File no: 145-556-4

25 September 2015

Paul Robilliard  
Director Housing Land Release  
Department of Planning and Environment  
GPO Box 39 Sydney 2001

Dear Sir,

Review of Draft Riverstone East Precinct Plan

I refer to the exhibited draft Precinct Plan and supporting documentation for the Riverstone East Precinct within the North West Priority Growth Area.

We have reviewed the precinct planning documents. Our comments on the draft Precinct Plan are provided in Attachment 1 to this letter. We support the proposed rezoning of the Riverstone East Precinct subject to the matters included in Attachment 1 being addressed.

We appreciate the opportunity of working closely with you throughout the precinct planning process. If you would like to discuss this matter further, please contact our Strategic Planner, Wint Khin Zaw on 9839 6424.

Yours faithfully,

Glennys James  
Director Design & Development
Blacktown City submission on the draft Riverstone East Precinct Plan

1. Staging
   a. We were initially opposed to the new staged approach to the rezoning of the Precinct as we believed it was inequitable to landowners. We believe that the release of the entire Precinct and invitations to all landowners to attend community consultation workshops created an expectation that the entire Precinct would be rezoned. Leading up to exhibition, landowners had not been informed of the Government’s change in policy in favour of staging.

   b. Even though a concept plan for Stage 3 has been exhibited, we are concerned about the consequences this has for the affected landowners. There is no certainty for the landowners in Stage 3, particularly those identified with future public infrastructure on their land such as roads, drainage and open space. The concept plan does not create an acquisition responsibility, but it does have a significant impact on the ability of landowners to sell or develop their land. We also do not have the ability to collect Section 94 contributions from development in Stage 3 to fund the acquisition of land required for a future public purpose. This issue, which creates serious inequity and uncertainty, needs to be resolved in finalising the precinct plan.

2. Open space and recreation
   a. We require further details concerning the size of playing fields in order to demonstrate that all fields and supporting infrastructure can physically fit into the allocated spaces.

   b. There is a shortfall in passive open space and indoor and outdoor recreation facilities to support the population forecasts for the Riverstone East Precinct and Area 20 Precinct. We have previously provided this feedback to you. We would like to meet with you to further discuss our requirements.

   c. We outline below our key concerns in terms of open space provision on the draft ILP:

      i. The proposed playing fields will not fit into the allocated spaces when considering earthworks, buffer zones, fencing etc. Further information and designs are required to determine the correct size of the spaces

      ii. The provision of passive open space is not equitable. The majority of passive open space has been allocated along the western boundary of the ilp, which is supported within the first ponds creek corridor. Further open space should be considered in accessible locations across the precinct

      iii. There is a noticeable gap in the provision of open space between Clarke Street, Guntawong Road, Tallawong Road and Riverstone Road. This needs to be considered

      iv. The open space area between Cudgegong Road and the transmission easement in the Area 20 Precinct serves no useable function. These lots are currently zoned R2 Low Density Residential in the Area 20 Precinct Plan. We do not believe it is equitable to now rezone part of this land as open space that is unusable. The entire lots should retain a residential zoning. The open space
should be transferred elsewhere in the precinct, such as to land located between Clarke Street and First Ponds Creek.

3. Environment (noise, odour, water quality and land contamination)

a. There are various land uses within the precinct that could cause noise, odour, impact on water quality and cause contamination of land. These include low intensity agriculture, market gardens, poultry sheds and an abattoir, as well as illegal dumping.

b. A significant potential constraint for residential development exists at the meat rendering works, located on the corner of Windsor Road and Garfield Road East (1106 Windsor Road, Riverstone). The property descriptions are:

- Lot 10, DP 1076882 (34.21ha)
- Lot 8, DP 1079228 (33.16ha)
- Lot 91, DP 1097608 (24.19ha)
- Lot 2, DP 786801 (32.92ha).

c. Noise

i. Future development on residential land proposed in proximity to the train stabling yard should be required to include acoustic design measures to minimise potential adverse impacts.

ii. Noise and odour generated by existing animal husbandry operations in the precinct has a high potential of affecting future residents, despite the staged release. Consideration of staging should be given to the following recommended buffer distances:

- 75m for any development surrounding the poultry farm on Clarke Street
- 600m for any development surrounding the meat rendering works on Windsor Road.

iii. Although the acoustic report recommends limiting the hours of operation and imposing physical noise controls on existing operations in the precinct, we have limited ability to regulate and enforce these ameliorative measures.

d. Odour

i. The odour modelling indicates that that the area of odour impact covers the majority of the precinct. The model is based entirely upon assumptions. No physical testing was conducted. Although a range of odour reduction measures would significantly lower odour emissions rates, the actual extent of this reduction is not readily available.

ii. The existing meat rendering works and poultry farm will generate unacceptable levels of odour across a large portion of the Precinct. A detailed odour study of these existing operations is needed to test assumptions and capture site specific data prior to the rezoning of any affected residential land.

e. Water quality

i. The water sensitive urban design water quality modelling has not considered the discharge from the rendering works flowing to ambient waters. This needs to be addressed.

f. Land contamination

i. A detailed site investigation should be undertaken prior to finalising plans for any form of urban development on the meat rendering works site on Windsor
Road. The results of the detailed site investigation should determine the appropriate land use.

4. Heritage

a. We support the heritage outcomes proposed within the Precinct, including the heritage controls outlined in the DCP for development around Nu Welwyn (the listed non-indigenous heritage item).

b. In reference to the draft DCP, Section 4.5 Aboriginal Heritage, we suggest that the clause be amended as follows:

"Aboriginal stakeholder consultation should include groups currently identified by the Office of Environment and Heritage (OEH) as having an interest in the Riverstone East Precinct."

c. The OEH currently has 35 stakeholder groups registered for the Blacktown LGA. Applicants are obliged to give all groups an opportunity to comment as opposed to only consulting with 2 specific Darug Aboriginal stakeholder groups as stated in the draft DCP.

5. Biodiversity

a. The Biodiversity and Riparian Corridors Assessment report identifies a need to retain 3.8 hectares of existing native vegetation (ENV) within Certified lands in the Precinct in order to achieve the 14.6 hectare retention target under the Draft Growth Centres Conservation Plan.

b. The location for the 3.8 hectares of ENV should be considered in conjunction with the additional passive open space that is required in order to meet the population demands from Area 20 and Riverstone East. The identified areas need to be reflected on the Native Vegetation Protection Map, Riparian Protection Map, draft ILP and Land Zoning Map.

c. The impact to ENV within non-certified land from proposed bio-retention/detention basins (Basins 1, 2, 3, 5 and possibly 6) should be considered and offsets identified as part of retention of additional areas of ENV.

d. Our comments on Stages 1 and 2 are:

i. Land between First Ponds Creek, Clarke Street, Riverstone Road and Cranbourne Street:

- The proposed medium density residential land between First Ponds Creek, Clarke Street, Riverstone Road and Cranbourne Street is very close to the riparian corridor. This area contains groundwater dependent ecosystem (GDE) vegetation communities that are assessed as having high conservation significance.

- The setback in this area is not sufficient to allow for the riparian zone, vegetation protection and an associated asset protection zone and perimeter road. This area should form part of an open space riparian corridor. The Native Vegetation Protection Map and Riparian Protection Map should be amended to include the mapped GDE’s in this area.

ii. Similarly, open space consideration should be given to the proposed medium density residential land located between Clarke Street and First Ponds Creek, south of Cranbourne Street and south of Guntawong Road. This area could serve as an open space corridor in junction with the riparian zone, vegetation.
protection and asset protection. Land to the east of Clarke Street could be zoned medium density to maintain the overall densities within the precinct.

iii. Consideration should be given to realigning the Clarke Street extension between Guntawong Road and Oak Street towards First Ponds Creek, to increase the amount of developable land on the eastern side of the road.

iv. Further consideration should be given to land in the vicinity of Oak Street between the existing Nature Conservation Trust lot containing ENV, Clarke Street and the proposed native vegetation retention area on Certified land adjoining the train stabling yards. The medium density residential land should be considered as part of a realigned drainage corridor or low density residential to align with the biodiversity values in this area. This will also provide a buffer to the train stabling yard and increase the value of the habitat corridor between First Ponds Creek and Cudgegong Reserve.

e. Outlined below are our comments on Stage 3:

i. The presence of Shale Sandstone Transition Forest (SSTF) within the Stage 3 of the Precinct needs to be recognised for its importance regionally. Due to its low distribution within the North West Growth Centre and within the Blacktown LGA this vegetation should be recognised as a significant feature of the Precinct and therefore a priority for conservation and restoration for the locality. The retention of vegetation will improve the riparian corridor and provide a buffer to Rouse Hill Regional Park. The plan should identify sufficient area to ensure that the design of Basin 6 and proposed sporting fields avoid any impacts on SSTF vegetation.

ii. The proposed open space on the corner of Cudgegong Road and Guntawong Road within Stage 3 is supported. The open space/drainage corridors linking these areas together and to Rouse Hill Regional Park is also supported.

6. Traffic and transport

a. Riverstone Road and Gordon Road are both shown as being closed at First Ponds Creek in the Riverstone Precinct and are being constructed as local roads. In the Riverstone East Precinct they are now shown as being opened and also having the status of collector roads. This conflict needs to be addressed.

b. The proposed collector road between Tallawong Road and Cudgegong Road should have its alignment adjusted to meet Tallawong Road at the main entrance to the train stabling yard.

c. The ILP needs to incorporate a roundabout at the intersection of Rouse Road and Cudgegong Road.

d. The staggering of local roads in several places is not supported.

e. Traffic controls are required at the following intersections:

i. Realigned Clarke Street and Garfield Road East – traffic lights

ii. Realigned Clarke Street and Tallawong Road Extension – roundabout

iii. Realigned Clarke Street and Riverstone Road – roundabout

iv. Clarke Street and Guntawong Road – roundabout

v. Tallawong Road extension and Riverstone Road - roundabout

vi. Tallawong Road extension and Guntawong Road - roundabout
vii. Tallawong Road and Macquarie Road – roundabout.

f. Proposed road widths in DCP Schedule:

i. Fig 4.3 Sub-arterial - The total road reserve width of 35 m is wider than the width of sub-arterial roads in the DCP Schedule of other precincts. It should be consistent.

ii. Fig 4.4 Collector Road (Bus Route) – 20 m width is acceptable, however the gap between the property boundary and footpath should be a minimum of 0.9m.

iii. Fig 4.5 Local Street – 16 m width is acceptable, however the gap between the property boundary and footpath should be a minimum of 0.9 m.

iv. Fig 4.6 Local Street configuration along Riparian Corridors/Parks is not consistent with other precincts. This road will not be necessary as we do not support residential development between Clarke Street and First Ponds Creek. This road typology should be removed.

v. Fig 4.8 Slip lane configuration is not acceptable as it leaves only a 4.0 m width for 2 way traffic.

g. The 2 local roads that have direct access to Garfield Road East are not acceptable. The one opposite Edmund Street should be closed as a cul-de-sac and the one between Edmund Street and Junction Road could be a left in – left out arrangement.

h. Road widening for traffic signals and roundabouts must be shown on the Land Reservation Acquisition maps.

i. Access to the proposed medium density residential land located between Clarke Street and First Ponds Creek will be constrained given that Clarke Street is an access denied sub-arterial road. The ILP does not propose slip roads along the entire western side of Clarke Street, but does propose local roads along the edge of the riparian corridor. This would result in an undesirable streetscape of back fences on Clarke Street. Development in this area is questioned.

j. Consideration should be given to a pedestrian crossing across Clarke Street to allow residents to access the open space corridor along First Ponds Creek.

7. Water cycle management

a. Our previous concerns with Issue B and C of the draft water cycle management report and stormwater management concept have not been addressed in the exhibited draft report. We would like these matters addressed.

b. The exhibition version of the hydrological, hydraulic and water quality models have not been supplied to us. Our assessment of the water cycle management models has therefore been based on the earlier versions of the models that were supplied to us in January/February 2015.

c. We are concerned that further investigation that is required for the 500 m wide area adjacent to First Ponds Creek will cause 12 to 18 months delay in the delivery of infrastructure. We would like this matter resolved quickly.

d. The project planning and design of the Sydney Metro Trains Facility (train stabling yard) must be considered as part of precinct planning, as it will have a significant impact on infrastructure in the precinct.
e. The area between the train stabling yard and Schofields Road should be excluded from the Water Cycle Management Plan as stormwater will be managed on the train stabling yard as part of their project approval. This needs to be discussed in the report and shown on associated drawings.

f. The boundaries of the train stabling yard are incorrectly shown on the ILP. This needs to be corrected. This will have a major impact on Basin 1 and bio-retention basins M5-A and M5-B. Our assessment is that Basin 1 is no longer required and the size of the bio-retention basins may be reduced as the catchment draining into them has been reduced by 40%.

g. The bio-retention basins are undersized as the conveyance swales are included in the stormwater quality treatment train. This is contrary to our guidelines and previous advice given throughout the precinct planning process. This has implications on whether the water cycle outcomes can be delivered for the precinct in the land available.

h. The flood extent shown on the draft SEPP Development Control Map (DVC Flood Prone and Major Creeks Land map) in the vicinity of Oak Street is questioned and needs to be checked against the modelling by Mott McDonald.

i. Consideration should be given to realigning the proposed stormwater channel between Clarke Street, Tallawong Road and land immediately north of the train stabling yard. Realignment of the channel should be considered to land south of the proposed E3 Environmental Management zoned land on land proposed for medium density residential development. This would provide for a consolidation of open space, biodiversity and drainage functions and would also act as a buffer between the train stabling yard and residential development to the north.

j. We have outlined below a summary of comments on the Water Cycle Management report:

i. The cumulative impact of stormwater within this precinct should be considered in conjunction with approved plans for other precincts.

ii. The detention basins for the stabling yard need to be included in the hydrological model. By including these basins in the model, and considering the basin strategy for the Riverstone Precinct and Alex Avenue Precinct, Basin 1 can be removed.

iii. The design case hydrologic model needs to incorporate the previous Riverstone and Alex Avenue models, not a single limped node. A single large limped node will affect sub-catchment storage and peak flows.

iv. The developed case should use the ARBM loss model for consistency with previous modelling.

v. The verification of the existing case hydrological model is that it matches the previous model. This is only the case at the outlet. At the other locations it is out by 20% or more. The previous model should have been used and amended as needed.

vi. The proposed modelling assumed that the Alex Avenue Precinct is undeveloped. This is a wrong assumption. The Alex Avenue detention strategy shows that there will be no increase in peak flows, but a change in timing of when the peaks occur.

vii. Section 4.1.4.2 states that the impact of the train stabling yard has been considered in the modelling in the scenarios. This statement is incorrect. This
area has a major impact on the flows to Basin 1. The removal of Basin 1 will provide significant savings in the Section 94 Contributions Plan.

viii. The model referred to in Section 4.1.8 does not calibrate flows above Guntawong Road. The flow difference upstream is more than 25%. Clarification is required as to whether this is due to the lumped node approach. The justification for the lumped node approach was discussed Section 4.1.10.1. However, the model prepared by GHD for the Alex Avenue Precinct and Riverstone Precinct is available. The previous section assumed undeveloped flows, but this section discussed the developed flows. This needs to be clarified.

ix. The hydrological results need to present the full range of storms, not just the 100Y and 2Y ARI.

x. The climate change assessment in Section 4.3.4 has used a 20% increase. Assessments undertaken in other precincts have adopted a 15% increase. The values in Table 4.11 are therefore not consistent with the recommended 15% increase. The report needs to be updated for the 15% increase.

xi. There has been no dam break assessment of the online detention basin strategy. This is critical as there are a number of online detaining structures proposed. Failure of an upstream dam could have a cascading impact on the system and cause significant risk to life and property. This needs to be undertaken.

xii. The mapping of the riparian corridors is not consistent. Now that First Ponds Creek has been classified as a 3rd Order stream, online basins are not permitted.

xiii. There needs to be an investigation into the waterway stability, pre and post development. We question whether the waterway will be stable with the works in the creek and floodplain. There needs to be velocity and shear stress mapping of the creek corridors to determine this.

xiv. Water quality modelling needs to be undertaken for each individual rain garden, not the lumped approach. We have no way of assessing or verifying whether the size of each rain garden is correct.

xv. Conveyance swales are not to be included in the stormwater treatment train. Also, the modelling of rainwater tanks is not in accordance with our Water Sensitive Urban Design Handbook and overstates the effectiveness of the tanks. The effect of both of these is to undersize the rain gardens.

xvi. A list of rain gardens is shown but the allocated places and sizes are not indicated. This needs to be rectified.

k. The following drawings need to be amended:

i. Appendix A Drawings 0207 and 0208
   • The catchment breakup for nodes CF52A, CF55C and CF58 is incorrect and does not take into account the approved train stabling yard.

ii. Appendix A Drawing 0209
   • The two small riparian corridors should not extend past Clarke Street
   • The train stabling yard should be excluded from the Water Cycle Strategy.

iii. Appendix A Drawings 0210, 0211, 0212, 0213 and 0214
iv. Appendix A Drawing 02 relating to bio-retention details

- The new bio-retention detail drawing supplied is plotted incorrectly and only shows partial details. As a result it cannot be assessed.

v. Appendix A Drawings 0240, 0241 and 0242

- The grade on the floor of the basin is too flat. It will be prone to siltation. It will become a marsh and not be maintainable. Our preferred grade for basin floors is 2%. We will consider grades down to 0.5%, but we require subsoil drainage and a suitable cross fall
- The batter slopes and storage depths are not to our standards
- We question how the continuity of the riparian corridor will be maintained over the basin embankment as it is in conflict with dam safety considerations
- Fish passage through the weirs needs to be allowed for in the design
- We question how the rain gardens fit with the basins, channels and topography
- The rain gardens need to be located outside the core riparian zone
- There needs to be an allowance for batters and storage within the basin footprint.

vi. Appendix A Drawing 0251

- The riparian corridor for Channel CF40, upstream of the road, needs to be deleted
- The trunk channel is better replaced by a piped drain within the road reserve as it will provide additional land for development.

vii. Appendix A Drawing 0252

- The riparian corridor for Channel CF38, upstream of the road, needs to be deleted
- The trunk channel is better replaced by a piped drain within the road reserve as it will provide additional land for development.