

11 June 2020

General Manager
Wagga Wagga City Council
PO Box 20
Wagga Wagga NSW 2650



Attention: Amanda Gray, Senior Town Planner
and Adam Wood, Strategic Town Planner

Dear Sir,

RE: ADDITIONAL INFORMATION DA19/0649

We are writing in response to Council's request for additional information in respect of Concept DA19/0649 for residential development at 52 Plumpton Rd, Tatton.

Additional details are provided in the attached document, as requested by Council.

As requested by Council, the documentation has been reorganised to provide a standalone Guidance Document to provide site specific provisions, replacing those contained in the Wagga Wagga DCP 2010. The Statement of Environmental Effects and accompanying design plans have also been updated. A Biodiversity Assessment has also been provided as requested.

Please note, Lot 31 was previously indicated as a dual occupancy site. This has been amended to two single dwellings sites, though the configuration remains similar.

We trust that this information meets Council's requirements. If you have any questions, please do not hesitate to contact me on 02 6923 1538 or via email to lizzie.oj@nghconsulting.com.au.

Yours sincerely,

Lizzie Olesen-Jensen
Principal Town Planner
6923 1508
NGH



WAGGA WAGGA

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ADDITIONAL INFORMATION

Item 1

The intent of the concept development application is to provide an overarching development scenario for the subject site. The application is supported with a Statement of Environmental Effects, 'Vision Document', a 'Concept Plan' for the site as well as a set of bespoke controls that will guide future development on the site. Any proposed new controls must to be provided in a format that can be used as a standalone assessment tool in future.

- a) Please provide a local character analysis in the 'vision document' to demonstrate the suitability of the proposed development on the site.***

As requested by Council, documentation has been reorganised to include a standalone Guidance Document that will guide future development on the site, under the concept development approval. The Guidance Document provides site specific provisions, replacing those contained in the Wagga Wagga DCP 2010, in respect of the subject site only. This document includes a local character analysis to demonstrate the suitability of the proposed development. As discussed with Council's Strategic Planning officers, this expands upon the local character analysis and urban design vision prepared by Urbis and submitted with the original Development Application.

- b) Any works on the site will be subject to a separate development application that must adhere to the parameters set out in this concept development application. This includes any subdivision, landscaping or terraforming works, construction of dwellings or installation of services. Please provide a set of development controls that apply to all future development on the site and where relevant, the provisions of the Wagga Wagga DCP 2010 that will still apply. This is to be incorporated in the proposed provisions of the 'Vision Document' or similar combined document.***

As requested by Council's Strategic Planning officers, the set of proposed development provisions is now comprised within the overarching Guidance Document that will inform future applications under the concept development approval.

- c) The notification procedure provided under the concept design controls (Appendix B) can be simplified. The concept development application will be the subject of public consultation. Future development applications that are consistent with the provisions of the approved 'visionary document', concept plan' and supporting controls shall not be subject to the public consultation requirements of Section 1.10 of the Wagga Wagga Development Control Plan 2010.***

As requested by Council's Strategic Planning officers, the notification procedure contained within the set of proposed development controls (Guidance Document) has been simplified. Future applications that are consistent with the provisions of the approved Guidance Document and masterplan would not be subject to the public consultation requirements of Section 1.10 of the WWDGP 2010.

- d) Within Appendix B it is noted that Section 2.2 states that multi-dwelling housing is not predicted for this development. Three dwellings on both lots 1 and 2 would be defined as multi-dwelling housing. Visitor parking requirements need to be included within proximity to these lots.***

This reference has been clarified as requested. The set of development controls now forms part of the Guidance Document.

- e) Within Appendix B it is noted that a minimum lot size of 300sq.m is sought when the concept layout does not go this low. Please clarify the need for this request.***

This reference has been clarified as requested. The set of development controls now forms part of the Guidance Document. **Item 2**

Please provide justification for the open space and demonstrate compliance with the open space requirements and alignment with Council's Recreation, Open space and Community Strategy 2040. More information is required about the future intent of the open space. Will it be dedicated to Council as part of a VPA, noting that there is no allocation within the contribution plans for Council to acquire this land.

Section 2.3.5 of the SEE provides that the dedication of public open space was intended as part of the proposed development. The proposed area is confirmed below. The parkland component comprises 0.117 hectares and would be embellished by the proponent prior to dedication to Council. The drainage reserve comprises approximately 0.82 hectares.

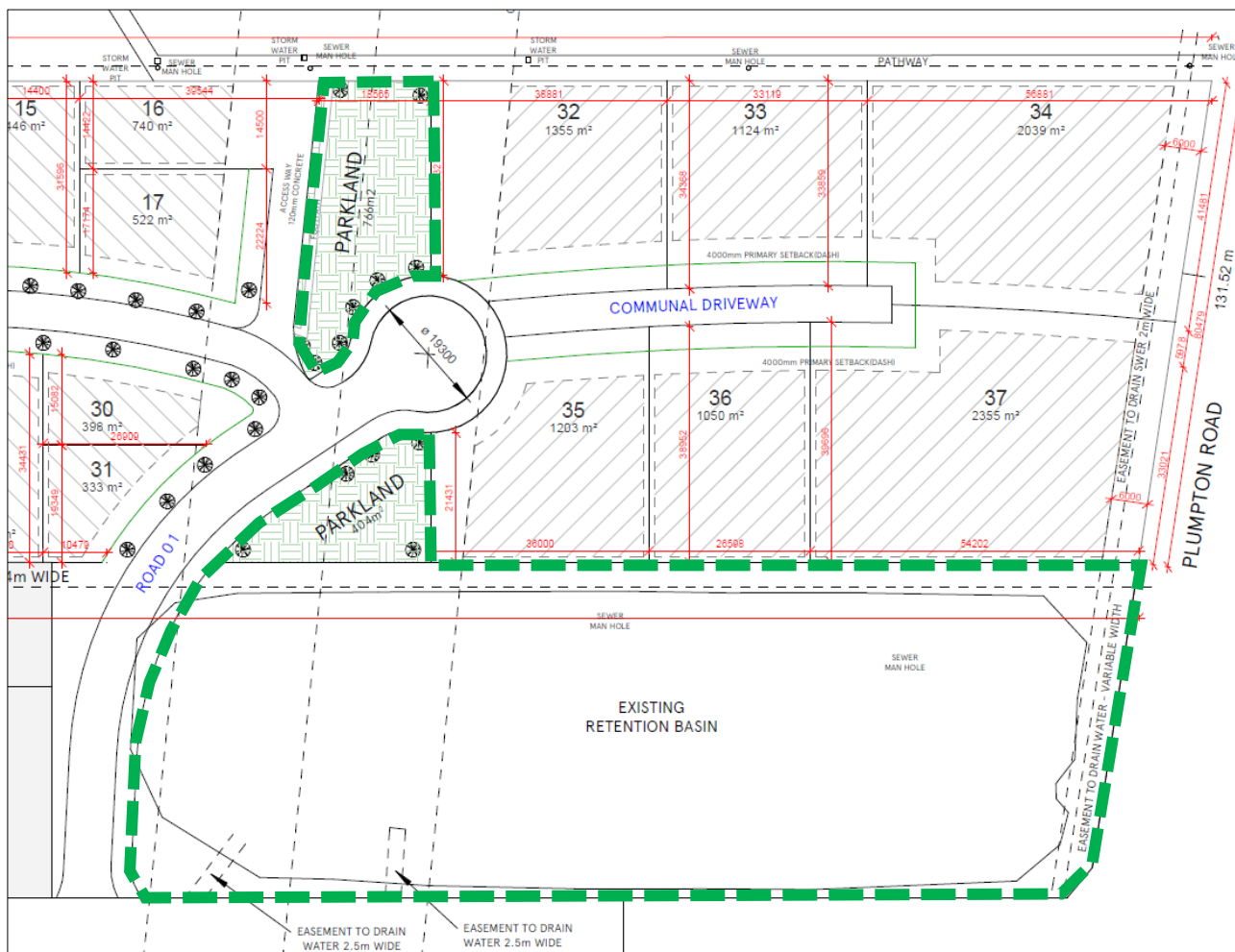


Figure 1: Proposed area for dedication as open space and drainage

This is justified on the basis that it is consistent with the pedestrian connection indicated between Barrington Street and Brindabella Drive in the South Tatton Masterplan, as indicated below. Council officers have indicated a need for Council to acquire the retention basin and accordingly, this matter has been included in the proposal for land dedication via VPA.



Figure 2: Extract from South Tatton Neighbourhood Plan (Source: WWCC DCP 2005, Ch.31)

The Tatton and Lake Albert precincts are considered together in Section 4.12 of Council's Recreation, Open Space and Community Strategy 2040 (ROSC). The current demand and future supply analysis for Tatton and Lake Albert (p.110) indicates no additional local parks are required within the precinct.

Our analysis indicates a surplus of open space in Lake Albert and a deficit in the Tatton precinct. Section 3.1 of the ROSC indicates that 3 hectares of outdoor recreation, per 1,000 persons is. According to the 2016 Census¹, the population of Tatton was 2,616. This equates to a need of 7.848 hectares of outdoor recreation space in the Tatton Precinct.

Table 1 below indicates only 1.77 hectares of parklands are available within the Tatton precinct.

The ridgeline reserve comprises a further 19 hectares, which is dedicated to environmental protection, though supports some passive recreation activities. It is also noted a proportion of the population would find accessing this area challenging, including seniors, who are not able bodied, those with health conditions or those with prams or small children. A further 6.5 hectares is provided within the Tatton neighbourhood as stormwater drainage reserves/basins.

Table 1: Parkland within Tatton precinct

Address	Description	Lot and DP	Area (ha)
Public Reserve 72 Stirling Blvd TATTON	Open space with goal posts	Lot 117 DP1129768	0.5045
Public Reserve 46 Stirling Blvd TATTON	Open space with playground	Lot 856 DP1117970	0.3648
Public Reserve 72 Tamar Dr TATTON	Part of above reserve, though zoned R1	Lot 60 DP1041446	0.1076

¹ ABS (2017), 2016 Census QuickStats Tatton. Accessed April 2020. Retrieved from https://quickstats.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/SSC13775

Public Reserve 49 Fitzroy St TATTON	Open space, no improvements	Lot 34 DP1061134	0.1293
Reserve Tamar Dr TATTON	Open space with playground	Lot 18 DP846375	0.1055
Transmission Easement 1 Fitzroy St TATTON	Open space with playground	Lot 40 DP830816	0.1766
Reserve Talbot PI TATTON	Part of above reserve	Lot 21 DP1005924	0.2079
Reserve 6 Talbot PI TATTON	Open space, no improvements	Lot 20 DP1005924	0.1784
		Sub total	1.7746

Table 2: Environmental reserves within Tatton precinct

Address	Description	Lot and DP	Area (ha)
Public Reserve Brindabella Dr TATTON NSW 2650	Willans Hill reserve zoned E2	Lot 150 DP1129768	9.0000
Public Reserve Darling PI TATTON NSW 2650	Willans Hill reserve zoned E2	Lot 746 DP1099783	4.9500
Reserve 98 Red Hill Rd TATTON NSW 2650	Willans Hill reserve zoned E2	Lot 1 DP224933	3.2000
Reserve 100 Red Hill Rd TATTON NSW 2650	Willans Hill reserve zoned E2	Lot 3 DP1197542	2.3200
		Sub total	19.4700

Table 3: Other reserves within Tatton precinct

Address	Description	Lot and DP	Area (ha)
Land for stormwater drainage			
Reserve Lachlan PI TATTON NSW 2650	Basin	Lot 50 DP846375	0.9308
Drainage Reserve 2 Talbot PI TATTON NSW 2650	Basin	Lot 19 DP1005924	1.0200
Reserve 2 Stirling Blvd TATTON NSW 2650	Basin	Lot 36 DP1061134	3.7200
Drainage Reserve 29A Kimberley Dr TATTON NSW 2650	Basin/landscape buffer	Lot 19 DP815550	0.6035
Transmission Easement 40A Kimberley Dr TATTON NSW 2650	Basin/transmission line	Lot 39 DP830816	0.2935
		Sub total	6.5678

Land for landscape buffers			
Reserve 7A Barwon PI TATTON NSW 2650	Landscape buffer	Lot 26 DP816355	0.3234
Road Section 14A Grampian PI TATTON NSW 2650	Landscape buffer	Lot 22 DP861016	0.2589
Road Section 14A Grampian PI TATTON NSW 2650	Pathway	Lot 21 DP861016	0.0207
3 Grampian PI TATTON NSW 2650	Landscape buffer	Lot 24 DP861347	0.6622
1 Grampian PI TATTON NSW 2650	Landscape buffer	Lot 23 DP861347	0.0695
Public Reserve 56 Red Hill Rd TATTON NSW 2650	Landscape buffer	Lot 16 DP1081590	0.1790
Reserve 44D Plumpton Rd TATTON NSW 2650	Landscape buffer	Lot 21 DP815550	0.0499
		Sub total	1.5636

Item 3

WMAwater assessed the flood impact based on the 1% AEP flood event for two scenarios (Scenario A: Proposed Development and Scenario B: Ultimate Development). Generally, the modelling process is done appropriately and shows the expected results. Please be noted that the rarer flood events up to PMF should be considered for flood impact assessment. It is the major comment on this report which should be addressed by consultant. It should be also noted that scenario 2 has major adverse effects with respect to the flood level across the floodplain and outside of the development zone. This contravenes the NSW state government flood prone land policy as outlined in the NSW State Government floodplain Development Manual 2005.

As agreed with Council Strategic Planning and Development Assessment officers, PMF modelling is not conventionally conducted for a residential development of this nature. The DCP indicates that the design event for this type of development is the 100 yr ARI flood level, not the PMF. The DCP indicates the PMF should be considered for essential community services and critical utilities, neither of which is proposed. A flood impact assessment (FIA) including modelling of the 100yr ARI event was provided in support of the proposed development.

As outlined in Section 5.4.7 in relation to Flooding, the SEE confirms that Scenario 2 was an additional scenario in the FIA that was requested by Council for their own investigation into the suitability of rezoning other E2-zoned land further north of the subject site. As evident in the SEE, Scenario 2 is not related to the proposed development in any way. Scenario 2 shall be disregarded for the purpose of this development application.

Item 4

Council's assessment report for the rezoning of the land indicated that a stormwater management strategy shall be developed for the site as part of any future development application on the site. The strategy shall recognise the existing dam located in the south western corner of the site which serves an important role in stormwater mitigation of the Tatton neighbourhood. The dam shall be incorporated into the strategy for the site and dedicated to Council as part of a future subdivision application.

The engineering design consultant considers that it is premature to be conducting a detailed stormwater analysis at Development Application stage. It is considered as a Council-approved stormwater structure, Council should have existing adequate detail in relation to the existing basin.

A detailed Stormwater Management Strategy (SMS) would be prepared as part of the detailed design phase, post-approval. It would be submitted to Council for approval prior to the issue of Construction Certificate. The SMS would include detailed drainage modelling, calculations and design plans. The engineering design consultant considers this development is unlikely to have a significant effect, given that it is at the bottom of large catchment and within an area subject to overland flow flooding.

A capacity constraint with the retention basin is not envisaged; however, several potential stormwater management options can be implemented to address this. This could include the management of stormwater on individual allotments by way of detention tanks to reduce peak flows and discharge, enlargement of the basin or desilting works.

As indicated in Section 4.4.1 of the SEE, a preliminary engineering design prepared by Xeros Piccolo Consulting Engineers accompanied this application (Attachment C) and indicates the proposed stormwater drainage servicing arrangement.

Item 5

Please provide proposed levels across the site more information on the building pad locations mentioned in the flood report. Will these dictate building envelopes within the larger lots? Details of the groundwater levels and influences adjoining the retention basin, where modelling should anticipate sustained maximum basin capacity. Certification by an appropriately qualified hydrogeologist should endorse the suitability of proposed building envelopes depicted on parcels adjoining the retention basin, or otherwise specify any restriction as to building/ excavation works, including (but not limited to) inground pools.

As outlined in Section 2.2 of the SEE, there is no detailed proposal put forward for Lots 32-37 at this time. The development application only indicates a concept proposal for this area, as directed by Council's Strategic Planning officers. A future development application would be required for these lots. The building pads indicated for Lots 33-36 (as per numbering in the FIA) were modelled at a nominal height above the design flood level plus freeboard, to determine the afflux impacts on overland flow, as indicated in Section 3.1 of the WMA report. It is anticipated that a maximum enclosed building area would need to be applied to Lots 31-36 in consideration of overland flow flooding impacts; however, this would be determined with a detailed future development application for those lots. It is understood the existing basin is accounted for in the Wagga Wagga Major Overland Flow Flood Study; no altered conditions were input for the subject assessment. A future development application, including confirmation of such details, will be submitted for Lots 32-37.

In response to groundwater concerns, a Risk Analysis Report prepared by NGH (2018) that supported the Planning Proposal was prepared for the subject land, to rezone the land to R1 General Residential and R5 Large Lot Residential. The report concluded an interaction was unlikely due to the current and historic groundwater depth.

In 1998, Wagga Wagga City Council established a network of piezometers across Wagga Wagga to monitor urban salinity through the collection of standing water level (SWL) and electrical conductivity (EC) readings. The network currently comprises 198 piezometers.

The piezometer closest to the subject land is Piezometer No. 51, which is located just off Plumpton Road opposite 48 Plumpton Road (approximately 150 metres north of the subject land). Readings from this piezometer have been taken monthly, or thereabouts since April 1997. The average standing water level (SWL) for Piezometer No. 51 since establishment in 1997 was 8.12 metres below ground level; the median was 8.33 metres. The readings have revealed a general decline in the SWL and has remained steady around 9 metres below ground level for the last 10 years. The piezometer was established in 1997 and readings have been taken in both severe drought conditions and periods of above average rainfall. The recorded levels substantiate the view that a shallow groundwater presence is unlikely to be a concern for this area. There is

no evidence to suggest the retention basin interacts with groundwater, nor that any typical residential excavations (such as an inground pool) would.

The following is extracted from the report:

According to Council's 'Urban Salinity Technical Report 2015-16' the groundwater monitoring results allow the identification of areas that are susceptible to saline discharge². Council considers urban salinity concerns to be present where the piezometer readings reveal both high EC concentrations (greater than 5 deciSiemens per metre) and high SWLs (less than 5 metres below ground level)³. These piezometers are referred to as 'critical piezometers' in Council's urban salinity literature.

The only piezometer in the Eastern Sub-Catchment to indicate an urban salinity concern is Piezometer No. 29, which is located off Dalkeith Avenue in Lake Albert and approximately 630 metres east of the subject land. The Urban Salinity Technical Report refers to Council's belief that the SWLs of this piezometer may be due to lateral influences of Lake Albert⁴.

The piezometer closest to the subject land is Piezometer No. 51, which is located just off Plumpton Road opposite 48 Plumpton Road. Readings from this piezometer have been taken monthly, or thereabouts, since April 1997. Refer to records obtained from Wagga Wagga City Council in Attachment B.

The readings indicate a general decline in SWLs since the establishment of the piezometer, from 6.7 metres below ground level, remaining fairly steady around 9 metres below ground level for the last 10 years. The average SWL since establishment is 8.12 metres below ground level; the median is 8.33 metres.

The recorded electrical conductivity (EC) has ranged from 2.14 deciSiemens per metre (dS/m) in March 2011 to 6.10 in October 2007. Since establishment the average EC level is 4.76 dS/m; the median is 4.75.

Summarised yearly readings from Piezometer No. 15 and others in the surrounding area are included in the table below. A copy of all readings obtained from Wagga Wagga City Council is included as Attachment B.

Table 2-2 Reading summary from piezometers surrounding the subject land

	Piezometer No. 51		Piezometer No. 163		Piezometer No. 180		Piezometer No. 181		Piezometer No. 182	
	Depth: 16.68m		Depth: 8.50m		Depth: 6.70m		Depth: 10.00m		Depth: 12.00m	
	SWL	EC_w	SWL	EC_w	SWL	EC_w	SWL	EC_w	SWL	EC_w
1997	-6.54	3.30								
1998	-6.66	5.22								
1999	-6.30	5.18								
2000	-6.07 ¹	8.82								
2001	-6.16	4.55								
2002	-6.40	5.53								
2003	-7.02	5.26								
2004	-7.46	3.40								
2005	-8.17	5.89								
2006	-8.47	6.00								
2007	-8.99	5.37								

² City of Wagga Wagga, 2016, 'Urban Salinity Technical Report 2015-16', p.7.

³ City of Wagga Wagga, 2016, 'Urban Salinity Technical Report 2015-16', p.20.

⁴ City of Wagga Wagga, 2016, 'Urban Salinity Technical Report 2015-16', p.20.

2008	-9.76	5.30	DRY	N/A						
2009	-10.19	5.11	DRY	N/A						
2010	-10.44	4.69	DRY	N/A	DRY	N/A				
2011	-9.79	2.18	DRY	N/A	DRY	N/A	-8.47	6.22	-2.67	0.71
2012	-9.35	3.97	DRY	N/A	DRY	N/A	-8.53	6.42	-2.50	1.13
2013	-9.32	4.01 ³	DRY	N/A	DRY	N/A	-8.88	6.72 ³	-3.14	1.52 ³
2014	-9.35	4.12	DRY	N/A	DRY	N/A	-9.10	6.97	-3.19	1.45
2015	-9.62	5.56	DRY	N/A	DRY	N/A	-9.39	6.06	-3.56	1.50
2016	-9.49	5.54	DRY	N/A	DRY	N/A	-8.07	6.44	-3.26	1.24
2017	-9.08 ²	4.84 ²	DRY	N/A	DRY	N/A	-8.79 ²	6.71 ²	-3.83 ²	1.32 ²

Note: Readings from June each year have been reproduced in Table 2-2 except as provided for below.

1 Reading from 6 July 2000

2 Reading from 28 August 2017

3 Reading from 29 July 2013

As stated earlier, Council deems urban salinity concerns to be present where the piezometer readings reveal both high EC concentrations (greater than 5 dS/m) and high SWLs (less than 5 metres below ground level)⁵. The recorded average and median SWLs and EC levels for Piezometer No. 51 near to the subject land do not exceed these thresholds and can therefore be considered to indicate that urban salinity is not a notable concern for this area.

Further, according to Table 2.17 of the draft Wagga Wagga Natural Resource Management Plan, the salinity risk rating is considered to be 'low' where the groundwater depth is between 5-10 metres and 'very low' where exceeding 10 metres. As stated earlier, the average SWL for Piezometer No. 51 since establishment in 1997 was 8.12 metres below ground level; the median was 8.33 metres. The readings have revealed a general decline in the SWL and has remained steady around 9 metres below ground level for the last 10 years. The piezometer was established in 1997 and readings have been taken in both severe drought conditions and periods of above average rainfall. The recorded levels substantiate the view that a shallow groundwater presence is unlikely to be a concern for this area.

Item 6

Council's assessment for the rezoning of the land indicated that the subject land has been used for agricultural uses in the past. This land use is a use specified in Table 1 of the Contaminated Land Planning Guidelines. Given the previous land uses on the site (being grazing), it is considered that the potential impacts of Land Contamination are low and a detailed assessment may be undertaken as part of any future application for subdivision and/or land use change. Please provide a certified Detailed Site Investigation (DSI) prepared in accordance with Council's Contaminated Land Management Policy, the SEPP 55 Guidelines —Remediation of Land and relevant NSW EPA and NEPM Guidelines.

Council's Guidelines for Contaminated Land indicate that where an initial evaluation by Council identified that the land was previously used for agriculture or horticulture purposes, Council may request a preliminary investigation to be undertaken to determine the history of the property. If the preliminary investigation shows that the land was *only* used for broadacre agriculture, then the application may proceed. However, if investigations show that the land was used for intensive agriculture or horticulture, or if there are any other

⁵ City of Wagga Wagga, 2016, 'Urban Salinity Technical Report 2015-16', p.20.

activities to cause concern for Council with regard to contamination or misuse of potential contaminants (including pesticide use) then a further investigation may be warranted.

Site investigations indicate the land has only been used for grazing. There is no publicly available information to suggest the land has been used for any other activities. Aerial imagery dated 1971 from Council's online mapping indicates a small number of rural dwellings within the Tatton locality. The precinct appears to be mostly used for grazing. Some smaller areas of cropping are identifiable. No industries or intensive plant or animal agriculture or other potentially contaminated uses or activities are apparent on or near the subject land.

Aerial imagery from 1990 indicates the number of rural dwellings within the Tatton locality had increased from 1971, though rural character remains evident. By 1990, the subject property was approximately 7 hectares in area. The subject land appears to be used for grazing, as does surrounding holdings. No industries or intensive plant or animal agriculture or other potentially contaminated uses or activities are apparent.

According to State-wide land use mapping conducted by the NSW Department of Environment and Climate Change (DECC) in 2004 (published in 2007), the subject land was Urban land and Grazing land (Volunteer, naturalised, native or improved pastures) under the ALUM (Australian Land Use and Management) Classification. The surrounding land was also classified as grazing land.

There was no visible evidence during a site walkover that intensive agriculture or horticulture had historically been conducted on the land. There are no farm sheds or other structures that may be indicative of a substantial agricultural enterprise on the land and no evidence of sheep/cattle dips.

Our investigations show the subject land has only been used for grazing. The above referenced information indicates the subject land and surrounds have historically formed part of a low-density rural living precinct. Since 1970, the precinct remained rural in character, though density gradually increased. Urban development has occurred in the last 20 years.

Council's Guidelines for Contaminated Land indicate that where a preliminary investigation shows that the land was *only* used for broad acre agricultural then the application may proceed without further contamination assessment.



Figure 3: Aerial imagery 1990 (Source: WWCC online mapping, 2020)

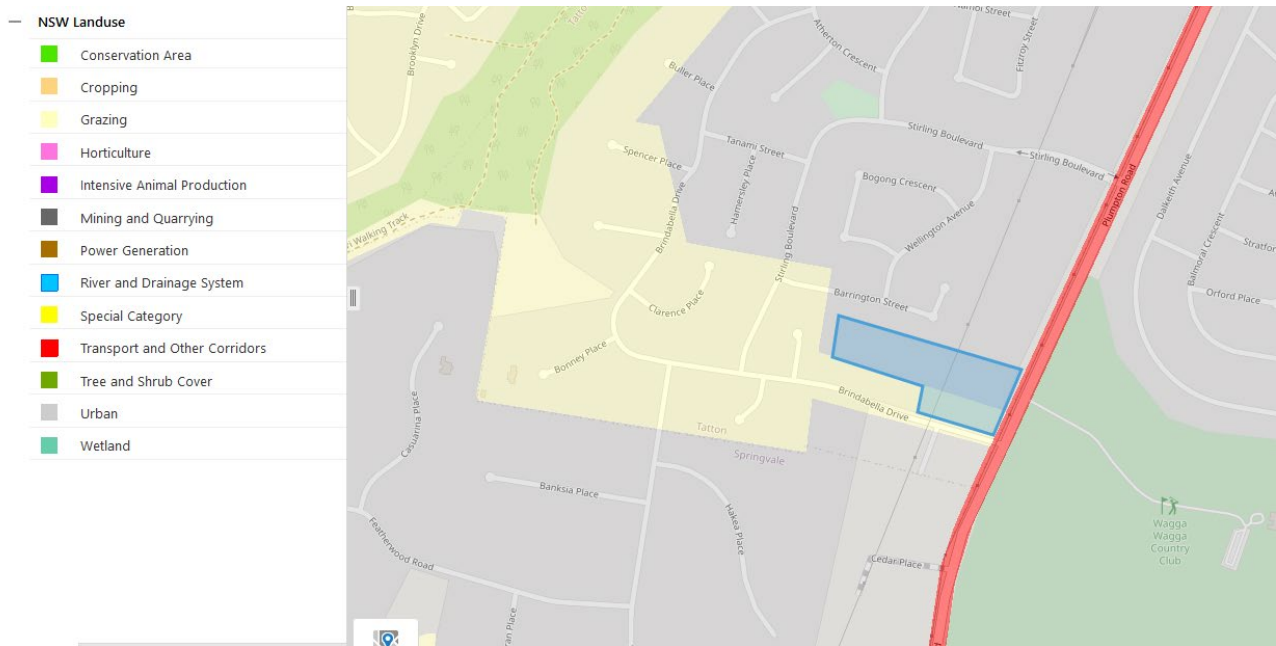


Figure 4: Land mapped as Urban and Grazing (Volunteer, naturalised, native or improved pastures) under the ALUM (Australian Land Use and Management) Classification 2004 (Source: DECC, 2007)



Figure 5: Land mapped as Residential and farm infrastructure NSW Land Use 2017 map (Source: DPIE, 2020)

Stockpiles of soil, mulch and building materials are present at the eastern side of the subject site. The proponent has confirmed the soil was excavated from other local construction sites and is likely to be classified as virgin excavated natural material (VENM). Documentation has been provided by the proponent, which evidences the source location of the soil material (see attachments). The intention of the soil stockpiles is the use as controlled fill for reinstatement of the land at the completion of tree removal. Other mulch and building material would be removed from the site.

Item 7

This site is not bio-certified. Where the area of clearing exceeds the BOS threshold or is likely to significantly affect a threatened species, an accredited assessor must supply a Biodiversity Development Assessment Report (BDAR). Please note that all native vegetation on the site must be identified (including trees under 8m, shrubs and groundcovers), and assessment of clearing or adverse impacts on the vegetation is based on the anticipated subsequent residential development of that land. Where the requirement to submit a BDAR is not triggered (the methodology for which should be clearly outlined), provision of a Test of Significance (TOS) is required.

As indicated in Section 5.2 of the SEE, part of the land is within the area that is subject to the protective conditions of the Wagga Wagga Biodiversity Certification Order 2010. A subsequent Biodiversity Certification Order was issued by the Minister on 24 November 2017, which had the effect of limiting the Wagga Wagga Biodiversity Certification Order 2010 to apply only to those areas zoned business, industrial, residential and infrastructure immediately prior to the commencement of that order. Part of the site was already zoned residential prior to the commencement of the 2017 Order and therefore is not excluded from the operation of the original 2010 Order. These parts of the site are biodiversity certified land. Part 7 of the Biodiversity Conservation Act 2016 (BC Act) therefore does not apply to this part of the land.

Conversely, the part of the land zoned E2 Environmental Conservation immediately prior to the commencement of the 2017 Order, now constitutes "excluded land". This part of the land, despite being since rezoned to R1 and R5, is not classed as biodiversity certified land. Therefore, it is subject to Part 7 of the BC Act.

A biodiversity assessment was prepared to determine whether the proposed development on former E2 zoned land is likely to significantly affect threatened species. The assessment concluded there are no Areas of Outstanding Biodiversity that would be impacted, no significant impact on threatened species is likely and the BOS thresholds would not be exceeded. The relevant matters of the BC Act have been addressed. Refer to attached Biodiversity Assessment report.

Item 8

Where the clearing or pruning of trees is proposed elsewhere on the parcel, please refer to Section 5.2 and 5.3 of the Wagga Wagga Development Control Plan 2010. Council requires detailed plans and supporting documentation addressing the DCP provisions, including provision of a Tree Assessment Report identifying all prescribed trees and whether the trees will be removed, retained or how it will be pruned. The plans currently do not clearly indicate which trees are to be retained and/or removed.

The tree plans/details provided in support of the application indicate all prescribed trees on the land. The plans also indicate all of these would be removed as part of the development and the SEE seeks consent is sought for this. There are other trees currently present on the land; however, they are not prescribed by the table in Section 5.2 of the DCP and our understanding therefore is they do not require consent for removal. It is considered these details would meet Council's requirements for assessment.

The relevant controls of the DCP are addressed in Section 5.5 of the SEE. Section 5.2 of the DCP is addressed and confirms that the trees indicated on the plans are prescribed as per Table 5.2.1, and that consent is sought for the removal of all prescribed trees on the site. There are no specific controls or objectives under Section 5.2 that require a response. The SEE also outlines that it is considered Section 5.3 of the DCP is not applicable, given the zoning of the land and the minimum lot size not exceeding 0.2 hectares. It is considered Section 5.2 and 5.3 have been addressed.

Council requested a Tree Assessment report be provided identifying all prescribed trees and whether the trees would be removed/retained/pruned. As outlined above, the supporting documentation confirms all prescribed trees are intended to be removed.

Item 9

It appears that the proposed road servicing the development (shown in green) is going to be a Public Road as stated in the Statement of Environmental Effects. This contradicts the Traffic Impact Assessment which refers the development as Road 2 being a private road servicing 21 community title blocks and not 30 torrens title blocks as per the submitted plans.

Figure 1.2 of the Traffic Impact Assessment (TIA) shows Road 2 servicing 32 community title allotments, not 21 as described by Council above.

Section 6.4 of the TIA, states there are 21 community title medium density dwellings *fronting* Private Road 2 and access via a 4m wide drive to 5 pairs and one single dwelling along the northern boundary of Lot 1. This equates to the 32 community title dwellings.

Item 10

The Traffic Impact Assessment (TIA) quotes both Road 1 & 2 as being 7.5m wide which contradicts the submitted plans.

The road width internally within the development does not affect the outcomes of the TIA. The TIA is relied upon to demonstrate there will be no adverse impacts, given there is adequate capacity within the surrounding road network. The degree of saturation, queuing time and average delay are minimal. Service levels remain at Level A for both the AM and PM peak periods to the design horizon. Refer to Figures 6 and 7 below extracted from the TIA.

MOVEMENT SUMMARY

Site: Plumpton Rd AM 2027 with generated & forecast traffic

Plumpton Rd Brindabella Dr

Giveaway / Yield (Two-Way)

Design Life Analysis (Practical Capacity): Results for 1 years

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Plumpton Rd											
1	L2	13	0.0	0.232	5.6	LOS A	0.0	0.0	0.00	0.02	58.2
2	T1	479	0.0	0.232	0.0	LOS A	0.0	0.0	0.00	0.02	59.8
Approach		492	0.0	0.232	0.2	NA	0.0	0.0	0.00	0.02	59.8
North: Plumpton Rd											
8	T1	375	0.0	0.190	0.0	LOS A	0.0	0.0	0.00	0.00	60.0
9	R2	35	0.0	0.032	7.4	LOS A	0.1	0.9	0.49	0.65	52.0
Approach		410	0.0	0.190	0.7	NA	0.1	0.9	0.04	0.06	59.2
West: Brindabella Dr											
10	L2	122	0.0	0.120	7.5	LOS A	0.5	3.3	0.48	0.70	52.1
12	R2	33	0.0	0.091	14.2	LOS A	0.3	2.2	0.72	0.88	47.3
Approach		156	0.0	0.120	8.9	LOS A	0.5	3.3	0.53	0.74	51.0
All Vehicles		1058	0.0	0.232	1.6	NA	0.5	3.3	0.09	0.14	58.1

Level of Service (LOS) Method: Delay (RTA NSW)

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akcelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Figure 6: SIDRA analysis Plumpton Road/Brindabella Drive intersection AM 2027

MOVEMENT SUMMARY

Site: Plumpton Rd PM 2027 with generated traffic & forecast traffic

Plumpton Rd Brindabella Dr

Giveway / Yield (Two-Way)

Design Life Analysis (Practical Capacity): Results for 1 years

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Plumpton Rd											
1	L2	21	0.0	0.138	5.6	LOS A	0.0	0.0	0.00	0.04	58.0
2	T1	269	0.0	0.138	0.0	LOS A	0.0	0.0	0.00	0.04	59.6
Approach		291	0.0	0.138	0.4	NA	0.0	0.0	0.00	0.04	59.5
North: Plumpton Rd											
8	T1	390	0.0	0.198	0.0	LOS A	0.0	0.0	0.00	0.00	60.0
9	R2	121	0.0	0.088	6.5	LOS A	0.4	2.8	0.38	0.60	52.3
Approach		511	0.0	0.198	1.6	NA	0.4	2.8	0.09	0.14	57.9
West: Brindabella Dr											
10	L2	39	0.0	0.030	6.4	LOS A	0.1	0.8	0.33	0.57	52.6
12	R2	12	0.0	0.027	12.0	LOS A	0.1	0.7	0.64	0.79	48.7
Approach		50	0.0	0.030	7.7	LOS A	0.1	0.8	0.41	0.63	51.6
All Vehicles		853	0.0	0.198	1.5	NA	0.4	2.8	0.08	0.14	58.0

Level of Service (LOS) Method: Delay (RTA NSW).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Figure 7: SIDRA analysis Plumpton Road/Brindabella Drive intersection PM 2027

Item 11

The TIA needs to be amended to match the current proposal shown on the plans.

As above. There have been changes to the internal layout of the development subsequent to the preparation of the TIA. However, this does not affect the outcomes of the TIA. The TIA is relied upon to demonstrate there will be no adverse impacts, given there is adequate capacity within the surrounding road network.

Item 12

The "long" Cul-de-sac is 6m wide which narrower than the Council minimum of 7.5m. The road services 30 lots and based on the Guide to Traffic Generating Developments this will generate 10 movements per day per dwelling. This is a total of 300 movements per day with 10% (30) of these assumed to occur in the commuter peak period. Council's Engineering Guidelines have a minimum 7.5m wide carriageway for a maximum of 10 lots. This road configuration does not meet the minimum width or maximum lot number for road width.

The concept DA includes departures from Council's Development Control Plan and Council's Engineering Guidelines. The road design was raised with Council's Strategic Planning Section whereby it was advised departures to the Engineering Guidelines can be supported by Council, in addition to the departures from the Development Control Plan, given its opportunities as a strategic infill site. Consent is sought for the proposed departure from Council's Engineering Guidelines on the following basis:

- The example dwelling layouts provided in support of the application indicate that at least one parking space per dwelling would be provided. It is likely that two parking spaces per dwelling would be provided for most dwellings. This is consistent with Council's off-street parking requirements. No on-

street parking would be necessary. It is noted that future dwellings would be subject to further consideration in separate development applications.

- The site is not bushfire prone.
- The site is subject to overland flow flooding; however, the FIA indicates the egress route to be categorised as H1 hazard level, being the lowest risk.
- The site is intended as a low-speed walkable environment for residents. The road width allows for two 3-metre-wide lanes, which is suitable for such an environment. Council has previously supported other existing cul-de-sacs that exceed 10 lots, including Cowan Place, Dobell Place, and Kilmia Place.
- Poor quality road connections to the site, and the prevention of direct access to Plumpton Road, necessitate an alternative internal road arrangement.
- It is considered the proposed departure in width would be suitable for the subject development, as it responds to site features and would allow intensive infill development as supported by Councils Strategic Planning section.

Item 13

The road width will cause problems for on-street parking. Once a vehicle is parked in the road there is only sufficient width for one vehicle to pass. On the “Long” cul-de-sac servicing 30 lots with potentially several of them having cars parked on the street simultaneously, the proposed width in my opinion will be a poor outcome for road users in the subdivision. It will also potentially cause problems when vehicles are parked opposite driveways for the turning manoeuvre of the vehicle turning out of the driveway. The Traffic Impact Assessment does not address this as it is referring to 21 dedicated visitor parking spaces for the community title development.

As discussed with Council Strategic Planning officers, the provision of off-street parking that exceeds the developments requirements removes the need for vehicles to park on-street. The example dwelling layouts provided in support of the application indicate that at least one parking space per dwelling would be provided. It is likely that two parking spaces per dwelling would be provided for most dwellings. It is noted that future dwellings would be subject to further consideration in separate development applications.

The engineering design consultant considers there would be no safety concerns arising from vehicles temporarily parking on the street. Vehicles parking on the street would also help maintain the low speed environment. It is not expected there would be external traffic entering the development, therefore the road design is not considered to be inappropriate for the impacts that would be generated by the development.

Item 14

Please confirm what the kerb return radius is at the internal T-intersection (Council's minimum standard is 10m). Please confirm what the cul-de-sac radius is (Council minimum standard is 9.5m?)

The engineering design consultant has confirmed the radius can cater for the Austroads 8.8 metre commercial vehicles to turn around.