

Design Review Response

# Riverwood Estate State Significant Precinct

Prepared for: NSW Land  
and Housing Corporation  
Date: 29 April 2022



# Riverwood SDRP 01



GOVERNMENT  
ARCHITECT  
NEW SOUTH WALES  
Advice Letter

SDRP 01

7<sup>th</sup> December 2020

Adriana Malin

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RIVERWOOD STATE – LAHC MASTERPLAN

STATE DESIGN REVIEW PANEL Session 67 – 2<sup>nd</sup> December 2020

Dear Adriana,

Following the first State Design Review Panel session for the master planning of LAHC Riverwood State, please find our summary of observations and recommendations.

Overall, the proposal provides a well-reasoned and well-developed response to the site. Positive aspects of the proposal that should be maintained as the design develops include:

- the approach to building on the existing street layout but improving its permeability to support walkability, cycling and improved access and connections to the surrounds
- the intent to preserve existing trees and integrate them into future public spaces and road reserves
- the level of intensification, including density and housing typologies, which contribute to deliver housing policy targets while also improving the urban amenity of the area. However, it is noted that further evidence is required that the wider area can support the proposed level of intensification
- the commitment to upgrading local infrastructure and utilities, including the undergrounding of electrical and other utilities overheads
- the proposed design targets which can provide a useful reference for monitoring the development of the design and the project implementation.

We request the following matters be addressed at the next SDRP session. The landscape aspects of the proposal should be presented by the nominated landscape architect, JMD, as indicated in the SDRP Project Information Form.

#### Connection to Country

As a state government led initiative, it is important that the project leads by example to demonstrate how it will contribute to the health and wellbeing of Country. For guidance on this matter please refer to the recently published Better Placed [Connecting with Country Draft Framework](#).

#### Urban structure

- As noted, please provide evidence that the site and the wider area have the capacity to support the proposed level of intensification and any necessary mitigation measures. For example, in relation to public space, school capacity, the road network and the town centre

- The approach to restructuring the organising grid is supported, however it can be more nuanced. The introduction of rectilinear links into the existing curvilinear grid will generate distinctive spaces and viewpoints that should be celebrated with the positioning and articulation of the built form. This can assist with creating variety, improving wayfinding and creating a sense of place
- The intent of providing tree lined streets with dedicated spaces for socialising and active transport is supported. However, it is recommended that the street cross sections have a width of minimum 20 meters (rather than 15.7 meters current minimum). This width is considered more appropriate for the density and building heights proposed. Consider locating the seating zones on the internal side of the footpath with the seats facing the street
- Integrate civil considerations for the upgrading of the street network and siting of built forms to ensure impacts on existing trees are minimised. These should be captured in a grading plan.
- Discuss the proposed WSUD strategy for the project area, including the water budget and proposed initiatives for water storage and reuse. Identify any synergies and opportunities for water management integration with the Salt Pan Reserve.

#### Interfaces

Provide further information on built form interfaces, including cross-sections, along:

- Kentucky Road and Salt Pan Reserve, illustrating approach for integrating levels and long and short view lines
- Belmore Road
- The residential uses to the south boundary of the project area.

#### Public Space and tree canopy

- Clarify the existing tree canopy coverage and provide further detail on the breakup of proposed tree canopy (public – private spaces)
- Complement the plan that identifies the trees to be kept with a plan mapping the trees proposed to be removed
- Discuss any existing issues and opportunities in relation to CEPTED considerations and illustrate how findings inform the design of proposed public spaces
- Provide approach for lighting public spaces to support activity and sense of safety
- Distributing community gardens across the site is supported. Provide further information on the character and functions for proposed public spaces.

#### Built form

- Identify where basement carparks will be located, ensuring footprints and entrances will not be detrimental to the urban amenity or impact existing and proposed trees.

#### Housing mix

- Outline the existing and proposed break up of private to social housing, including housing types, distribution and GFA
- The intent of achieving Silver Standard for all social housing dwellings is noted and supported. Please provide further information on the existing and proposed break up or intent for social housing including types and distribution

#### Social infrastructure

- Increasing the provision, quality and distribution of local open spaces is supported. Please elaborate further how the existing character and features that the community values about the place can be integrated and celebrated in the new and existing public spaces
- Provide further detail about proposed non-residential uses, their location, type and how these can contribute to local employment opportunities for social housing residents
- Provide further information on the logic and expected provision of social infrastructure, specifically the type and location of what is being proposed
- Outline any opportunities for contributions to the improvement and integration of Salt Pan Reserve
- Generally, identify how the project will contribute to public benefit beyond through the provision of improved public housing, and how it will address Local Strategic Planning Statement objectives

#### Zoning

- Recommend that the area proposed to be zoned B4 (mixed use) be zoned B2 (local centre) instead. This better aligns with Council's classification for centres in their Local Environmental Plan.

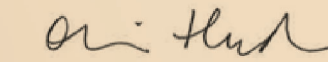
#### Implementation

- The logic of prioritising the southern portion of the site to deliver social housing first, close to public transport and improving the provision and quality of local public space is understood. The need to create a tenant relocation approach that minimises the impact on social housing residents is also acknowledged and supported. However, this approach also poses the challenge that construction works for later stages will negatively impact the quality and amenity of newly delivered urban infrastructure. Please address how the project will manage this issue.
- Recommend adding to the design targets one by which social housing residents will only need to move once, and provide a diagram indicating how this can be achieved.
- Demonstrate the range of development controls and other initiatives proposed to ensure the design vision and intent is delivered. This should include effective controls and mechanisms for:
  - carparking provision and how to avoid negative impacts on existing and proposed trees and urban amenity
  - achieving the the intent for built form envelopes (e.g. good solar access, cross ventilation, aspect, view lines, etc.) when transitioning to development procurement and implementation
  - principles for the provision and location of social housing dwellings
  - achievement of quality public space outcomes as illustrated
  - achievement of quality built form outcomes as illustrated

Mechanisms could include requirements in the development brief, development controls, design excellence and design integrity strategies and/or Voluntary Planning Agreements. Please identify what mechanisms will be used and for what purposes.

Please contact Melizza Morales if you require further clarification. We look forward to seeing how the design evolves.

Regards,



Olivia Hyde  
Director Design Excellence, GANSW

#### Attendees:

Olivia Hyde	DRP Chair	GANSW
Helen Lochhead	DRP Panellist	
Garth Paterson	DRP Panellist	
Matthew Pullinger	DRP Panellist	CBCC
Melizza Morales	Design Advisor	GANSW

Adriana Malin	Client	LAHC
Richard Wood	Client	LAHC
Gilead Chen	Client	LAHC
Greg Burgon	Design Team	Architectus
Nick Capetta	Design Team	Architectus

Peter Poulet	Observer	GSC
Shona Porter	Observer	CBCC
Mitchel Noble	Observer	CBCC
Marly Bishop	Observer	GRCC
Catherine McMahon	Observer	GRCC
Laura Locke	Observer	DPIE
Eva Stanbury	Observer	DPIE
Rene Coull	Observer	DPIE
Marcus Jennejohn	Observer	DPIE

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Summary of response

# SDRP 01 2nd of December 2020

<b>Connection to Country</b>	
As a state government led initiative, it is important that the project leads by example to demonstrate how it will contribute to the health and wellbeing of Country. For guidance on this matter please refer to the recently published Better Placed Connecting with Country Draft Framework.	LAHC is currently developing a tailored Implementation and Measurement Framework for the Riverwood Renewal project. The purpose of the framework is to guide the integration of Connecting with Country principles into the next stages of development, planning and design of the project. This framework will include a range of measures that will be undertaken, including working groups and ongoing consultation with GANSW to ensure and reinforce connection with Country across all future stages of the development.
<b>Urban structure</b>	
<ul style="list-style-type: none"> <li>As noted, please provide evidence that the site and the wider area have the capacity to support the proposed level of intensification and any necessary mitigation measures. For example, in relation to public space, school capacity, the road network and the town centre</li> </ul>	<p>The following studies assess the capacity of the site and the wider areas to support the redevelopment, and proposes mitigations:</p> <ul style="list-style-type: none"> <li>Traffic and Transport Assessment by TTPP (Attachment J of the Planning Report)</li> <li>Community and Social Infrastructure Needs by Cred Consulting (Attachment D of the Planning Report)</li> <li>Infrastructure Services Report by Mott MacDonald (Attachment R of the Planning Report)</li> </ul> <p>The masterplan addresses all of these needs as is highlighted in Attachment M, the design review response (SDRP02 Urban Structure 01).</p>
<ul style="list-style-type: none"> <li>The approach to restructuring the organising grid is supported, however it can be more nuanced. The introduction of rectilinear links into the existing curvilinear grid will generate distinctive spaces and viewpoints that should be celebrated with the positioning and articulation of the built form. This can assist with creating variety, improving wayfinding and creating a sense of place</li> </ul>	<p>Deep soil locations at strategic locations where the rectilinear grid meet the existing curvilinear grid allow opportunities for feature tree planting. Built form with additional setbacks take advantage of the curvilinear road network to provide direct lines of site to open space and key locations. Iconic built form in locations where the grids intersect help with wayfinding through the precinct. Taller buildings marking the gateway to the precinct help with wayfinding.</p>
<ul style="list-style-type: none"> <li>The intent of providing tree lined streets with dedicated spaces for socialising and active transport is supported. However, it is recommended that the street cross sections have a width of minimum 20 meters (rather than 15.7 meters current minimum). This width is considered more appropriate for the density and building heights proposed. Consider locating the seating zones on the internal side of the footpath with the seats facing the street</li> </ul>	<p>Street cross section increased to 18m which results in a building separation of 22m at 6 storeys and 28m at 8 storeys (ADG requires 18m) This preserves the road hierarchy and creates a variety of street characters. See Urban Structure 03 in the SDRP 02 presentation for diagrams.</p> <p>Seating to be retained in the current location for the following reasons:</p> <ul style="list-style-type: none"> <li>Seating against the property boundary impacts the delineation between private and public space</li> <li>Privacy and access for residents impacted</li> <li>Impedes maintenance</li> <li>Consolidated planting provides greater shade to seating area as well as larger dimensions for deep soil</li> </ul> <p>Seating can be designed to face both the pedestrian/cycleway and the street</p>
<ul style="list-style-type: none"> <li>Integrate civil considerations for the upgrading of the street network and siting of built forms to ensure impacts on existing trees are minimised. These should be captured in a grading plan.</li> </ul>	<p>Tree retention is a key priority of the master plan. Matters raised relating to tree retention, removal and re-provision have been taken into consideration by the design team in preparation of the DCP, with an overall objective to retain trees across the site where possible. A high level grading plan has been prepared by Mott Macdonald to inform the upgrading of the road network and potential tree retention. Further refinement of the civil works and detailed grading plan will be submitted with each DA stage of development to highlight impacts on existing trees to be retained are minimised.</p>
<ul style="list-style-type: none"> <li>Discuss the proposed WSUD strategy for the project area, including the water budget and proposed initiatives for water storage and reuse. Identify any synergies and opportunities for water management integration with the Salt Pan Reserve.</li> </ul>	<p>WSUD strategy is detailed in the Water Quality and Stormwater Report by Mott Macdonald. Further consideration of WSUD has been included in the Green Infrastructure Study (CLOUSTON) pg36 (Attachment H) and in the Landscape Design Report (JMD design) pg 33 (Attachment I). In consultation with Canterbury Bankstown Council, the water quality and stormwater strategy include a basin with the Salt Pan Creek Reserve, which serves the purpose for the development and wider area. Further design detail off the basin will be undertaken with Canterbury Bankstown Council at the Development Application Stage. The cost of implementing the WSUD measures is included in the feasibility for the redevelopment.</p>
<b>Interfaces</b>	
Provide further information on built form interfaces, including cross-sections, along:	
<ul style="list-style-type: none"> <li>Kentucky Road and Salt Pan Reserve, illustrating approach for integrating levels and long and short view lines</li> </ul>	Attachment M, The design review response (SDRP02 Interfaces 01)
<ul style="list-style-type: none"> <li>Belmore Road</li> </ul>	Attachment M, The design review response (SDRP02 Interfaces 02)

<ul style="list-style-type: none"> <li>The residential uses to the south boundary of the project area.</li> </ul>	Attachment M, The design review response (SDRP02 Interfaces 03)
<b>Public Space and tree canopy</b>	
<b>Public Space and tree canopy</b>	
<ul style="list-style-type: none"> <li>Clarify the existing tree canopy coverage and provide further detail on the breakup of proposed tree canopy (public – private spaces)</li> </ul>	<p>Existing canopy cover across the site = 7.95ha 26% Mix of: –0.14ha Grey Box - Forest Red Gum (Cumberland Plain Woodland) –4.63ha Planted Native Vegetation –3.18ha Exotic Vegetation</p> <p>See Attachment A, Public Domain, Place and Urban Design Report pg118-122 for detailed plans and calculations</p>
<ul style="list-style-type: none"> <li>Complement the plan that identifies the trees to be kept with a plan mapping the trees proposed to be removed</li> </ul>	See Attachment A, Public Domain, Place and Urban Design Report pg118-122 for detailed plans and calculations
<ul style="list-style-type: none"> <li>Discuss any existing issues and opportunities in relation to CEPTED considerations and illustrate how findings inform the design of proposed public spaces</li> </ul>	<p>–The existing street network comprises narrow circular streets and many cul-de-sacs that restrict connectivity wayfinding and permeability, creating poor pedestrian amenity –Small isolated local pocket parks scattered through the site have no function and are poorly lit –Deep and varied setbacks create ill-defined, unused, left-over spaces. CEPTED initiatives</p> <ul style="list-style-type: none"> <li>Good sightlines across parks</li> <li>Defined program of public open space</li> <li>Activated edges through residential entries at frequent regular intervals</li> <li>Territorial reinforcement by clear delineation of private and public areas</li> <li>Recommend robust materials and a regular maintenance regime</li> <li>Lighting strategy for open space</li> </ul>
<ul style="list-style-type: none"> <li>Provide approach for lighting public spaces to support activity and sense of safety</li> </ul>	This item has been considered by the design team. The DCP includes provisions relating to lighting and is considered sufficient to address this issue, noting this link will be further explored as part of subsequent detailed design processes.
<ul style="list-style-type: none"> <li>Distributing community gardens across the site is supported. Provide further information on the character and functions for proposed public spaces.</li> </ul>	Attachment A, Public Domain, Place and Urban Design Report pg68-83 Attachment I, Landscape Design Report (JMD design) pg38-41
<b>Built form</b>	
<ul style="list-style-type: none"> <li>Identify where basement carparks will be located, ensuring footprints and entrances will not be detrimental to the urban amenity or impact existing and proposed trees.</li> </ul>	Maps of basement entry locations can be found in: Attachment A, Public Domain, Place and Urban Design Report pg104-107 Attachment M, the design review response (SDRP02 Built form 01)
<b>Housing mix</b>	
<ul style="list-style-type: none"> <li>Outline the existing and proposed break up of private to social housing, including housing types, distribution and GFA.</li> </ul>	<p>Existing number of social housing dwellings: 992 The master plan yields approximately 3,400 dwellings on LAHC owned land: Approximately 1,000 social housing dwellings (target of up to 30% of total number of dwellings) Approximately 2,400 private dwellings Existing social housing GFA approximately 55,000sqm The master plan has the capacity to deliver approximately 61,500sqm of social housing GFA <b>Indicative dwelling mix is subject to adjustment as part of the market tender process, and assessment of social housing needs in the LGA.</b></p>
<ul style="list-style-type: none"> <li>The intent of achieving Silver Standard for all social housing dwellings is noted and supported. Please provide further information on the existing and proposed break up or intent for social housing including types and distribution.</li> </ul>	<p>Indicative dwelling mix only as follows: Studios – existing 7.5%, indicative 10% 1 bed – existing 12%, indicative 40% 2 bed – existing 52%, indicative 45% 3 bed – existing 28%, indicative 5% 4 bed – existing 0.5%, indicative 0% 5 bed – existing 0.2%, indicative 0%</p>
<b>Social infrastructure</b>	
<ul style="list-style-type: none"> <li>Increasing the provision, quality and distribution of local open spaces is supported. Please elaborate further how the existing character and features that the community values about the place can be integrated and celebrated in the new and existing public spaces</li> </ul>	<p>Sense of community/community facilities</p> <ul style="list-style-type: none"> <li>Front gardens</li> <li>Front doors</li> <li>Community facilities up to 4,000sqm of non-residential floorspace</li> <li>Improving walkability through increased connectivity and permeability</li> </ul> <p>Green Space</p> <ul style="list-style-type: none"> <li>Diverse range of open space for a variety of activities (Attachment A, Public Domain, Place and Urban Design Report pg68-83)</li> <li>Additional community garden</li> <li>Tree retention</li> </ul> <p>Shops &amp; Services</p>



	<ul style="list-style-type: none"> <li>Retail floorspace along Belmore road within master plan</li> <li>Contributions to current social infrastructure</li> </ul>
<ul style="list-style-type: none"> <li>Provide further detail about proposed non-residential uses, their location, type and how these can contribute to local employment opportunities for social housing residents</li> </ul>	<p>A review of proposed non-residential uses has been undertaken, in consultation with both Canterbury Bankstown Council and Georges River Council. As a result of this review, amendments to land zoning along Belmore Road are proposed, including reverting from the previous B4 (Mixed Use) zone to a more granular B2 (Local Centre). This B4/B2 zoning extends the town centre providing retail opportunities along Belmore Road.</p> <p>Following discussions with Canterbury Bankstown Council, it is also proposed to increase the GFA of neighbourhood shops on identified sites within the R4 zone to 200sqm, which are otherwise currently permitted a maximum of 100sqm GFA pursuant to Clause 5.4(7) of the Canterbury LEP 2012. This will provide additional flexibility to potential non-residential uses (such as cafes or restaurants) within these identified locations as noted above. Following discussions with Canterbury Bankstown Council, it is also proposed to increase the GFA of neighbourhood shops on identified sites within the R4 zone to 200sqm, which are otherwise currently permitted a maximum of 100sqm GFA pursuant to Clause 5.4(7) of the Canterbury LEP 2012. This will provide additional flexibility to potential non-residential uses (such as cafes or restaurants) within these identified locations as noted above.</p> <p>See ground floor residential uses in the current masterplan (Attachment A, Public Domain, Place and Urban Design Report pg108)</p>
<ul style="list-style-type: none"> <li>Provide further information on the logic and expected provision of social infrastructure, specifically the type and location of what is being proposed</li> </ul>	<p>The following studies assess the capacity of the site and the wider areas to support the redevelopment, and proposes mitigations:</p> <ul style="list-style-type: none"> <li>Community and Social Infrastructure Needs by Cred Consulting (Attachment D of the Planning Report)</li> </ul> <p>The masterplan addresses all of these needs as is highlighted in Attachment M, the design review response</p>
<ul style="list-style-type: none"> <li>Outline any opportunities for contributions to the improvement and integration of Salt Pan Reserve</li> </ul>	<p>A VPA will be prepared and is intended to include a financial contribution towards the upgrade of Salt Pan Creek Reserve.</p> <p>to Salt Pan Creek.</p>
<ul style="list-style-type: none"> <li>Generally, identify how the project will contribute to public benefit beyond through the provision of improved public housing, and how it will address Local Strategic Planning Statement objectives</li> </ul>	<p>Improvements to the street scape are being provided in accordance with priority E2.9 of the LSPS</p> <p>The proposal will increase the retail and commercial offering in the Riverwood centre. In accordance with priority E3.8 LSPS</p> <p>The proposal will enhance the provision of public open space and access to this in accordance with priority E5.6 of the LSPS</p> <p>More broadly however the proposal response to the broader vision of Riverwood and acknowledges its role as a centre.</p>
<b>Zoning</b>	
<p>Recommend that the area proposed to be zoned B4 (mixed use) be zoned B2 (local centre) instead. This better aligns with Council's classification for centres in their Local Environmental Plan.</p>	<p>A review of proposed zoning has been undertaken, in consultation with both Canterbury Bankstown Council and Georges River Council. As a result of this review, amendments to land zoning along Belmore Road are proposed, including reverting from the previous B4 (Mixed Use) zone to a more granular B2 (Local Centre) zone and R4 (High Density Residential) zone arrangement, including provision of an additional permitted use to the northern block of the intersection of Belmore Road and Roosevelt Avenue. These changes will form part of the formal submission package.</p> <p>Following discussions with Canterbury Bankstown Council, it is also proposed to increase the GFA of neighbourhood shops on identified sites within the R4 zone to 200sqm, which are otherwise currently permitted a maximum of 100sqm GFA pursuant to Clause 5.4(7) of the Canterbury LEP 2012. This will provide additional flexibility to potential non-residential uses (such as cafes or restaurants) within these identified locations as noted above.</p>
<b>Implementation</b>	
<ul style="list-style-type: none"> <li>The logic of prioritising the southern portion of the site to deliver social housing first, close to public transport and improving the provision and quality of local public space is understood. The need to create a tenant relocation approach that minimises the impact on social housing residents is also acknowledged and supported. However, this approach also poses</li> </ul>	<p>Construction methodology by the developer to carefully consider impact on the existing community such as traffic management, dust and noise, working hours, and mitigation measures.</p>

<p>the challenge that construction works for later stages will negatively impact the quality and amenity of newly delivered urban infrastructure. Please address how the project will manage this issue.</p>	
<ul style="list-style-type: none"> <li>Recommend adding to the design targets one by which social housing residents will only need to move once, and provide a diagram indicating how this can be achieved.</li> </ul>	<p>This is not a design consideration. A detailed Relocation Strategy will be prepared by LAHC in consultation with DCJ prior to commencing relocations for the first stage of redevelopment.</p>
<ul style="list-style-type: none"> <li>Demonstrate the range of development controls and other initiatives proposed to ensure the design vision and intent is delivered. This should include effective controls and mechanisms for: <ul style="list-style-type: none"> <li>carparking provision and how to avoid negative impacts on existing and proposed trees and urban amenity</li> <li>achieving the intent for built form envelopes (e.g. good solar access, cross ventilation, aspect, view lines, etc.) when transitioning to development</li> <li>procurement and implementation</li> <li>principles for the provision and location of social housing dwellings</li> <li>achievement of quality public space outcomes as illustrated</li> <li>achievement of quality built form outcomes as illustrated</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>The DCP will directly implement the Place Strategy and the proposed master plan for Riverwood</li> <li>Intent of the DCP is to give legislative effect and guidance to the detailed aspects of the master plan</li> <li>The ADG will provide appropriate guidance for the amenity of future apartments proposed on the site</li> </ul> <p>See Attachment B, DCP for detailed controls</p>
<ul style="list-style-type: none"> <li>Mechanisms could include requirements in the development brief, development controls, design excellence and design integrity strategies and/or Voluntary Planning Agreements. Please identify what mechanisms will be used and for what purposes.</li> </ul>	<ul style="list-style-type: none"> <li>A VPA will be prepared to facilitate public domain improvements.</li> <li>LEP provisions will be proposed to capture the need for design excellence throughout the development.</li> <li>Architectural Design Competitions have been proposed for key sites to further enhance the design excellence requirements of the site.</li> <li>The Design Competition requires exceed the current standards under the current and future LEP for the site and LGA.</li> </ul>



# Riverwood SDRP 02

GOVERNMENT  
ARCHITECT  
NEW SOUTH WALES  
Advice Letter

SDRP 02

10<sup>th</sup> February 2021

Adriana Malin

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RIVERWOOD STATE – LAHC MASTERPLAN

STATE DESIGN REVIEW PANEL Session 69 – 3<sup>rd</sup> January 2021

Dear Adriana,

Following the second State Design Review Panel session for the master planning of LAHC Riverwood State, please find below the summary of observations and recommendations. This advice should be read in conjunction with the recommendations from the previous SRDP session.

In general, the information presented is consistent in its quality and intent with what has been previously provided. There are still a few but fundamental aspects of the design that should be addressed to effectively elevate the design quality of this important development. These are discussed in detail below.

The emerging positive aspects of the proposal that are supported and should be maintained as the design develops include:

- The initiative and commitment of the team to developing a Connecting with Country framework
- The water sensitive urban design approach, including the adoption of a water budget. Coordination of this approach with similar initiatives from the local Council is encouraged
- The approach to basement carpark footprints and location of vehicular and service entries to support walkability, streetscape amenity and tree retention
- The project's support of the implementation of the adopted master plan for the Salt Pan Reserve via a VPA, including a financial contribution and public space connections
- The approach to Design Excellence, including architectural design competitions for key sites, integrating specific design quality provisions in the LEP, and a VPA to facilitate public domain improvements. Please consider extending the scope of design competitions to key public spaces.

The following matters should be addressed at the next SDRP session:

#### Tree canopy

In analysing the proposed tree removal plan, it is evident that much more can be done to avoid the reduction of existing tree canopy across the site. It should be of the utmost priority to protect, retain and enhance the environmental and biodiversity

benefits that only mature trees can provide. In particular, to better respond to extreme weather conditions and climate change.

- The siting of buildings should be informed by the location of existing trees, including within development lots. A detailed arborist report should be completed to then establish the placement, extent and shape of building footprints.

For reference, attached to this letter we include extracts from the Australian Standard 4970 – Protection of Trees on Development Sites, kindly provided by the panel out of session.

- Recommend setting ambitious tree replacement targets as part of the landscape and tree canopy strategy.

#### Built form

The overall approach to built form should be refined to respond in a more place-specific manner to the design intent for tree retention, creating a distinct street hierarchy, supporting public and private amenity and celebrating the particularities of the grid. Specifically:

- The relationship of building heights and street widths to contribute to the idea of clear street hierarchies and urban amenity. While the recommendation to increase the street corridor from 15.7m to minimum 20m has been addressed and is supported, we note that the separation between buildings has not changed. The move to locate 8 and 12 story buildings facing what is proposed to be a local street (~20 m wide) is questioned, given that the majority of 6 storey buildings are facing wider streets (~ 26 to 30m). The potential effect of the current approach is not only diminishing dwelling amenity but also unnecessarily heightening the perception of density on the site.
- The recommendation of celebrating the contrast between the curvilinear and rectilinear grids with the built form has only partially been addressed. Bookending key view corridors with open spaces and greenery is noted and supported. However, the recommendation is reiterated to review the way building footprints are located and shaped to highlight the specificity of each site, in particular where the grid/street alignment is distinct (e.g. curved or pointy streets and sites). If this approach is also informed by the location of existing trees, the urban design will support the creation of a more place specific and varied response to the site.
- As a strategy to mitigate the perception of density in the north west area of the site, the placement of built form along Michigan Road to enable long views at the pedestrian level towards Salt Pan Reserve is recommended.
- Illustrate how proposed building heights will allow for adequate solar access to key public spaces.

#### Streetscapes and public spaces

- For CPTED purposes, integrating pedestrian lighting is recommended along secondary streets. Luminance levels should aim for pedestrian comfort rather than solely to support CCTV systems
- Ensure space allocations within the streetscape designs will provide appropriate conditions for large trees to be established or retained
- Clear guidance for greenery within private setbacks along street frontages should be developed to ensure this positively contributes to the overall streetscape amenity
- Ensure the design of streetscapes and public spaces will generously serve the varied needs and expectations of future and existing residents, e.g. families, youth, seniors, singles, etc.

#### Belmore Road

The project address to Belmore Road should create a vibrant urban experience and contribute to its role of high street and key connection to the train station.

- Review built form height and articulation to reduce perceived bulk and create a more considered interface with the buildings on the opposite side of the road.
- Locating residences at the ground level is not supported. Ground level uses should support local employment generation uses that can activate the street. Recommendation is reiterated for B2 (local centre) zoning.
- Keep as many existing trees as possible.

#### Non-residential uses

- To further embed walkability, sustainability and vibrancy, it is recommended that the communal facilities to the west of the site are designed with the flexibility to accommodate convenience retail (e.g. small supermarket, convenience stores, cafés, etc). These uses can be established once there is sufficient patronage to make them viable.
- Consider not only physical flexibility but also other matters such as zoning, scale and commercial and management matters.
- Introduce additional retail uses to the west of the site near Salt Pan Creek Reserve to provide potential services to the Reserve (café etc.) and 'corner shop' retail to reduce car dependence and increase walkability.

#### Housing mix

- The need for LAHC to shape its portfolio to better serve tenant profiles (1- and 2-bedroom dwellings) is understood and noted. It is also noted that the area's local population profile is predominantly families, and that the site itself is well located to serve families (adjacent school and Regional open space). Further, many

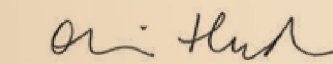
- aspects of the current design such as 'Play Street' are explicitly aimed at supporting families.
- Ensure that the overall development will provide a dwelling mix that responds to LAHC tenant mix, the local community and the potential of the site.

#### Implementation

- As noted previously, approaches to Connecting with Country and Design Excellence are commended. Opportunities to review proposed initiatives (e.g. frameworks, design guidelines) to ensure advice is well integrated in planning and other related documents are welcomed.

Please contact Melizza Morales if you require further clarification.

Regards,



Olivia Hyde

Director Design Excellence, GANSW

#### Attendees:

Olivia Hyde	DRP Chair	GANSW
Helen Lochhead	DRP Panellist	
Garth Paterson	DRP Panellist	
Matthew Pullinger	DRP Panellist	CBCC
Melizza Morales	Design Advisor	GANSW

Adriana Malin	Client	LAHC
Richard Wood	Client	LAHC
Gilead Chen	Client	LAHC
Cameron Nixon	Design Team	Architectus
Nick Capetta	Design Team	Architectus
Ingrid Mather	Design Team	JMD Design

Shona Porter	Observer	CBCC
Simon Manoski	Observer	CBCC
Merly Bishop	Observer	GRCC
Catherine McMahon	Observer	GRCC
Harkirat Singh	Observer	GRCC
Laura Locke	Observer	DPIE
Marcus Jennejohn	Observer	DPIE
Paul Maher	Observer	DPIE
Barbara Schaffer	Observer	GANSW

ATTACHMENT Letter of advice SDRP 69 – Riverwood State

AS 4970 – Protection Trees on Development Sites

- A tree survey of existing trees on the site and trees on adjacent properties, accurately located by a registered surveyor, indicating the trunk location and level to (AHD) and an accurate portrayal of the canopy spread.
- The applicant must engage an Australian Qualification Framework (AQF) Level 5 consulting arborist to prepare an Aboricultural Impact Assessment (AIA) in the initial stages of planning the development to determine which trees are suitable to be retained and integrated into the development. The suitability of the vegetation for incorporation should be based on the tree's health, amenity value and significance of the tree.
- The (AIA) must address the health, amenity value and Useful Life Expectancy (ULE) rating of each tree.
- The arborist must provide a Tree Protection Zone (TTP) outlining the specification for tree protection to be in place during the construction phase including any pruning requirements.

Summary of response

# SDRP 02 3rd of February 2021

<p><b>Tree canopy</b></p> <p>In analysing the proposed tree removal plan, it is evident that much more can be done to avoid the reduction of existing tree canopy across the site. It should be of the utmost priority to protect, retain and enhance the environmental and biodiversity benefits that only mature trees can provide. In particular, to better respond to extreme weather conditions and climate change.</p>	<p>Tree retention is a key priority of the master plan. Matters raised relating to tree retention, removal and re-provision have been taken into consideration by the design team in preparation of the DCP, with an overall objective to retain trees across the site where possible.</p> <p>See Attachment B, DCP Section 8.6 and 8.7 for tree canopy, retention and management.</p>
<ul style="list-style-type: none"> <li>The siting of buildings should be informed by the location of existing trees, including within development lots. A detailed arborist report should be completed to then establish the placement, extent and shape of building footprints.</li> </ul>	<p>Ecological (ELA) produced an existing tree canopy study. This assessment combines light detection and ranging (LiDAR) data with high-resolution imagery to identify and delineate canopy cover within the precinct and to calculate canopy density. This study has sought to inform the design of the master plan to determine block and building layouts and the potential for tree retention across the site, as well as broader tree canopy targets.</p> <p>Whilst not presented to the panel at this meeting, the DCP provides draft controls including the requirement for preparation of an arboricultural assessment accompanying any DA for the site. These arboricultural assessments will categorise the health and significance of trees across the site from low to high, with trees in the latter category being prioritised for retention, including providing influence to the design of buildings at the site.</p>
<ul style="list-style-type: none"> <li>For reference, attached to this letter we include extracts from the Australian Standard 4970 – Protection of Trees on Development Sites, kindly provided by the panel out of session.</li> </ul>	<p>This item is acknowledged.</p>
<ul style="list-style-type: none"> <li>Recommend setting ambitious tree replacement targets as part of the landscape and tree canopy strategy.</li> </ul>	<p>As detailed within the SDRP presentation, the DCP recommends 30% tree canopy across site and implements a number of controls to ensure retention and future planting.</p> <p>Tree canopy target of 30% is higher than the existing tree canopy on the site and higher than the target of 25% canopy for medium-density development, as contained within the GANSW Draft Greener Places Design Guide.</p> <p>Further details, including detailed targets tree canopy across the site, development staging and length to tree maturity, soil networks, volume and irrigation measures are provided within the DCP.</p>
<p><b>Built form</b></p> <p>The overall approach to built form should be refined to respond in a more place specific manner to the design intent for tree retention, creating a distinct street hierarchy, supporting public and private amenity and celebrating the particularities of the grid. Specifically:</p>	<p>A detailed response to each item is provided below.</p>
<ul style="list-style-type: none"> <li>The relationship of building heights and street widths to contribute to the idea of clear street hierarchies and urban amenity. While the recommendation to increase the street corridor from 15.7m to minimum 20m has been addressed and is supported, we note that the separation between buildings has not changed. The move to locate 8 and 12 story buildings facing what is proposed to be a local street (~20 m wide) is questioned, given that the majority of 6 storey buildings are facing wider streets (~ 26 to 30m). The potential effect of the current approach is not only diminishing dwelling amenity but also unnecessarily heightening the perception of density on the site.</li> </ul>	<p>The master plan has sought to provide increased building separation beyond the minimums provided within the Apartment Design Guide (ADG), including draft amendments to the ADG.</p> <p>For buildings up to eight (8) storeys, the ADG requires a minimum building separation of 18.0m; and 24m for building above eight (8) storeys.</p> <p>Within the master plan, buildings up to six (6) storeys are provided with 24m separation, 6m greater than that required by the ADG. Additionally, for buildings eight (8) storeys and above, building separation of 28m is provided, being between 4 to 10m greater than that required by the ADG.</p> <p>Residential flat buildings at the site generally range between 6-8 storeys, with all eight (8) storey buildings benefitting from a six (6) storey street wall. In addition, three twelve (12) storey buildings are provided, including two along Belmore Road and one provided along Roosevelt Avenue, (an 18m local street) with a building separation of 24m at 6 storeys, being an additional 6m separation than that required in the ADG. Built form on 18m local streets have a building separation of 28m at 8 storeys an additional 10m separation than required in ADG.</p>

<ul style="list-style-type: none"> <li>The recommendation of celebrating the contrast between the curvilinear and rectilinear grids with the built form has only partially been addressed. Bookending key view corridors with open spaces and greenery is noted and supported. However, the recommendation is reiterated to review the way building footprints are located and shaped to highlight the specificity of each site, in particular where the grid/street alignment is distinct (e.g. curved or pointy streets and sites). If this approach is also informed by the location of existing trees, the urban design will support the creation of a more place specific and varied response to the site.</li> </ul>	<p>The masterplan responds in a number of ways to celebrate the contrast between the curvilinear and rectilinear street grids. They include:</p> <ul style="list-style-type: none"> <li>Open space - major locations where the new grid meets the existing curved road reserve are marked with open space reinforcing views to green and tree retention in these locations across the Masterplan</li> <li>Built form - Built form shapes and locations at these junctions are informed by both the specific lot patterns &amp; view corridors and highlight major locations</li> <li>Deep soil - reinforcing view corridors or in specific locations provide opportunities for tree retention and feature tree planting.</li> </ul>
<ul style="list-style-type: none"> <li>As a strategy to mitigate the perception of density in the north west area of the site, the placement of built form along Michigan Road to enable long views at the pedestrian level towards Salt Pan Reserve is recommended.</li> </ul>	<p>The site in question comprise private allotments and whilst attempts were explored by the design team to create long views through this element of the site, it was recognised that it was not an equitable outcome to assume that some of the private lots be made to deliver through site links and not maintain the recommended FSR while others did not.</p> <p>Accordingly, other opportunities for through site links have been explored, across the site providing view corridors to Salt Pan Creek, Kentucky Road reserve, Riverwood Primary and Karne Street Reserve.</p>
<ul style="list-style-type: none"> <li>Illustrate how proposed building heights will allow for adequate solar access to key public spaces.</li> </ul>	<p>Detailed solar testing has been undertaken as detailed within the Urban Design Report. This testing demonstrates that all areas across the site, including key public spaces will receive generous and appropriate solar amenity.</p>
<p><b>Streetscapes and public spaces</b></p>	
<ul style="list-style-type: none"> <li>For CPTED purposes, integrating pedestrian lighting is recommended along secondary streets. Luminance levels should aim for pedestrian comfort rather than solely to support CCTV systems</li> </ul>	<p>Provisions relating to lighting have been incorporated within the DCP. It is anticipated that a site wise lighting strategy will be developed as part of subsequent detailed design processes.</p>
<ul style="list-style-type: none"> <li>Ensure space allocations within the streetscape designs will provide appropriate conditions for large trees to be established or retained</li> </ul>	<p>The DCP contains detailed provisions relating to landscaping and the public domain, including appropriate conditions for large street trees to be retained and/or provided on site. In particular, it is sought to maintain at least 1800mm within the street frontage to allow for deep rooted planting, with street trees to be designed to have adequate soil volume and connected soil networks across the site.</p>
<ul style="list-style-type: none"> <li>Clear guidance for greenery within private setbacks along street frontages should be developed to ensure this positively contributes to the overall streetscape amenity</li> </ul>	<p>The DCP includes provisions to ensure private open space, including balconies and front garden courtyards, are integrated into the overall architectural form and facade of buildings. In particular, it is sought that ground floor apartments should provide front garden courtyards that are at least 15sqm.</p>
<ul style="list-style-type: none"> <li>Ensure the design of streetscapes and public spaces will generously serve the varied needs and expectations of future and existing residents, e.g. families, youth, seniors, singles, etc.</li> </ul>	<p>The design team has sought to provide a range of open spaces, suitably distributed across the site to ensure public spaces will generously serve the varied need of existing and future residents.</p> <p>Open spaces have been design to maximise pedestrian connectivity and improve active transport access to Riverwood town centre. These routes will be supported by ahigh level of pedestrian amenity along streets through increased tree canopy, wide footpaths and shared paths.</p> <p>Pedestrian routes have also been designed to facilitate connections between open space, community space and existing surrounding infrastructure, such as Salt Pan Creek reserve and Riverwood Public School.</p> <p>Open spaces have been designed to ensure flexibility for user groups and allow for active and passive recreation and comingling between all ages and demographics.</p>
<p><b>Belmore Road</b></p>	
<ul style="list-style-type: none"> <li>The project address to Belmore Road should create a vibrant urban experience and contribute to its role of high street and key connection to the train station.</li> </ul>	<p>Non-residential uses along Belmore Road will extend the town centre and contribute to the role of high street. Potential super market can act as a book end for the town centre. Visual connections to new local open space from Belmore road help to open the site up to the wider community.</p>
<ul style="list-style-type: none"> <li>Review built form height and articulation to reduce perceived bulk and create a more considered interface with the buildings on the opposite side of the road.</li> </ul>	<p>In response to matters raised by the panel, the design team has introduced an additional 3.0m setback of buildings from the boundary to reduce perceived bulk and aid in transition to surrounding lower density aeras (where this was previously built to the site boundary).</p>



<ul style="list-style-type: none"> <li>Locating residences at the ground level is not supported. Ground level uses should support local employment generation uses that can activate the street. Recommendation is reiterated for B2 (local centre) zoning.</li> </ul>	<p>The design team has sought to provide residences at the ground floor, integrated with non-residential uses, to provide a variety of uses and built form. This arrangement has been carefully considered in consultation with the economic consultant to ensure proposed non-residential floor space does not unreasonable extend, nor detract from, the nearby Riverwood Town Centre.</p> <p>In response to matters previously raised by the panel, a review of proposed zoning has been undertaken, in consultation with both Canterbury Bankstown Council and Georges River Council. As a result of this review, amendments to land zoning along Belmore Road are proposed, including reverting from the previous B4 (Mixed Use) zone to a more granular B2 (Local Centre) zone and R4 (High Density Residential) zone arrangement, including provision of an additional permitted use to the northern block of the intersection of Belmore Road and Roosevelt Avenue. These changes will form part of the formal submission package.</p>
<ul style="list-style-type: none"> <li>Keep as many existing trees as possible.</li> </ul>	<p>Matters raised relating to tree retention, removal and re-provision have been taken into consideration by the design team in preparation of the DCP, with an overall objective to retain trees across the site where possible.</p>
<b>Non-residential uses</b>	
<ul style="list-style-type: none"> <li>To further embed walkability, sustainability and vibrancy, it is recommended that the communal facilities to the west of the site are designed with the flexibility to accommodate convenience retail (e.g. small supermarket, convenience stores, cafés, etc.). These uses can be established once there is sufficient patronage to make them viable.</li> </ul>	<p>This item is agreed by the project team. Indicative locations for such uses have since been presented to the panel and been incorporated within the master plan. All locations identified are within LAHC owned land, to provide certainty for their delivery.</p>
<ul style="list-style-type: none"> <li>Consider not only physical flexibility but also other matters such as zoning, scale and commercial and management matters.</li> </ul>	<p>Following discussions with Canterbury Bankstown Council, it is also proposed to increase the GFA of neighbourhood shops on identified sites within the R4 zone to 200sqm, which are otherwise currently permitted a maximum of 100sqm GFA pursuant to Clause 5.4(7) of the Canterbury LEP 2012. This will provide additional flexibility to potential non-residential uses (such as cafes or restaurants) within these identified locations as noted above.</p>
<ul style="list-style-type: none"> <li>Introduce additional retail uses to the west of the site near Salt Pan Creek Reserve to provide potential services to the Reserve (café etc.) and ‘corner shop’ retail to reduce car dependence and increase walkability.</li> </ul>	
<b>Housing mix</b>	
<ul style="list-style-type: none"> <li>The need for LAHC to shape its portfolio to better serve tenant profiles (1- and 2- bedroom dwellings) is understood and noted. It is also noted that the area’s local population profile is predominantly families, and that the site itself is well located to serve families (adjacent school and Regional open space). Further, many aspects of the current design such as ‘Play Street’ are explicitly aimed at supporting families.</li> </ul>	<p>The development allows for flexibility in provision of dwellings mix to meet market demand at the time of development and provide the social housing dwelling mix required to meet the needs of LAHC’s portfolio. Proposed buildings have been designed to provide for flexibility in housing mix, however it is anticipated this will be determined through subsequent detailed design process in consultation with any future development partner(s).</p>
<ul style="list-style-type: none"> <li>Ensure that the overall development will provide a dwelling mix that responds to LAHC tenant mix, the local community and the potential of the site.</li> </ul>	
<b>Implementation</b>	
<ul style="list-style-type: none"> <li>As noted previously, approaches to Connecting with Country and Design Excellence are commended. Opportunities to review proposed initiatives (e.g. frameworks, design guidelines) to ensure advice is well integrated in planning and other related documents are welcomed.</li> </ul>	<p>LAHC is currently developing a tailored Implementation and Measurement Framework for the Riverwood Renewal project. The purpose of the framework is to guide the integration of Connecting with Country principles into the next stages of development, planning and design of the project. This framework will include a range of measures that will be undertaken, including working groups and ongoing consultation with GANSW to ensure and reinforce connection with Country across all future stages of the development.</p>

<p>the challenge that construction works for later stages will negatively impact the quality and amenity of newly delivered urban infrastructure. Please address how the project will manage this issue.</p>	
<ul style="list-style-type: none"> <li>Recommend adding to the design targets one by which social housing residents will only need to move once, and provide a diagram indicating how this can be achieved.</li> </ul>	<p>This is not a design consideration. A detailed Relocation Strategy will be prepared by LAHC in consultation with DCJ prior to commencing relocations for the first stage of redevelopment.</p>
<ul style="list-style-type: none"> <li>Demonstrate the range of development controls and other initiatives proposed to ensure the design vision and intent is delivered. This should include effective controls and mechanisms for: <ul style="list-style-type: none"> <li>carparking provision and how to avoid negative impacts on existing and</li> <li>proposed trees and urban amenity</li> <li>achieving the intent for built form envelopes (e.g. good solar access, cross ventilation, aspect, view lines, etc.) when transitioning to development</li> <li>procurement and implementation</li> <li>principles for the provision and location of social housing dwellings</li> <li>achievement of quality public space outcomes as illustrated</li> <li>achievement of quality built form outcomes as illustrated</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>The DCP will directly implement the Place Strategy and the proposed master plan for Riverwood</li> <li>Intent of the DCP is to give legislative effect and guidance to the detailed aspects of the master plan</li> <li>The ADG will provide appropriate guidance for the amenity of future apartments proposed on the site</li> </ul> <p>See Attachment B, DCP for detailed controls</p>
<ul style="list-style-type: none"> <li>Mechanisms could include requirements in the development brief, development controls, design excellence and design integrity strategies and/or Voluntary Planning Agreements. Please identify what mechanisms will be used and for what purposes.</li> </ul>	<ul style="list-style-type: none"> <li>A VPA will be prepared to facilitate public domain improvements.</li> <li>LEP provisions will be proposed to capture the need for design excellence throughout the development.</li> <li>Architectural Design Competitions have been proposed for key sites to further enhance the design excellence requirements of the site.</li> <li>The Design Competition requires exceed the current standards under the current and future LEP for the site and LGA.</li> </ul>

# Riverwood SDRP 03



GOVERNMENT  
ARCHITECT  
NEW SOUTH WALES  
Final Advice Letter

SDRP 03

5<sup>th</sup> May 2021

Adriana Malin

Project Director  
Land and Housing  
Corporation.  
Communities Plus

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RIVERWOOD STATE – LAHC MASTERPLAN

STATE DESIGN REVIEW PANEL Session 75 – 28<sup>th</sup> April 2021

Dear Adriana,

Following the third State Design Review Panel session for the master planning of LAHC Riverwood State, please find the summary of advice below.

The overall structure of the masterplan has been maintained and is supported. However, key aspects of the proposal identified at previous review sessions as requiring further work are yet to be successfully resolved. These are discussed in detail under each subheading.

While LAHC's preference for maintaining planning flexibility is noted, flexibility must be appropriately balanced with certainty on expected outcomes for the community and other stakeholders. Clear project outcomes, and thereby appropriate design quality standards, will be better delivered through more defined controls.

Considering the stage of the process, it is strongly recommended that the project now shift from outlining targets and aspirations to setting clear and measurable commitments and development controls. Commitments should include but not be limited to tree canopy retention, walkability, activation, dwelling mix, non-residential uses, water quality and sustainability. Development controls should be tailored for each block and address the various aspects identified in this and previous letters of advice.

#### Tree canopy

- Previous advice in relation to the importance of protecting and retaining as many as possible of the existing mature trees, including within development lots, is reiterated. As presented, the masterplan does not demonstrate a clear intent for modifying the siting, scale or shape of building footprints in order to retain trees. The proposed approach to defer a detailed arborist report to a later stage and define what trees can be retained on a staged, and an as needed basis, is not supported. This approach erodes the core purpose and benefit of a masterplan in establishing robust precinct wide strategies, in this case a tree canopy strategy.
- Commissioning of a detailed arborist report should be a priority. Its findings should inform the layout and scale of proposed building footprints. Furthermore, this information would assist in creating a place specific design response with a richer built form, character, permeability and overall amenity.

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#### Built form

- Refining the overall approach to built form to respond in a more place-specific manner to support the legibility of the street hierarchy, tree retention, and the particularities of the grid and the site's topography is reiterated.
- Strategies for mitigating the perception of density, in particular to the north west area of the site, should be explored further. Consider variations in building heights when long views are not viable.

#### Streetscapes and public spaces

- Kentucky Road and Karne Street Reserves could be better connected through a stronger green link along the proposed street network. Investigate revisions to the alignment of built form and/or the street alignment to enable a corridor that visually links the two reserves.
- Recommendation to develop a lighting design that goes beyond engineering standards and prioritises human comfort and ambience is reiterated.

#### Non-residential uses

- Non-residential uses, including local retail and community facilities, should be located where there is certainty for their delivery, e.g. on LAHC owned land, not in the private lots.
- Recommend locating additional non-residential uses in the area where Washington and Roosevelt Avenues intersect. This will add amenity and interest to the link between Kentucky Road and Karne Street Reserves and further support walkability.
- Similar consideration for locating non-residential uses close to the school and 'Play Street' is recommended.
- Current arrangement of non-residential uses across the site is not considered to adequately support delivery of a walkable neighbourhood.

#### Zoning

- Develop a more granular zoning plan which supports the establishment of non-residential, local employment generation uses, which are well distributed across the site and along Belmore Road.

#### Implementation

- Develop block by block development controls which are place specific yet contribute to a coordinated strategy and coherent intent at precinct scale. Controls should include but not limited to FSRs, zoning/uses, tree retention, tree canopy, building length/block permeability, building heights, deep soil, solar access/thermal performance and carparking.
- The Sustainability Strategy should demonstrate an integrated approach for the different aspects of the masterplan, including the built form, public space, WSUD, etc.

Summary of previous advice, which was not specifically discussed at the session, but should be resolved prior to exhibition is provided in the attachment to this letter.

Please contact GANSW Design Advisor Melizza Morales ([melizza.morales@planning.nsw.gov.au](mailto:melizza.morales@planning.nsw.gov.au)), if you have any queries regarding this advice.

Regards,



Olivia Hyde  
Director Design Excellence, GANSW  
SDRP Chair

**Distribution:**

Helen Lochhead	DRP Panellist	
Garth Paterson	DRP Panellist	
Matthew Pullinger	DRP Panellist	CBCC
Melizza Morales	Design Advisor	GANSW
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Harkirat Singh	Observer	GRCC
Marcus Jennejohn	Observer	DPIE
Eva Stanbury	Observer	DPIE

**Apology for the Review Session**

Adriana Malin	Client	LAHC
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Final response

# SDRP 03 28th of April 2021

<b>Tree canopy</b>	
<ul style="list-style-type: none"> <li>Previous advice in relation to the importance of protecting and retaining as many as possible of the existing mature trees, including within development lots, is reiterated. As presented, the masterplan does not demonstrate a clear intent for modifying the siting, scale or shape of building footprints in order to retain trees. The proposed approach to defer a detailed arborist report to a later stage and define what trees can be retained on a staged, and an as needed basis, is not supported. This approach erodes the core purpose and benefit of a masterplan in establishing robust precinct wide strategies, in this case a tree canopy strategy.</li> <li>Commissioning of a detailed arborist report should be a priority. Its findings should inform the layout and scale of proposed building footprints. Furthermore, this information would assist in creating a place specific design response with a richer built form, character, permeability and overall amenity.</li> </ul>	<p>Matters raised relating to tree retention, removal and reprovion have been taken into consideration by the design team in preparation of the Design Guide, with an overall objective to retain trees across the site where possible.</p> <p>Whilst not presented to the panel at this meeting, the Design Guide provides draft controls including the requirement for preparation of an arboricultural assessment accompanying any DA for the site. These arboricultural assessments will categorise the health and significance of trees across the site from low to high, with trees in the latter category being prioritised for retention, including providing influence to the design of buildings at the site.</p> <p>Where trees are not able to be retained, controls relating to reprovion apply, by a margin greater than those being removed, along with broader controls to ensure canopy cover targets are achieved across the precinct.</p> <p>This planning proposal only seeks to amend the development standards contained in the Canterbury Local Environmental Plan 2011. Hence, the building footprints provided in the master plan are indicative only, The master plan does not seek to lock in the layout and scale of proposed building footprints. Further detail work and investigation are required before building footprints are determined including earthworks, servicing, flooding, access, location of trees etc. This level of detailed work is typically undertaken at DA stage, including place-specific design response to many elements that contribute to the built form.</p> <p>As illustrated in Section 7.2 of the Green Infrastructure Study prepared by Clouston Associates, there are precedents in Sydney where building envelopes have been designed around existing trees to enable their retention. Arborist report is not required as part of the Study Requirements issued by DPIE.</p>
<b>Built form</b>	
<ul style="list-style-type: none"> <li>Refining the overall approach to built form to respond in a more place-specific manner to support the legibility of the street hierarchy, tree retention, and the particularities of the grid and the site's topography is reiterated.</li> <li>Strategies for mitigating the perception of density, in particular to the north west area of the site, should be explored further. Consider variations in building heights when long views are not viable.</li> </ul>	<p>As required by the study requirements, block by block height, massing and FSR diagrams is provided in the Urban Design Report. These diagrams provide an overview of the stepping and gradation of building heights across the site, including siting and measures taken to mitigate the perception of density and maintain sight lines across the precinct.</p>
<b>Streetscapes and public spaces</b>	
<ul style="list-style-type: none"> <li>Kentucky Road and Karne Street Reserves could be better connected though a stronger green link along the proposed street network. Investigate revisions to the alignment of built form and/or the street alignment to enable a corridor that visually links the two reserves.</li> <li>Recommendation to develop a lighting design that goes beyond engineering standards and prioritises human comfort and ambience is reiterated.</li> </ul>	<p>This item has been considered by the design team. Whilst not presented to the panel in this meeting, the Design Guide includes provisions relating to the public domain, landscaping and lighting and is considered sufficient to address this issue, noting it will be further explored as part of subsequent detailed design processes.</p> <p>Lighting design is not part of the Study Requirements. Lighting design is typically undertaken at DA stage.</p>
<b>Non-residential uses</b>	
<ul style="list-style-type: none"> <li>Non-residential uses, including local retail and community facilities, should be located where there is certainty for their delivery, e.g. on LAHC owned land, not in the private lots.</li> <li>Recommend locating additional non-residential uses in the area where Washington and Roosevelt Avenues intersect. This will add amenity and interest to the link between Kentucky Road and Karne Street Reserves and further support walkability.</li> <li>Similar consideration for locating non-residential uses close to the school and 'Play Street' is recommended.</li> <li>Current arrangement of non-residential uses across the site is not considered to adequately support delivery of a walkable neighbourhood.</li> </ul>	<p>This item is agreed by the project team. Indicative locations for such uses were shown in the presentation to the panel and have since been incorporated within the master plan. All locations identified are within LAHC owned land, to provide certainty for their delivery.</p> <p>This location has been identified for such uses. Non-residential uses throughout the site is being discussed with Canterbury Bankstown Council.</p> <p>This location has been identified for such uses. Non-residential uses throughout the site is being discussed with Canterbury Bankstown Council.</p> <p>A number of locations have been identified for non-residential uses and have since been incorporated within the master plan. Locations have been selected based on their potential to support future residents within the precinct and existing surrounding development (including within Washington Park), as well as users of open space including Salt Pan Creek Reserve, which are anticipated to increase substantially following future upgrade works by Canterbury Bankstown Council (in accordance with the Salt Pan Creek Reserve Masterplan). Non-residential uses throughout the site is being discussed with Canterbury Bankstown Council.</p>

<b>Zoning</b>	
<ul style="list-style-type: none"> <li>Develop a more granular zoning plan which supports the establishment of non-residential, local employment generation uses, which are well distributed across the site and along Belmore Road.</li> </ul>	<p>In response to matters previously raised by the panel, a review of proposed zoning has been undertaken, in consultation with both Canterbury Bankstown Council and Georges River Council. As a result of this review, amendments to land zoning along Belmore Road are proposed, including reverting from the previous B4 (Mixed Use) zone to a more granular B2 (Local Centre) zone and R4 (High Density Residential) zone arrangement, including provision of an additional permitted use to the northern block of the intersection of Belmore Road and Roosevelt Avenue. These changes will form part of the formal submission package.</p> <p>Following discussions with Canterbury Bankstown Council, it is also proposed to increase the GFA of neighbourhood shops on identified sites within the R4 zone to 200sqm, which are otherwise currently permitted a maximum of 100sqm GFA pursuant to Clause 5.4(7) of the Canterbury LEP 2012. This will provide additional flexibility to potential non-residential uses (such as cafes or restaurants) within these identified locations as noted above.</p>
<b>Implementation</b>	
<ul style="list-style-type: none"> <li>Develop block by block development controls which are place specific yet contribute to a coordinated strategy and coherent intent at precinct scale. Controls should include but not limited to FSRs, zoning/uses, tree retention, tree canopy, building length/block permeability, building heights, deep soil, solar access/thermal performance and carparking.</li> <li>The Sustainability Strategy should demonstrate an integrated approach for the different aspects of the masterplan, including the built form, public space, WSUD, etc.</li> </ul>	<p>As required by the study requirements, block by block development controls such as zoning, building height and FSR, are provided within the Design Guide</p> <p>As per the Study Requirements an Environmental Sustainability Study has been prepared by Mott MacDonald (Attachment O of the planning report) which recommends an integrated approach to sustainability through the adoption of:</p> <ul style="list-style-type: none"> <li>5-star Green Star – Communities Rating .</li> <li>5-star Green Star ratings for the residential towers and townhouses with the Green Star Buildings tool v1;</li> <li>NABERS Apartment ratings should be managed by strata / building management during operation;</li> <li>BASIX Energy and water scores that exceeds minimum targets;</li> </ul>

# Summary of matters to be addressed prior to exhibition

The SDRP identified a number of matters to be addressed prior to exhibition. The project team has addressed all matter, which are summarised in the following table. The following table also summarises how the matters have been addressed and which section of the exhibition package the resolution can be found.

Matters to be addressed/updated/further refined prior to exhibition	Design review response	Report Section	Matters to be addressed/updated/further refined prior to exhibition	Design review response	Report Section
Demonstration of connection to country as per Better Placed Connecting with Country Draft Framework	Included sections within reports on Country and potential Pathways for connecting to Country as per Better Placed Connecting with Country Framework  DCP controls  – Included controls on Connecting with Country	– Place Strategy, chapter 4, Country  – Public Domain, Place and Urban Design, 5.3 Designing with Country  – DCP 6.3	Tree retention details and arborist report including showing deep soil provision and building envelopes to maintain trees	Provided High retention value tree (HRT) arborist report. Detailed analysis of retention of high value trees across the site, deep soil and ability for revision of building envelopes during future detailed design stages to enable existing HRT retention.	– Public Domain, Place and Urban Design, 3.10, 7.2, 7.3 and 7.6
Block-by-block design and planning details, showing how the proposed controls respond to the site context including significant trees, topography and solar access	Included block by block controls and methodology as to how this has informed the final LEP planning controls with a focus on design led while still maintaining flexibility.  LEP controls  – HOB, ADG compliant. Informed by Master Plan, land use, topography and flooding mapping promotes flexibility in future stages of development  – FSR, informed by Master plan. Mapping informed by block by block approach and revised to promote flexibility in future stages. Detailed methodology included in Public domain, place and urban design report  DCP controls  – Included controls on tree retention  – Included controls on solar access	– Public Domain, Place and Urban Design, 8 Recommendations  – Public Domain, Place and Urban Design, 6.10 Building Height  – Public Domain, Place and Urban Design, 6.11-6.13  – DCP 8.0  – DCP 7.9	Identification of potential locations of non-residential uses throughout the site (suggest activation near school)	Included APU LEP map identifying potential locations of non-residential uses across the masterplan.	– Public Domain, Place and Urban Design, 8 Recommendations
Details on the activation of Belmore Road and response the scale of building opposite on Belmore Road	Detailed interface study including sections and precedents for master plan proposal highlighting appropriateness of scale and design response	– Public Domain, Place and Urban Design, 6.6	Addressing street interface design issues/ mitigation of density (e.g. street wall height and building lengths)	Analysis of existing built form/character. Interface study, typologies and built form response to local context.	– Public Domain, Place and Urban Design, 3.16  – Public Domain, Place and Urban Design, 6.6
			Explanation of amount of floorspace of social housing compared to existing	Not a study requirement	
			Identification of a stronger link between Karnes Reserve and Kentucky Rd Reserves	Revised DCP to include control indicating through site link to be provided between Karne and Kentucky reserve	– DCP 3.5
			Consideration of B2 zoning fronting Belmore Road and activation of the centre of the site with commercial uses	Have revised zoning to B2	– Public Domain, Place and Urban Design, 8 Recommendations
			Sustainability – a site wide approach should be undertaken	Revised DCP to include - Ecologically Sustainable Development including, Local climate sensitive design, Sustainability ratings/ targets for the site	– DCP 10.1 10.2
			Revise lighting requirements to respond to the particulars of the site and vision for the streets to be a 'joy' to walk down	Revised DCP to include controls on lighting	– DCP 3.1, 3.4
			Demonstrate place responsive built form	Interface study, typologies and built form response to local context.	– Public Domain, Place and Urban Design, 6.6