.2017	Draft		
Issue B	19.09.2017	Draft		0
Issue C	10.10.2017	Final	A.Piccolo	lab nit



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1



1 INTRODUCTION

1.1 BACKGROUND

Xeros Piccolo were engaged by Salvestro Planning to undertake a service provision feasibility study for a proposed subdivision on Butterbush Road to determine the service requirements and a basic service provision strategy for the subdivision. The current proposed layout is based on a minimum 4-hectare lot size, potentially creating up to 18 allotments plus a new public roadway.

1.2 LOCALITY

The proposed subdivision is located at Lot 2 DP1046774, at the end of Butterbush Road, Gregadoo NSW. This subdivision could effectively be considered the next stage of a previous subdivision developed along Butterbush Road in 2007-08, with the existing road continuing directly into the proposed subdivision from the existing cul-de-sac.

1.3 SCOPE OF REPORT

The aim of this report is to investigate how the proposed subdivision can be serviced by the relevant services, such as water, electricity, telecommunications, roads and so forth. The report outlines the service requirements for the subdivision, the availability of the various services in the area and investigates what potential requirements there may be to fully service the subdivision and how this can be achieved.

The information provided in this report is subject to detailed investigation and design of the subdivision and services to meet the service authority requirements. This detailed investigation and design has not been undertaken in preparation of this report.

<u>1.4</u> <u>CONTACTS</u>

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Name:	Alastair Xeros	
Position:	Civil Designer	

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2 SERVICE REQUIREMENTS

2.1 EXISTING SERVICES AND CONDITIONS

Investigation into the existing services included obtaining Dial Before You Dig (DBYD) plans and information, referencing available design plans and information from the previous subdivision on Butterbush Road, discussion held with the service authorities, and a site investigation.

2.1.1 Roads and Stormwater Drainage

Butterbush Road consists of a sealed bitumen road that intersections Mitchell Road to the west. The northern end of the road terminates at a cul-de-sac located just south of the proposed subdivision boundary.

There is no kerb and gutter on this road, with roadside drainage consisting of open swale drains, with a piped culvert at the low point in the road. The drainage flows to an existing dam located on one of the lots, west of Butterbush Road. This dam forms part of the natural watercourse in this area.

2.1.2 <u>Electricity</u>

Essential Energy is the electricity supply authority in this area.

Electricity supply for the previous subdivision consists of above-ground high-voltage powerlines and power poles running along the western side of Butterbush Road within private property. Lowvoltage service connections to the properties are via above-ground lines connecting to small poles to which the main-switch boards are attached. These above-ground connections also cross the road.

The closest power pole to the proposed subdivision is located approximately 40m south of the proposed subdivision's southern boundary. This correlates with the certified design plans from the previous subdivision and is also shown on the DBYD plans.

2.1.3 <u>Water</u>

Riverina Water County Council is the water supply authority in this area.

Water supply for the previous subdivision consisted of a 100mm diameter OPVC main running along the western side of Butterbush Road within the road corridor. This line terminates within the proposed subdivision lot at a hydrant and endcap. This area is supplied via an elevated water reservoir tank located south of Butterbush Road.

This correlates with the DBYD plans from Riverina Water, and the last hydrant is visible on site.

2.1.4 <u>Telecommunications</u>

Telstra is the telecommunications supply authority in this area.

Existing telecommunications pits and conduits were installed as a part of the previous subdivision. The last pit is located just north of the final power pole, approximately 35m south of the proposed subdivision site.

2.1.5 <u>Sewer</u>

The properties along Butterbush Road currently utilise septic sewer systems.

Based on conversations held with Council staff and Councils GIS mapping, the nearest Council sewer main system is located on the corner of Gregadoo and Mitchell Road as shown in Figure 1 below. This is a distance of approximately 2.2km away from the proposed subdivision via Butterbush and Mitchell Roads.





Figure 1: GIS map of active sewer in vicinity of proposed subdivision

Therefore, it is not economically feasible to provide sewer main connections to this subdivision.

Additionally, the proposed subdivision area is generally elevated and is not subject to flooding according to Wagga Wagga City Councils *Major Overland Flow Flood Study* (2011), refer to Attachment 2, meaning onsite disposal systems are a viable option.

Finally, the soil profile in the proposed subdivision area is expected to be similar to that of the previous subdivision and it is understood that there have been no ongoing or significant issues with the onsite disposal sewer systems currently installed. During the development design, geotechnical investigation and testing will be undertaken to ascertain the specifications for the onsite disposal systems for each new allotment to confirm their suitability.

Based on the above information, it is expected that onsite disposal sewer systems would be suitable for the proposed subdivision as well.

2.1.6 <u>Gas</u>

No gas was supplied for the previous stage of the subdivision along Butterbush Road.

Based on conversations held with APA Group, the nearest gas main is located along Gregadoo Road, approximately 2.8km away from the proposed subdivision via Butterbush, Mitchell and Gregadoo Roads, as shown in Attachment 3. APA indicated that there is no foreseeable intention to develop gas in this area at this stage.

If gas main supply was desired or required, APA would undertake an economic evaluation on the main extension, based on potential overall loading and return. Depending on this evaluation, a capital contribution from the developer may be required to be paid toward the main extension works, with this contribution potentially in excess of \$50,000.00.

Based on this information, at this stage gas main supply is unlikely to be a financially viable option. Bottled gas supply may be provided if desired by owners, or required otherwise.

2.2 FEASIBILITY OF SERVICE PROVISION FOR THE PROPOSED SUBDIVISION

2.2.1 Roads and Stormwater Drainage

Geotechnical investigations and pavement design for the proposed road pavement will be required. This will involve subsoil investigation (boreholes and associated testing) along the proposed road alignment, followed by pavement design based on the soil conditions, traffic



volumes and Council requirements. Based on the geotechnical investigation undertaken for the previous subdivision, no significant complications are expected.

The road geometry will require design to meet Council's requirements for a local rural road, as well as relevant Austroads guidelines and Australian Standards. Based on the site topography (see Attachment 4), a compliant road design meeting these requirements is expected to be highly achievable.

Road side stormwater drainage will be as per typical rural type road profiles, with open swale drains on the high side of the road, or on both sides in cuttings. Appropriately sized culvert road crossings would be designed to drain any low points.

The swale drains would be designed to drain to existing water courses and dams, or to new basins if they are required.

Following discussions with Council engineering staff, requirements for on-site detention will be determined following assessment by Council, and will depend on a number of factors including the number and size of the proposed lots. If on-site detention is required, it could be incorporated into an existing dam located on the eastern boundary of the site, or new basins could be provided at a number of other locations, depending on the site topography (see Attachment 4). Possible locations include near the northern boundary of the site in the natural low point, or alternatively near the north or south-western corners of the site, which are also natural low points.

Additionally, control of stormwater for concentrated flows may be required to prevent negative impacts on adjacent lots. This would be assessed by Council and the subdivision engineer, and may require design and construction of drainage infrastructure to negate the negative impacts. Potential areas of concern would be near existing or new basins, and topographical low points.

Therefore, based on the investigations undertaken and conversations with Council, no major impediments are expected in regards to the provision of roads and stormwater drainage

2.2.2 <u>Electricity</u>

Based on conversations held with Essential Energy network planning staff, continuation of electricity supply from the nearby existing power pole is likely to be suitable, and no major impediments are expected. An above-ground electricity supply network would be suitable for the high-voltage lines, as per the previous subdivision. However, low-voltage lines, including property connections, are likely to be required to be underground. Requirements will also depend on the land use zoning.

The existing electricity line will be required to extend from the nearest power pole. This will involve applying for Design Information from Essential Energy to determine their requirements, and engaging a suitably qualified contractor to provide a certified design, which can be undertaken when detailed subdivision layout plans have been developed.

The new high-voltage lines will likely run within the road corridor, and any lines in private property will require easements. Appropriate allowance for road crossing conduits will be required to be made during the road construction.

Based on the investigations and conversations held with Essential Energy, no major impediments are expected in regards to the provision of electricity for the proposed subdivision.

2.2.3 <u>Water</u>

Discussions held with Riverina Water indicated that the existing 100mm main is adequate for the proposed 18 lots shown on the proposed concept plans. However, additional lots or developments may not be serviceable based on the water infrastructure. This will require detailed review by Riverina Water and there are potential options that could be considered by Riverina Water that may enable some additional lots to the ones shown.



Due to the location and elevation of the site, any proposed properties above 240m AHD will require on-site tanks and pressure pumps to maintain suitable pressures. This was also a requirement for the previous stage of the subdivision.

Therefore, provision of water for the proposed subdivision will require extension of the main from the existing end point in a typical service allocation alignment. On-site tanks and pressure pumps will be required on a case by case basis, to be assessed by Riverina Water at the time. Appropriate allowance for road crossing conduits will be required to be made during the road construction.

The exact details will be subject to detailed review and design by Riverina Water, however no significant impediments are expected in regards to providing water service to the proposed subdivision.

2.2.4 <u>Telecommunications</u>

The telecommunications line will be required to be extended from the last pit into the proposed subdivision. This will involve following the appropriate application process required by Telstra, with the pit and conduit layout to be approved by Telstra. The new line will be located within the road reserve as per typical service allocations. Attachment 5 is the design plan for the previous subdivision, showing the end pit located approximately as per the DBYD plans.

Appropriate allowance for road crossing conduits will be required to be made during the road construction.

Based on the investigation undertaken, no major impediments are expected in regards to the provision of telecommunication service to the proposed subdivision.



3 CONCLUSION

Investigation into the required services for this subdivision, including conversations held with the relevant service authorities, indicated that there are no significant impediments expected in extending and providing the services based on the proposed 18 lot layout. The requirements will be similar to that of the previous subdivision.

It is expected that full provision of the services will be able to be achieved following standard procedures for subdivision developments in this area, which will involve engagement with relevant designers and authorities to determine detailed requirements.



ATTACHMENTS

ATTACHMENT 1: DIAL BEFORE YOU DIG PLANS AND INFORMATION

ATTACHMENT 2: PMF DESIGN FLOOD DEPTHS, WAGGA WAGGA MAJOR OVERLAND FLOW FLOOD STUDY

ATTACHMENT 3: NEAREST GAS MAIN LOCATION MAP

ATTACHMENT 4: LOT LAYOUT OF PREVIOUS SUBDIVISION

ATTACHMENT 5: TELECOMMUNICATIONS PIT AND PIPE LAYOUT DESIGN PLAN



91 Hammond Avenue Wagga Wagga, NSW, 2650 Ph: (02) 6922 0608 Fax: (02) 6921 2241 www.rwcc.nsw.gov.au

To:

Not Supplied - Mr Saxon Xeros Bye Street

Wagga Wagga	NSW	2650
Enquiry Details		
Utility ID	90329	
Sequence Number	62995207	
Enquiry Date	24/07/2017 08:26	6
Response	AFFECTED	
Address	Butterbush Road Gregadoo	
Location in Road	CarriageWay,Foo	otpath,Nature Strip
Activity	Mechanical Exca	vation

Enquirer Details				
Customer ID	1567461			
Contact	Mr Saxon Xeros			
Company	Not Supplied			
Email	saxon@xerospiccolo.com.au			
Phone	0269255855 Mobile Not Supplied			

Disclaimer

Plans issued by RWCC are valid for 60 days unless otherwise stated. If this timeframe has elapsed, you will be required to reapply via Dial Before You Dig. RWCC plans are provided for the use of the applicant only and must not be distributed to any third parties. Please contact RWCC if assets are identified that are not shown on the plans. RWCC shall not be liable for any loss or damage caused by the use of its plans and/or information supplied to the applicant. Please ensure RWCC plans and information provided remains on-site at all times during construction



Your Enquiry has fallen within 25m of one or more of RWCC's assets

IMPORTANT:

- The attached plan/s shows RWCC assets within the specified search area.
- Schematic plans supplied depict locations of RWCC's assets in the general vicinity of the search area. Exact depths and alignments are not supplied.
- Plans have been prepared for RWCC's own use. RWCC supplies them at no cost with the objective of reducing the
 risk of accidental damage occurring to its network. Riverina Water County Council does not accept any liability for
 inaccuracies or any lack of information on the plans, or any damage to Riverina Water County Council assets
 resulting from, or in connection with the information provided.

CONCERNING RWCC PLANS:

- Plans issued by RWCC are valid for 60 days unless otherwise stated. If this timeframe has elapsed, you will be advised to reapply via Dial Before You Dig.
- RWCC plans are provided for the use of the applicant only and must not be distributed to any third parties.
- Please contact RWCC if assets are identified that are not shown on the plans.
- RWCC shall not be liable for any loss or damage caused by the use of its plans and/or information supplied to the applicant.
- Please ensure RWCC plans and information provided remains on-site at all times during construction.

DUTY OF CARE:

When working in the vicinity of RWCC assets, the applicant has a duty of care to:

- Request plans of RWCC assets in the affected work area before commencing work.
- Visually locate RWCC assets prior to commencing excavation.
- Maintain safe clearances when constructing in the vicinity of RWCC assets.
- Ensure that any construction does not have a negative impact on any RWCC asset. Where there is a potential for conflict with RWCC assets, please contact RWCC before construction or excavation commences to discuss options before approval is granted.

DAMAGE:

IN CASE OF EMERGENCY OR TO REPORT DAMAGE

PHONE (02) 6922 0608

IMMEDIATELY

- The contractor, or other agency, is liable for all damage to RWCC assets when works commence prior to obtaining plans, or failure to follow agreed instructions.
- All damage, regardless of severity, must be reported to RWCC immediately.
- RWCC reserves the right to recover compensation for costs associated with repairing damage due to careless or negligent practices carried out by the applicant.
- Riverina Water County Council does not accept any liability for loss or damage occurring due to inaccuracy or lack of information on the plans provided.

FURTHER ASSISTANCE:

RWCC offers further assistance where more information is required as detailed below:

- Work as Executed Plans RWCC can supply WAE plans if they are available to assist in locating any assets in our network. Not all assets have WAE plans available. For further assistance please contact RWCC on (02) 6922 0608.
- On-site Assistance RWCC offers on-site assistance to help identify the location of its assets. On-site location/detection is a free service which will help identify our asset to the best of our knowledge. If potholing/excavation of the site is required, it will be costed out at the required rate and applicant billed accordingly. To arrange an on-site location contact RWCC on (02) 6922 0608. Please note that a minimum of 24 hours notice is required in advance for on-site assistance.















Sequence No: 62995207

Butterbush Road Gregadoo







Map 4

Sequence No: 62995207

Butterbush Road Gregadoo











CABLE/PIPE LOCATION Assets were found in the search area

COMPANY NAME:	Not Supplied
ATTENTION:	Mr Saxon Xeros
EMAIL:	saxon@xerospiccolo.com.au
SEARCH LOCATION:	Butterbush Road Gregadoo NSW 2650
SEQUENCE NO:	62995204
DATE:	Monday, 24 July 2017

Provision of Plans:

Please find enclosed plans depicting approximate locations of **Essential Energy** assets in the search location. *The excavator must not assume that there may not be assets owned by <u>other</u> network operators in the search location.*

Underground assets searched for	Underground assets found
Essential Energy Electrical	
Essential Energy Water & Sewerage	

Plans are updated from time to time to record changes to underground assets and may be updated by Essential Energy without notice. In the event that excavation does not commence within 28 days of receipt of a plan, a new plan should be obtained.

The excavator must retain the plans on site for the duration of the works.

The excavator shall report all damage made to Essential Energy assets immediately. Note that damage includes gouges, dents, holes and gas escapes.

IN CASE OF EMERGENCY OR TO REPORT DAMAGE: PHONE 13 20 80

DISCLAIMER

Please be aware that plans may **not** reflect alterations to surface levels or the position of roads, buildings, fences etc. **Cable and pipe locations are approximate** and the plans are **not** suitable for scaling purposes. *Essential Energy does not retain plans for privately-owned underground electrical or water & sewerage assets located on private property.* **Privately-owned underground electrical assets located on private property are the responsibility of** <u>the owner.</u>

The plans have been prepared for Essential Energy's sole use and benefit. **Essential Energy cannot and does not** warrant the accuracy or completeness of the plans. Essential Energy supplies them at no cost with the object of reducing the serious risk of unintentional damage being caused to its cables and pipes. Essential Energy does not accept any responsibility for any omissions, inaccuracies or errors in the plans, or any reliance place on the material. Any reliance placed on any plan provided in response to your request is at your own risk.

Page 1 of 2



Essential Energy retains all intellectual and industrial property rights which exists or may exist in or with respect to the plan(s). The material provided is not to be copies or distributed beyond you.

You release Essential Energy from and against all claims, demands, actions and proceedings arising out of or in any way related to the use of the provided material.

Location of Assets on Site:

The plans indicate only that cables and pipes may exist in the general vicinity – they do not pinpoint the exact location of the cables and pipes.

If it is found that the location of cables or pipes on the plans can be improved, please notify Essential Energy on 13 23 91 (or fax 1800 354 636).

All individuals have a duty of care they must observe when working in the vicinity of underground cables and pipes. It is the excavator's responsibility to visually expose the underground cables and pipes manually, ie. by using hand-held tools and non-destructive pot-holing techniques prior to any mechanical excavation. The excavator will be held responsible for all damage caused to the Essential Energy network or cables and pipes, and for the costs associated with the repair of any such damage. The excavator will also be held responsible for all damage caused to any persons.

When digging in the vicinity of underground assets, persons should observe the requirements of the applicable Codes of Practice published by the NSW Work Cover Authority or Safe Work Australia, and any amendments from time to time by the Authorities, including although not limited to:

- Excavation Work
- Managing Electrical Risks in the workplace
- How to manage and control asbestos in the workplace

(Please refer to https://www.workcover.nsw.gov.au/law-and-policy/legislation-and-codes/codes-of-practice).

When digging in the vicinity of **electrical assets** persons should observe the requirements of the **Electricity Supply Act 1995.**

Persons excavating near live underground electrical reticulation and/or earthing cables **must exercise extreme** caution at all times and adhere to the requirements of Essential Energy's Electrical Safety Rules. (These are available on our website: <u>http://www.essentialenergy.com.au/content/safety-community</u> and include • Work near Essential Energy's Underground Assets:

- <u>http://www.essentialenergy.com.au/asset/cms/pdf/contestableWorks/CEOP8041.pdf</u>, and
 Asbestos Fact Sheet:
 - http://www.essentialenergy.com.au/asset/cms/pdf/safety/AsbestosFactSheet.pdf

In some situations these procedures call for work to be performed by authorised staff.

Should there be any doubt as to the exact location of any underground electrical assets, and the potential for conflict with live underground cables caused by excavation at your work site, you should contact **13 23 91** to arrange for an on-site visit by an Essential Energy representative. No construction or mechanical excavation work is to commence prior to this on-site visit and approval being obtained.

When digging in the vicinity of water or sewer assets persons should observe the requirements of the Water Management Act 2000.

Should there be any doubt as to the exact location of any underground water and sewer assets, and the potential for conflict with underground water and sewer pipes caused by excavation at your work site, you should contact **13 23 91** to arrange for an on-site visit. No construction or excavation work is to commence prior to this on-site visit and approval being obtained.

Prior Notification:

Please note that for excavation depths greater than 250mm near power poles and stays you should allow for **advance notice** in your construction program to permit Essential Energy time to allocate the necessary field resources to carry out the inspection at the site a **minimum of fourteen (14) working days prior to work commencing**. This service may incur a fee and this can be negotiated with the local Area Coordinator at the time of making the appointment. Failure to give reasonable notice to the local Area Coordinator may result in disruption to Essential Energy's planned works program in the district and could incur an extra charge over and above the normal rate for this service.

For further information please call 13 23 91.



LEGEND

For more info contact a Telstra Accredited Locater or Telstra Plan Services 1800 653 935







6

30

between two 6-pits, 20.0m apart, with a direct buried 30-pair cable along the same route.

> Two separate conduit runs between two footway access chambers (manholes) 245m apart. A nest of four 100mm PVC conduits (P100) containing assorted cables in three ducts (one being empty) and one empty 100mm concrete duct (C100) along the same route.

WARNING: Telstra plans and location information conform to Quality Level 'D' of the Australian Standard AS 5488 - Classification of Subsurface Utility Information. As such, Telstra supplied location information is indicative only. Spatial accuracy is not applicable to Quality Level D. Refer to AS 5488 for further details. Telstra does not warrant or hold out that its plans are accurate and accepts no responsibility for any inaccuracy shown on the plans. FURTHER ON SITE INVESTIGATION IS REQUIRED TO VALIDATE THE EXACT LOCATION OF TELSTRA PLANT PRIOR TO COMMENCING CONSTRUCTION WORK. A plant location service is an essential part of the process to validate the exact location of Telstra assets and to ensure the asset is protected during construction works. The exact position of Telstra assets can only be validated by physically exposing it. Telstra will seek compensation for damages caused to its property and losses caused to Telstra and its customers.











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