

5 April 2024

Contact: *Stuart Little*

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Our ref: *D2024/23688*

David Kieran
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Locked Bag 22
GOUBURN NSW 2580

Dear Mr Kiernan,

Planning Proposal to Rezone and Amend Minimum Lot Size on Lots along Brisbane Grove Road, Goulburn (REZ/0005/2122)(PP_2024_291).

I refer to your email of 8 March 2024 requesting pre-gateway comments on a Planning Proposal for Lots along Brisbane Grove Road, Goulburn. We understand that this is a revised Planning Proposal for Brisbane Grove Road as the former Proposal was unable to complete its Gateway conditions within 1 year of determination due to the absence of a Flood Impact and Risk Assessment (FIRA).

The Proposal comprises 22 existing lots covering approximately 83 ha of land with all but one lot lying to the north of Brisbane Grove Road. The land is not serviced by reticulated water or sewer.

The Proposal seeks to rezone the land from part RU1 Primary Production and RU6 Transition to part R5 Large Lot Residential and part C2 Environmental Conservation. The C2 zoning would apply to the areas of highest flooding risk including approximately 32 ha of land incorporating the west of the site and a central overland flow path and a separate area (1.9 ha) of land in the far north-east of the site. Most of the current RU1 area in the west would be zoned C2. Minimum Lots Sizes would also be varied with the R5 land being afforded a 2 ha MLS while the C2 land would be afforded no MLS. A new conceptual subdivision layout Plan shows how the rezoning might be able to deliver a yield of twenty-one (21) 2 ha lots under the proposed zoning and MLS arrangements.

WaterNSW made comments on the earlier Proposal in May 2022 (Our Ref: D2022/35274) and September 2022 (Our Ref: D2022/113583). At that time, the conceptual subdivision layout plan suggested an indicative yield of 27 lots. In our September 2022 correspondence, we indicated that the site held a number of water-related constraints but believed the site was capable of sustaining a R5 zoning and 2 ha MLS based on the zoning and MLS boundaries put forward at that time. We understand that the Biodiversity and Conservation Division of the former Department of Planning and Environment (DPE) later raised a number of issues regarding the flood impact assessment and recommended that a FIRA be prepared to better inform flooding risk. A FIRA accompanies the current Proposal and has informed

further refinements to the Proposal including indicative subdivision layout and lot configuration.

We note that the Proposal and the conceptual subdivision layout plan respond to flooding risk. The C2 zoning applies to land within the Flood Planning Area (FPA) while the conceptual subdivision layout plan demonstrates how building footprints, effluent management areas and water quality treatment dams can be located outside of the Probable Maximum Flood (PMF) limit. While the subdivision layout plan is conceptual and may change or be further refined at later subdivision stage, the approach adopted demonstrates how the site can provide rural residential development under the proposed zoning and MLS arrangement while minimising risks to water quality.

It is not fully clear how the residual C2 zoned land would be managed. The conceptual subdivision layout plan and supporting plans respond to the C2 land by configuring the proposed rural residential allotments to avoid the C2 land thereby limiting rural residential impacts to the proposed R5-zoned land. This approach supports the protection of water quality. The Proposal suggest that the C2 land would be left to agricultural uses, however, it essentially occurs in three discreet areas (west, centre and north-east) and may not easily be managed as a continuum. It is unclear whether the C2 land would be assigned a single or multiple residual allotments? While this is a matter for the later subdivision stage and design, the Proposal would benefit by describing how the C2 land would be managed, particularly as no MLS is being assigned.

WaterNSW has no objection to the Planning Proposal proceeding to Gateway, subject to management of the C2 land being clarified. We ask that we be notified if the Proposal proceeds to public exhibition so that we are given a further opportunity to review the Proposal at that time.

Please note further refinements to the lot layout may be required at subdivision stage depending on further assessment of site constraints at that time and resolution of the C2 zoning issue. The [Water NSW \(2023\) Water Sensitive Design Guide for Rural Residential Subdivisions](#) (Rural Residential Guide) should be consulted when preparing the subdivision development application (DA) for the site. This may also assist in addressing the C2 zoned area.

Our detailed comments are provided in Attachment 1. If you have any questions regarding this letter, please contact Stuart Little at stuart.little@watersw.com.au.

Yours sincerely

A handwritten signature in black ink, appearing to read "Alison Kniha". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

ALISON KNIHA
Environmental Planning Assessment and Approvals Manager

ATTACHMENT 1 - DETAIL

The Site and Proposed Zoning

The site encompasses twenty-two (22) existing lots covering approximately 83 ha of land. The lots are contiguous, for all but one lot.

The Proposal seeks to rezone the land from part RU1 Primary Production and RU6 Transition to part R5 Large Lot Residential and part C2 Environmental Conservation. The RU1 zoned land is currently afforded a 100 ha minimum lot size (MLS) and the RU6 zoned land, a 10 ha MLS. The proposed R5 land would be afforded a 2 ha MLS while the C2 land would be afforded no MLS.

Urban and Fringe Housing Strategy

The site lies within the Precinct 11 Brisbane Grove of the Urban and Fringe Housing Strategy. The Precinct Summary identifies that the lots are unserved by water and sewer infrastructure. It also notes that the Precinct is suited to large lot residential development subject to the resolution of noise and water quality issues. The Strategy recommends to rezone land that is least constrained by topography and environmental constraints to Large Lot Residential, noting that the site will be unserved. It also recommends that a suitable environmental zoning be applied to flood affected land (discussed below). The Proposal is consistent with these requirements.

Subdivision Layout Plan

The Planning Proposal includes a conceptual subdivision layout plan, which shows how the site could accommodate a total yield of 21 lots while meeting relevant site constraints, particularly flooding risk. The subdivision layout plan confines all rural residential allotments (and related impacts) to the proposed R5 zone. This protects water quality but may have some unintended consequences for the management of the C2 land (see below).

For this Proposal, the conceptual subdivision layout plan and associated Wastewater Management Site Plan distinguish between building envelopes (600 m²), effluent disposal areas (100 m²), and new farm dams (water quality treatment measures (200 m²)). We have treated the subdivision layout plan as indicative of how the site can accommodate a proposed R5 and 2 ha MLS arrangement while responding to key site constraints such as flooding.

C2 Environmental Conservation - Zoning

It is unclear how the residual C2 zoned land would be managed practically. The conceptual subdivision layout plan and supporting plans (e.g. Wastewater Management Site Plan) respond to the C2 land by configuring the proposed rural residential allotments to avoid the C2 land thereby limiting rural residential impacts to the proposed R5-zoned land. This approach supports the protection of water quality. However, there appears to be no split zoning or residual allotment in the design to secure the management of the C2 land. The Proposal discusses the C2 zoning in the west of the site (page 15) but this zoning also occurs along the overland flow corridor in the centre of the site and as an

isolated pocket in the north-west corner. The Proposal described how C2 land would be left to agricultural uses (page 30) but it is unclear how this will work in the central overland flow corridor and in the north-east and whether these areas are to be assigned a single or multiple residual allotments? While this is more a matter for the subdivision DA stage, the Proposal would benefit by further describing how the C2 land would be managed, particularly as no MLS is being assigned.

Servicing

The land is not serviced by reticulated water or sewer. Future lots would be reliant on on-site rainwater collection and on-site wastewater management systems.

Watercourses and water features

The site is bordered by the Mulwaree River in the north. A second order watercourse also bisects the site flowing in a south-north direction before entering the Mulwaree River north of the Planning Proposal area. The watercourse is also an overland flow path and carries an associated localised flooding risk (see below). The Mulwaree River and central watercourse act as site constraints.

The site includes nine (9) existing farms dams, five of which are sited along the existing drainage channel. Eight new small dams are also proposed as water quality treatment measures to manage stormwater runoff from new proposed internal roads. There is also one registered groundwater bore site on proposed Lot 1 (existing Lot 39 DP 976708). The presence and location of drainage features, farm dams and groundwater bores influence the location of Effluent Management Areas (EMAs) (see below).

Response to Flood Risk

The Proposal responds to Flood Risk by siting the proposed C2 zone to coincide with the riverine and overland flow Flood Planning Area (FPA) as presented in Figure 29 (P. 54). We support this approach but ask Council to satisfy itself that the zoning boundary aligns with the overland flow FPA as presented in Figure A9 of the supporting FIRA. We note that the entire site lies outside the FPA for riverine flooding risk (see Figure 9 of the Planning Proposal, page 22).

The conceptual subdivision layout plan has been designed to respond to flooding risk and demonstrates how a 2 ha MLS can be provided for potentially 21 lots while keeping building envelopes outside of the FPA and PMF (see Figures A9 and A7, of the FIRA, respectively).

For this Proposal, the building envelopes do not include wider impact areas such as EMAs. The location of potential EMAs is presented in Appendix 10b, which shows a wastewater management layout plan for the site. When Appendix 10b is compared to the PMF hazard as presented in Figure A7 of the FIRA, it is apparent that the EMAs can be positioned outside the PMF.

Appendices 10b and 10c also show the potential position of eight new small dams for stormwater management and treatment for the new proposed internal roads. When

these appendices are compared with Figure A7 of the FIRA, it is apparent that the stormwater management dams can also be positioned outside the PMF for overland flow and riverine flooding. Ensuring that EMAs and stormwater management dams can be located outside the PMF maximises water quality protection and minimises the risk of water contamination during flood events. We note and support this approach.

Effluent Management Areas

It is unclear whether the drainage channel associated with the second order watercourse is incised or whether it acts as a drainage depression in the landscape. The Proposal refers to the feature as a drainage path, drainage channel, and drainage depression. The Wastewater Management Site Plan (Appendix 10b) assumes it to be a drainage depression warranting a 40 m EMA buffer. All EMAs meet this 40 m buffer distance. If the channel is incised, a 100 m buffer will be required for the EMAs. While this buffer distance is not depicted on the Plan, it is apparent that the EMAs are generally meeting this distance. There is also available room on the proposed lots should more distance be required. The contingency of a 100 m buffer requirement does not appear to affect the MLS or zoning configuration, nor, at face value, the conceptual lot design. The exact EMA distances and positioning of the EMAs can be further addressed at subdivision stage along with any further refinement of lot boundaries should this be necessary.

The Planning Proposal indicates that there are nine (9) existing farm dams on site and eight (8) proposed new dams for water quality treatment associated with new internal roads. While the existing farm dams are not depicted on relevant maps, they can be distinguished in the aerial imagery underpinning the Wastewater Management Site Plan (Appendix 10b). This site plan also shows the location of the eight (8) new small dams proposed for water quality treatment associated with the new internal road network. The proposed EMAs all appear to meet the required 40 m buffer distances from farm dams. The location of the EMAs with respect to proposed EMA buffer distances can be further refined at subdivision stage.

The Planning Proposal indicates that there is one current groundwater bore on site. The supporting Water Cycle Management Study (WCMS) (Appendix 10a) and Preliminary Site Investigation (PSI) (2022) report notes that it is authorised for stock and domestic purposes. The Planning Proposal notes that the bore and nearby farm dam are proposed to be decommissioned to enable the construction of the western internal access road (Planning Proposal, P. 41). The Wastewater Management Site Plan assumes that the bore is decommissioned. The EMA for proposed Lot 1 is also approximately 100 m from the bore and farm dam, should the bore be retained. The bore does not operate as an additional constraint.

Based on the PSI report, there are 18 registered bores within 1 km of the site. None of these occur within 100 m of the site. The location of these groundwater bores does not influence the location of EMAs on the site.

Any new rural residential development will also need to ensure that EMAs are located at least outside the 1:100 flood zone to prevent effluent entering rivers or watercourses (see Table 3.1 (page 43) of the WaterNSW (2023) [Water Sensitive Design Guide for Rural Residential Subdivisions](#)). The Wastewater Management Site Plan shows that how all EMAs can be located outside the PMF which is a higher level than the 1:100 flood zone. The conceptual subdivision design meets this requirement.

Water Cycle Management Study (WCMS)

The Proposal includes a new Water Cycle Management Study (WCMS) dated 10 February 2024, which includes a stormwater quality assessment, consideration of stormwater drainage and flood impacts, and a wastewater management assessment. The document is based on the conceptual subdivision design that delivers 21 lots.

The WCMS refers to the former 2021 version of the Water Sensitive Design Guide for Rural Residential Subdivisions, the 2019 version of Using MUSIC in Sydney's Drinking Water Catchment, and 2018 version of the Developments in the Drinking Water Catchment – Water Quality Information Requirements. The latest version of all these documents is 2023 and they are available from the following weblink: <https://www.waternsw.com.au/water-services/catchment-protection/building-and-development>. The report also refers to the former provisions of State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011 rather than the current provisions that apply to the Sydney Drinking Water Catchment as provided under Part 6.5 of State Environmental Planning Policy (Biodiversity and Conservation) 2021 (B&C SEPP).

The stormwater modelling is based on the development incorporating grassy swales and eight (8) small farm dams for water quality treatment associated with impacts from the internal access road. Existing dams have been excluded from any water quality assessment as they may already be performing a water quality or attenuation benefit. The report notes that all proposed roads and water quality treatment measures are above the PMF. We note that there is sufficient room above the PMF to accommodate the necessary stormwater treatment measures as well as building footprints and EMAs.

The wastewater assessment includes consideration of the Rural Residential Guideline and the accompanying Wastewater Management Site Plan shows the location of indicative EMAs taking into account relevant environmental constraints (previously discussed). EMAs are located outside the PMF limit. The WCMS takes account the presence and location of the drainage depression, the flooding risks associated with the site, and the location of farm dams. Plume summaries are also provided, although these are somewhat difficult to interpret as the maps are based on the current rather than proposed lot boundaries. However, the Wastewater Management Site Plan shows how EMAs can be accommodated above the PMF and there appears to be sufficient land available to contain effluent plumes within proposed lot boundaries. This aspect can be examined in further detail at subdivision stage. The WCMS also notes that further detailed site analysis and onsite wastewater management design will need to be undertaken at later development stages.

Contamination Risk

WaterNSW examined the updated Preliminary Site Investigation (PSI) (dated August 2022) and responded to that report in our previous correspondence of 26 September 2023. We noted that the updated PSI report satisfactorily addressed our earlier concerns and covered the preliminary contamination risk for the Planning Proposal. The PSI report recommends the preparation and implementation of a Construction Environment Management Plan (incorporating an unexpected finds protocol) during any future construction works at the site. If fill is to be disposed of off-site, the report recommends an assessment of material in accordance with NSW EPA (2014) Waste Classification Guidelines, Part 1: Classifying before waste is removed. We agree with these recommendations and believe they can be implemented at DA stage.

Biodiversity and Conservation SEPP

The Proposal takes into account and responds to Part 6.5 of the B&C SEPP. It notes that the site is not serviced by reticulated sewer or water, and that all lots would be required to provide on-site rainwater collection and on-site wastewater management systems. Reference is made to riverine and overland flow flooding risks and the supporting WCMS and Wastewater Management Site Plan. Based on the overall site size (approximately 83.8 ha) and 2 ha MLS and given that the highest risk flood-prone areas are excluded from the development. The response identifies that the Proposal has the ability to deliver neutral or beneficial effect (NorBE) outcomes for water quality.

The Proposal notes that a NorBE assessment would be undertaken as part of any future development application for the site and that WaterNSW concurrence would also be required. The response also flags that Water NSW's current recommended practices (CRPs) should be incorporated into any new development. We note and agree with these statements. Please note that section 6.63 of the B&C SEPP requires development to be consistent with the WaterNSW [NorBE Guideline](#). The Guideline provides the pathway for the adoption of CRPs for new development in the SDWC. The [Water NSW \(2023\) Water Sensitive Design Guide for Rural Residential Subdivisions](#) (Rural Residential Guide) is particularly relevant and should be consulted during the preparation of the subdivision DA for the site.

Ministerial Direction 3.3 Sydney Drinking Water Catchment.

The Proposal includes a very detailed response to Direction 3.3 Sydney Drinking Water Catchment. In summary, the Proposal explains how the site is not serviced by water or sewer, with no plans to extend the town's sewer and water network to this location. The response takes into account site constraints including riverine flooding risks, it addresses the presence of the drainage feature and the overland flow flooding risk, and considers the presence of new and existing farm dams and the existing water bore (which is to be decommissioned as previously explained). The response refers to the WCMS and Wastewater Management Site Plan and responds to the constraints stated, explaining how dwelling pads, new dams, and EMAs are proposed to be located outside any areas of flood inundation including the PMF flood extent. The Proposal also discusses how restrictions associated the C2 zoning

(which aligns with the FPA) will prohibit EMAs and uses ancillary to the residential development from the higher flood risk areas.

The Proposal concludes that it is consistent with Direction 3.3. We agree with this statement.

Strategic Land and Water Capability Assessment (SLWCA)

The response to Direction 3.3 includes statements summarising key elements of our previous responses (9 May 2022 and 26 September 2022). It also includes a copy of the Strategic Land and Water Capability Assessment (SLWCA) for the site which we previously provided. This is based on the site delivering unsewered residential lots (4,000 m² – 2 ha). The SLWCA shows that the water quality risk to the site varies from LOW to EXTREME. The area of EXTREME risk coincides with the overland flow risk area which is to be afforded C2 zoning. Areas of EXTREME risk have a VERY LOW capability for the stated use. Most of the site carries a LOW to MODERATE water quality risk. These areas have a HIGH and MODERATE capability for unsewered development, respectively.

The following limitations need to be considered in relation to the SLWCA outcomes:

- Flood risk is not one of the factors influencing the outcomes of the SLWCA, so water quality risks for flood liable land may be underestimated. This is particularly relevant to the areas in the west of the site that are subject to riverine flooding risk.
- We observe that the areas of EXTREME risk have been informed by earlier watercourse mapping and do not fully accord with the latest [hydrography](#) layer from Six maps. However, this has minimal implications for this Proposal given that the C2 zoning is encompassing the FPA and given that the conceptual layout plan demonstrates how building footprints, stormwater controls and EMAs can be located outside the PMF.