Appendix 7e_Water NSW Pre-gateway Referral_5 May 2022

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Contact: *Stuart Little*
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Our ref: *D2022/34298*

David Kiernan
Senior Strategic Planner
Goulburn Mulwaree Council
Locked Bag 22
GOULBURN NSW 2580

Dear Mr Kiernan,

Planning Proposal for 'Allfarthing' – 2 Brisbane Grove Rd, Goulburn (REZ/0003/2122) (PP_2021_6932) -Pre-Gateway Referral

I refer to the Pre-Gateway Referral of the Planning Proposal for 'Allfarthing' – 2 Brisbane Grove Rd, Goulburn. This is a proponent-led proposal that affects 34.8 ha of land comprising twelve existing lots (Lot 60 DP 1090981, Lots 61 to 64 and 71 to 77 DP 976708) and which is bounded by roads on three sides (north, south, west).

The Proposal seeks to rezone the land from RU6 Transition to R5 Large Lot Residential and to amend the minimum lot size (MLS) from 10 ha to 2 ha. It also proposes that an area of land be zoned C2 (Environmental Conservation) to equate with the areas subject to the most frequent and severe impacts from overland flooding (Figure 4 of the Proposal). Areas zoned C2 will be afforded a 100 ha MLS. It is envisaged that the rezoning and other MLS amendments will facilitate a total lot yield of 16 rural residential lots.

WaterNSW believes that the Proposal needs further refinement before exhibition. This includes providing more clarity about the flooding risk and the documents used to support the analysis of this risk. Some refinements to the C2 boundary and associated 100 ha MLS may be needed, but this will depend on the nature of the additional flood risk information presented. The site also appears to be affected by drainage, water ponding, soil depth issues and other constraints which may affect the nature and location of Effluent Management Areas (EMAs). These matters may also affect the proposed subdivision configuration and expected yield at development application (DA) stage.

There are some other shortcomings with the current Proposal. For example, the concept subdivision layout plan presented in Appendix 3 differs from the layout presented in various Figures in the Proposal (e.g. Figures 7 and 12). Ideally this should be reconciled with all figures being consistent with the concept design before the Planning Proposal is exhibited. A number of appendices are also still being finalised and we have not been able to access all the supporting technical documents. Of note is that the Proposal refers to a draft Brisbane Grove and Mountain Ash Precinct-specific Development Control Chapter which would apply to this area, but this is still being drafted.

We ask that we be referred the Planning Proposal again at exhibition stage so that we can better understand the nature of the Proposal, its relationship to flooding risk and further examine the configuration of the proposed C2 zoning. Referral at exhibition stage will also enable us to consider the Proposal in concert with the proposed DCP Chapter and supporting technical documents.

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

Yours sincerely

DARYL GILCHRIST
Manager Catchment Protection

ATTACHMENT 1 - DETAIL

Urban and Fringe Housing Strategy

The Brisbane Grove Precinct is included in the Goulburn Mulwaree Urban and Fringe Housing Strategy (UFHS), including the area that is the subject of this Proposal. The UFHS identifies that Brisbane Grove area is not currently serviced by water and sewer. The UFHS proposes rezoning the least environmentally constrained land to Large Lot Residential zoning (un-serviced) and for Environmental (Conservation) zones to be considered for flood affected land. The Proposal conforms with the UFHS with regard to these matters. The UFHS also considers the area suited to Large Lot Residential development, subject to the resolution of noise and water quality issues (see below). The UHFS includes a constraints and opportunities analysis which is replicated in Figure 5 of the Planning Proposal. No other major constraints are identified for the site at this broad scale.

Watercourses and water features

The site is constrained by a first order drainage feature in the south-west, affecting existing lots 74 and 75. This feature and the associated flooding risk in this area, affects the capability of land in this location to be rezoned for rural residential development. This constraint will need to be taken into account in the final subdivision design. We note that there are existing farms dams on site and that these are to be replaced with seven farms dams (see Water Cycle Management Study). The drainage feature and location of dams will need to be taken into account when locating effluent management areas (EMAs) and in the application of appropriate buffer distances (see below).

Water Cycle Management Study (WCMS)

A Water Cycle Management Study (WCMS) has been prepared (see Appendix 7 of the Proposal). This includes a site description, a stormwater quality assessment for the civil works required at subdivision stage and to satisfy the Neutral or Beneficial Effect (NorBE) test on water quality, the potential for overland stormwater flow and flood-related impacts, and a wastewater assessment for the future proposed lots.

We make the following comments:

- The information presented indicates that a NorBE will likely be achieveable at subdivision stage, subject to appropriate measures and controls being implemented. There appears to be sufficient land area for the proposed rural residential use, although the exact location and nature of control measures will need to be determined at later DA stage.
- It needs to be confirmed that the subdivision layout presented in Appendix 3 is the layout plan considered and assess in the Planning Proposal. Based on the individual lot configurations included at the back of the WCMS for the Wastewater Effluent Model (WEM) Plume Map Summaries (Pp 50-65), it appears that the WCMS is based on a different lot configuration, particularly in the south-west. The overland flood hazard maps (Figures 7 and 12 of the Proposal) also appear to have a different layout to that presented in Appendix 3.
- We note the inclusion of the stormwater modelling and that there is sufficient land to accommodate appropriate stormwater management measures on the site. The site is, however, affected by some drainage issues and soil constraints.
- It is unclear how the stormwater flow and hazard events have been incorporated into the Planning Proposal and whether these have been used with other flooding information to inform the overland flow maps presented in Figures 7 and 12 of the Planning Proposal.
- The WCMS (P. 27) identifies that potential building envelopes have been identified and that nominated effluent management areas are presented on an accompanying site plan (Ref 0030321-O1). We have not had access to that plan in this initial assessment. The site plan is important as it will have a bearing on the capacity of the lots in the south-western areas to sustain dwellings as well as EMAs while meeting necessary setbacks and site constraints.
- The WCMS (P.27) also identifies there are areas of poor stormwater drainage in some of the lots along the southern, western and north-western portions of the property. The northwest section of the property is also subject to periodic inundation during extreme rainfall

events. This together with other constraints may impact on effluent management opportunities. The WCMS identified that a detailed site analysis and design will be required at the time of future residential land development. We also agree that these matters need to be examined in detail at subdivision stage.

- The WEM plume map summaries don't have a scale and it is not possible to understand the location of the EMA sites and expected plumes with respect to the land and the overland flow and flood-risk constraints present.
- Drainage and soil depth are identified as a potential constraint throughout the property with phosphorus and sorption capacity and permeability being identified as issues in the southern portion of the property (P. 29). These matters may influence the location of EMAs.

Subdivision Design

The Proposal includes a concept subdivision layout to help how the subdivision configuration and design responds to land constraints, watercourses, flood risk, access, and accessibility etc. All lots will have direct access to either existing roads or a new internal road. Based on the maps presented, future Lot 10 is significantly constrained by the watercourse and overland flow flooding risk. Proposed lots 8 and 9 are also constrained. Further clarification of flooding risk may result in modification of the C3 zoning boundary and require a reconfiguration of the subdivision design in this area.

Constraints for Unsewered development

New unsewered development will need to meet necessary effluent management area (EMA) buffer distances and be at least 100 m from the watercourses and at least 40m from farm dams and drainage depressions. The NorBE tool also considers flooding risk for the 1 in 50 ARI event (roughly 2% AEP) which influences the risk profile level in the wastewater modelling. Lower risk levels could automatically be met by locating EMAs outside the flood prone area based on using the 2% AEP as a minimum standard.

Given the above, it would be useful for the Proposal to present a map showing the watercourse and the 2% AEP flood risk boundary, the Flood Planning Constraint Categories 1 and 2 in relation to the Draft Flood Risk Management Study (Figure H1 of the Strategy), and the relationship to the overall C2 boundary. This information could be used to help define the C2 boundary, thereby helping inform the limits to EMA locations and, in turn, overall subdivision design. Later development could then be more confident that flooding risk would not constrain or restrict the ability of the future development to have a NorBE on water quality.

Flood Risk

The Urban and Fringe Housing Strategy (UFHS) identifies that land in the Brisbane Grove precinct are subject to flooding and recommends that environmental zoning be applied to flood-prone land. The recent draft Floodplain Risk Management Study (FRMS) and Plan (FRMP) incorporates some of the Brisbane Grove land within its Study Area.

The Proposal seeks to use C2 zoning to address the overland flow flooding risk. The C2 area also includes the drainage feature previously mentioned. We generally support this approach the Proposal needs to be clearer on how flooding risk has been considered (see below)

The Planning Proposal draws from maps showing the 1 in 100 year event and Probable Maximum Flood Limit (PMF) (P15-16), noting that the northern section of the site is subject to the PMF. The Planning Proposal should clarify the source of these maps as they do not appear to be associated with the current draft FRMS. These maps and supporting information identify that the site is affected by riverine flooding in the north during extreme events and overland flow flooding in the south-west.

The Proposal also draws from the FRMS to help support the C2 zoning configuration in the south-west corner. The overland flow corridor maps (Figures 7 and 12) appear to draw from the FRMS but it is not clear from which Figures they are drawing from. These maps are also presented as 'overland flow corridor' maps when the FRMS mainly addresses the risk from riverine flooding rather than overland flow which is more associated with stormwater and addressed by the site-specific WCMS. Greater clarity is required as to what Figures 7 and 12 are presenting and where they originate.

What appears to be missing from the Proposal are overlay maps of the subject site area with the Flood Risk Constraint Categories (FRCC) mapping and, importantly, the Flood Planning Area (FPA) mapping presented in Figures H1 and 8 of the draft Goulburn Floodplain Risk Management Plan (FRMS).[1] While the Proposal currently includes a table describing the different FPCC categories (P.32), this is related to Figure 6 which isn't based on these categories but depicts a PMF and 1 in 100 event. It is possible that the table on page 32 relates to Figure 7 and 12. Again, more clarity is required.

The Planning Proposal would benefit by including a FRCC map and FPA map based on Figures H1 and 8 of the FRMS. It also needs to clarify the origins of the current overland flow and flood risk maps. This is required to demonstrate how the C2 zoning and proposed subdivision configuration relates to the flooding risk. This is particularly important given that development in the adjoining R5 land will be unsewered and therefore presents increased nutrient and pathogen risks during flood events.

Contamination Risk

The Planning Proposal notes that the subject site is not identified on Council's contaminated land register or identified as significantly contaminated land (P. 18). However, past agricultural activities have been undertaken on the site and these are listed as a potentially contaminating use within Table 1 of contaminated land planning guidelines. Ministerial Direction 4.4. Remediation of Contaminated land therefore applies.

The Proposal includes a consideration of contamination risk based on a Preliminary Site Investigation (PSI) Report which is included in Appendix 9. The PSI has been informed by available desktop information and a site walkover. It identifies that, potential sources of contamination and associated 'contaminants of potential Concern (CPOC)' are confined to areas of fill (associated with current buildings on the site, driveways and the farm dam wall) and current site buildings.

The PSI report notes that while there is a contamination risk associated with the fill, there is limited quantity and that only a small amount of 'hazardous building materials' is potentially present. It concludes that an intrusive investigation is not required at this stage, but recommends that a hazardous building assessment and construction environment management plan (incorporating an unexpected finds protocol) be prepared and implemented during any future construction works at the site. The report also notes that any fill that is to be disposed of off-site needs to conform with the NSW EPA (2014) *Waste Classification Guidelines, Part 1: Classifying Waste* guideline. The PSI considers that the site is suitable for proposed residential subdivision following implementation of the above recommendations. WaterNSW supports these recommendations and believes that these matters can be addressed at development application (DA) stage.

Sydney Drinking Water Catchment (Chapter 8 of the Biodiversity and Conservation SEPP)

Section 3.5.1 of the Proposal gives due consideration to the statutory requirements that apply to the Sydney Drinking Water Catchment (SDWC) under the B&C SEPP (P. 15). The Proposal outlines the aims of the SEPP and its requirements restricting development consent from being granted unless new development has a neutral or beneficial effect (NorBE) on water quality.

The Proposal responds to these requirements by discussing riverine flooding risks, the overland flow corridor in the south-west of the site, and the submitted WCMS.

The Proposal notes that a NorBE assessment will be undertaken as part of the DA process and that WaterNSW concurrence would be required for such applications. It also advocates that WaterNSW's current recommended practices (CRPs) be incorporated into any new development. We note and support these statements.

Direction 3.3 Sydney Drinking Water Catchment

The Planning Proposal gives due consideration to Direction 3.3 Sydney Drinking Water Catchments, listing the objectives and requirements of this Direction. It provides a comprehensive response to

[1] The FRMS would also benefit by including maps overlaying the proposed development areas of the UFHS with the Figures H1 and 8 of the FRMS to help determine the flood risk categories of these sites and their relationship to the flood planning area (FPA), respectively.

the Direction referring to the WCMS and flooding risk to the site. The above comments on those matters equally apply to the WCMS and flooding risk information contained here.

The Direction requires for the Planning Proposal to be consistent with Chapter 8 of the State Environmental Planning Policy (Biodiversity and Conservation) 2021 (the B&C SEPP) and to give consideration relevant Strategic land and Water Capability Assessments (SWLCAs) prepared by WaterNSW. The former requires new development to have a NorBE on water quality. Therefore, Planning Proposals and rezonings need to be designed so that there is a reasonable likelihood that that can be achieved at development application (DA) stage. The WCMS is relevant to this outcome. With regard to the SLWCA requirement, we provide a SLWCA map in Attachment 2 and an analysis of the SLWCA outcomes below.

In response to Direction 3.3, the Proposal recognises that the overland flow flooding risk presents an issue for effluent disposal. The Proposal notes that while most of the land would fall outside areas of flooding constraint, proposed lots 8 to 11 are most constrained with dams, dwelling envelopes and the EMAs likely falling within the highest risk areas. It proposes to address this by zoning the highest risk lands (red and blue areas) C2 Environmental Conservation. We generally support this approach, but as indicated above, require further information on the flooding risk and exactly how the boundary of the C2 land has been determined

We note that 'dwellings' are prohibited on land zoned C2 in the Goulburn Mulwaree Local Environmental Plan 2009 (LEP). Wastewater treatment measures such as wastewater systems and EMAs would similarly appear to be prohibited if proposed on their own. The Proposal would benefit by providing a brief description of characterisation, noting that EMAs are likely to be ancillary to new dwellings. It then needs to consider whether the EMAs would likely be prohibited due to the C2 zoning itself or due to such areas being ancillary to (but necessary for) the residential development and therefore 'prohibited due to them being 'characterised' as residential development. Either way, the C3 zoning operates as a significant constraint to development (and associated ancillary uses) in this area. It may be helpful for Council to include DCP provisions that outline the constraints of the C3 land, so that this can inform development design from the outset.

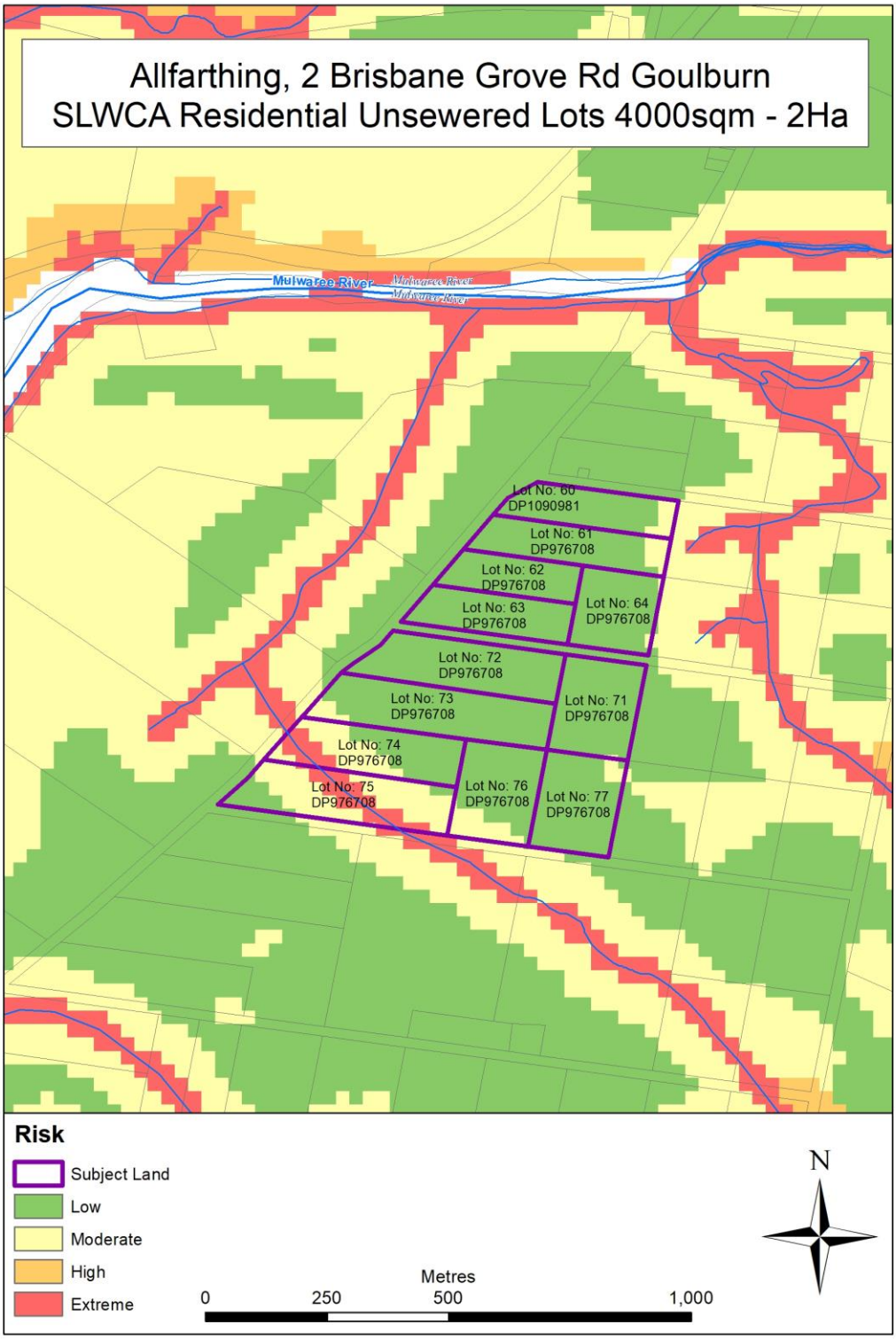
The Planning Proposal notes (P. 29) that the overland flow corridor and the C2 Environmental Conservation zoning is likely to require reconfiguration of lot boundaries, alongside dams, dwelling envelopes and EMAs in the south-east section of the site and prior to a DA being lodged. We concur with these observations. Dwellings and ancillary development such as wastewater treatment systems and EMAs also need to be suitably sited to avoid adverse impacts on water quality as stated in the Proposal (P. 29).

Strategic Land and Water Capability Assessment

WaterNSW has prepared a Strategic Land and Water Capability Assessment (SLWCA) for the site. The most applicable SLWCA is for unsewered residential lots (4,000 sqm – 2 ha). The outcomes of the SLWCA is presented in Attachment 2. The SLWCA shows that the water quality risk to the site varies from LOW to EXTREME. The areas classified as EXTREME are associated with the watercourse affecting land in the south-west corner of the site. Most of the northern area of the site carries a LOW water quality risk. Areas of LOW risk generally have a HIGH capability for unsewered development while areas of EXTREME risk have a VERY LOW capability. We encourage unsewered development to be located in areas of LOW to MODERATE risk.

Please note that the variables influencing the outputs of the SLWCAs include distance to water courses, but do not include flooding risk.

ATTACHMENT 2 – MAPS



Map 1. SLWCA Unsewered Residential development (lots 4,000 m^2 to 2 ha) for 'Allfarthing', 2 Brisbane Grove Rd Goulburn