

17 December 2020

Secretary of Planning  
NSW Department of Planning, Industry and Environment  
Locked Bag 5022  
Parramatta NSW 2124

## **Draft Mamre Road Precinct Development Control Plan**

Dear Mr Betts,

Thank you for the opportunity to make comment on the Draft Mamre Road Precinct Development Control Plan (DCP) and associated documents. Our team has been working closely with the Department in planning for the servicing of the precinct. Sydney Water is committed to protecting and restoring Wianamatta-South Creek and achieving wider sustainability and liveability objectives for the future communities of Western Parkland City. Please find attached (**Attachment A**) some detailed comments regarding specific clauses of the DCP along with the following general points for your consideration.

### **Clarification of Trunk Drainage Management**

Effective ongoing management of assets and land is crucial to deliver the outcomes for waterway health, greening, cooling and liveability detailed in the Mamre Road Integrated Water Management Plan.

The draft Mamre Road Precinct DCP allows for a “drainage manager” yet does not nominate that entity<sup>1</sup>. Sydney Water has existing powers under the Sydney Water Act and would welcome the opportunity to take a trunk drainage management role within the broader Sydney Area. Adopting this approach in the Mamre Road Precinct catchments would provide support to Penrith Council in the sustainable operation and management of Parkland drainage infrastructure. We would welcome further discussions with the Department in this regard.

### **Potential for regional approach to drainage assets**

Further efficiencies in the Mamre Road precinct may be realised by considering regional stormwater trunk drainage infrastructure, largely located within the neighbouring Wianamatta-South Creek Precinct. Sydney Water would be pleased to further assist in the investigation of this outcome.

### **Recycled Water in Mamre Road Precinct**

Recycled water will be provided in the Mamre Road precinct. The detailed specifications of the system are currently being resolved. In order to make recycled water a viable service, connection to the recycled water network should be mandated in the DCP. There is also a need to integrate stormwater reuse with the demand for recycled water to ensure that NSW

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<sup>1</sup> The Draft Section 7.11 Contributions Plan currently being exhibited by Penrith City Council costs trunk drainage infrastructure and appears to indicate Local Government management.

Government waterway health objectives are addressed. Relevant components of the Integrated Water Management Plan and Development Control Plan will need to be amended to reflect this recent development in the Mamre Road Precinct water servicing strategy. Further details are provided in the table at **Attachment A**.

Sydney Water looks forward to continuing an active role in the Mamre Road Precinct. Congratulations to the planning team in detailing innovative planning documents in a compressed timeframe. To clarify any elements in this correspondence please do not hesitate to contact Phillip Birtles, our Integrated Water Cycle Manager, at [phillip.birtles@sydneywater.com.au](mailto:phillip.birtles@sydneywater.com.au)

Yours sincerely,

A handwritten signature in black ink, appearing to read "Chris Gantt".

Chris Gantt for Renee Ingram  
Head of Western Sydney Development

Att: *Attachment A – Detailed Comments – Sydney Water*

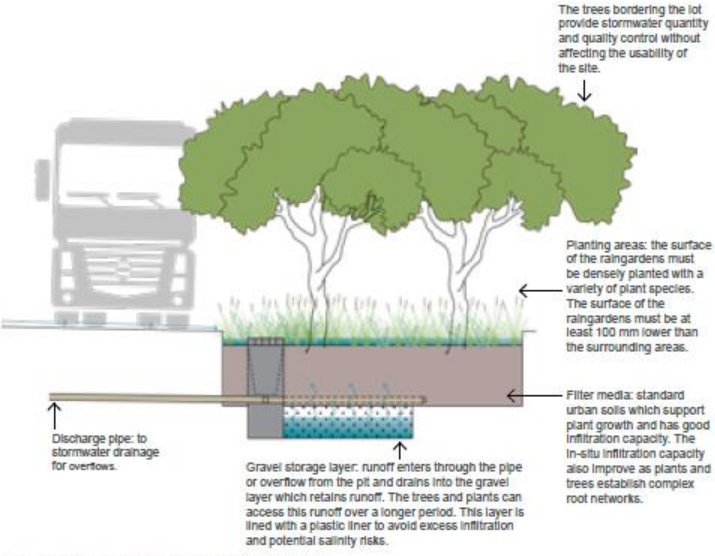
## Attachment A – Detailed Comments – Sydney Water

### 1. Draft Mamre Road Precinct Development Control Plan

Section	Subsection Ref	Comment
Section 1.5 – How to use this DCP	Section 1.5.1 – Structure of the DCP	Chapter 2 – Precinct Planning Outcomes. ‘Water Cycle Management’ does not need to be capitalised.
Section 1.6 – Precinct vision	Page 8	Recommend including a reference to the maintenance of healthy waterways as a key part of the vision statement. Could also reference sustainable, economic and integrated water management as part of paragraph four which highlights Western Parkland City principles.
2.2.3 – Biodiversity Conservation and Management	Figure 3, page 14	Need to consider how creeks, trunk drainage and biodiversity corridors will be managed downstream of (just outside) the precinct. In particular, Ropes Creek where it flows out of the precinct and then back into the precinct. Preferably a trunk drainage or waterway manager would own and manage these elements of green infrastructure.
	Environmental Conservation and Recreation zones – page 15	<p>Control 5 states: <i>Stormwater and road infrastructure, including pipelines and detention basins, are not to be located within land zoned E2 Environmental Conservation.</i></p> <p>There may be a need for some stormwater infrastructure, in particular water quality infrastructure in these zones. Recommend amendment to read:</p> <p><i>Stormwater and road infrastructure, including pipelines and detention basins, are not to be located within land zoned E2 Environmental Conservation. <b>This excludes trunk drainage infrastructure delivered by or on behalf of the relevant trunk drainage manager.</b></i></p>
Section 2.5 – Riparian Land	Objectives – page 23	<p>Some of the objectives included here would be better placed elsewhere as below:</p> <ul style="list-style-type: none"> <li><i>(g) - To protect, maintain or restore waterway health through a risk-based approach to managing the cumulative impacts of development.</i></li> </ul> <p>This would be better placed in the waterway health section.</p> <ul style="list-style-type: none"> <li><i>(h) - To ensure waterways are protected in the design and management of the stormwater and wastewater management systems.</i></li> </ul>

Section	Subsection Ref	Comment
		<p>This would be better placed in the integrated water cycle management section.</p> <ul style="list-style-type: none"> <li data-bbox="730 533 1426 595">• <i>(i) To maintain and improve the hydrological regime of wetlands and waterways.</i></li> </ul> <p>This would be better placed in the integrated water cycle management section.</p> <ul style="list-style-type: none"> <li data-bbox="730 719 1477 781">• <i>(i) To ensure development does not adversely affect water quality or availability, including ground water.</i></li> </ul> <p>This would be better placed in the integrated water cycle management section.</p>
	Mapped Riparian Corridors – page 23	The mapped riparian corridors heading states that they are field validated but the text refers to indicative mapping in Figure 2 and 3. Reference should be made to definitive mapping to avoid ambiguity.
	Avoiding modifications to natural waterbodies – page 24	Controls 4 and 5 may conflict with the flow objectives set by DPIE EES.
	Protection and Enhancement of Riparian Corridors – page 24	<p>Control 14 states:</p> <p><i>“The number of vehicular and pedestrian watercourse crossings should be minimised and designed in accordance with the NRAR Guidelines to allow for riparian connectivity and flows.”</i></p> <p>This may conflict with objectives for connectivity, permeability and active transport. Note that Control 8 states that waterway crossings such as bridges are to be maintained. Potential for conflict in these two controls.</p> <p>Control 15 – states that perimeter fencing should be placed along riparian corridors. Question whether this is desirable? Parkland City principles encourage access to waterways for the community. Also fencing along these areas does not generally create a pleasant landscape aesthetic.</p>
	Page 25	Control 21 – amend to read “Water holding structures (e.g. farm dams) that are more than 0.1ha in area or more than 3ML in volume within 3km of the approach boundary to Western Sydney Airport are to be avoided <i>unless appropriate wildlife strike assessment and design/maintenance controls are implemented</i> , to ensure that there is no attraction for water-favouring fowl”

Section	Subsection Ref	Comment
2.6 – Integrated Water Cycle Management	Page 26	<p>Introduction references the ‘Aerotropolis’. Suggest changing to ‘Mamre Road Precinct’.</p> <p>Introduction to this section should make reference to NSW Government waterway health objectives for Wianamatta-South Creek. Suggest reflecting wording in Draft Aerotropolis DCP (Stage 2).</p>
	Stormwater Management – pages 26-27	Where reference is made to ‘interim’ stormwater objectives – ‘interim’ should be removed as these are now endorsed by NSW Government.
	Trunk drainage infrastructure – page 28	<p>More guidance is needed in control 10 as to the sizing and design (natural) possibly with reference to a cross section.</p> <p>Change ‘Council’ to ‘Council or other’</p>
	Section 2.6.2, page 30	Update waterway health tables to final figures as per DPIE EES and remove notes from tables.
	Stormwater quality – page 30	<p>Control 1 – suggest amending to read:</p> <p>“All development proposals must include a Water Management Strategy detailing the proposed stormwater flow and quality measures.....”</p> <p>Don’t think there is a need to call out a specific component of a ‘Water Sensitive Urban Design strategy’ – this would naturally be covered in the overarching water management strategy.</p>
		<p>Control 3 - Wianamatta Street trees should be on all roads, regardless of whether basins are provided as these contribute to other objectives such as greening and cooling as well as water management.</p> <p>Wianamatta Street trees should be incorporated into all roads, not just local roads. Tree placement and design for industrial development is as per below:</p>

Section	Subsection Ref	Comment
		 <p>The trees bordering the lot provide stormwater quantity and quality control without affecting the usability of the site.</p> <p>Planting areas: the surface of the rain gardens must be densely planted with a variety of plant species. The surface of the rain gardens must be at least 100 mm lower than the surrounding areas.</p> <p>Filter media: standard urban soils which support plant growth and has good infiltration capacity. The in-situ infiltration capacity also improve as plants and trees establish complex root networks.</p> <p>Gravel storage layer: runoff enters through the pipe or overflow from the pit and drains into the gravel layer which retains runoff. The trees and plants can access this runoff over a longer period. This layer is lined with a plastic liner to avoid excess infiltration and potential salinity risks.</p> <p>Discharge pipe: to stormwater drainage for overflows.</p> <p>Wianamatta Street Tree – employment areas</p>
	Overland Flow – page 34	Control 15 – refer to trunk drainage figure.
Section 2.7 – Flood Prone Land	Flood Hazard Classifications	Control 4 – states that new development in floodways and flood storages or in high hazard areas <b>should be avoided</b> .  Wouldn't development be precluded in these areas?
2.9 – Salinity	Controls – page 36	Control 10 – query this control and others recommending minimisation of water use as directly contradicts water management approach. Higher pervious areas and use of harvested stormwater will be essential to meet new stormwater flow objectives as well as for greening and cooling. Guidance can be given on suitable irrigation rates to reduce risk of salinity impacts. Must be a balanced approach.
2.14 – Utilities Services	Controls – page 41	Control 3 – regarding provision of services in the road reserve. The Aerotropolis has adopted a common trenching approach for services to create room for street trees – is this intended to be adopted for Mamre Road Precinct? If so, should be detailed in the DCP.
3.2 – Views and Vistas	Controls, page 45	Controls 8 and 9 specify the avoidance of barriers such as fencing and walls along environmental conservation and open space areas and encourage the integration of creeks and waterways as key features of the landscape design. This is consistent with Parkland City principles and waterway management approaches but conflicts with control 15 in Section 2.5 which mandates fencing of riparian corridors.

Section	Subsection Ref	Comment
Section 3.4 – Transport Network	Figure 13, page 52	Sections should show Wianamatta Street Trees.
4.2 – Built form design controls	4.2.3 - Landscaping	Control 5, page 63 states that a minimum of 15% of site area is to be pervious. This conflicts with the previous requirement for 35% of the site to be pervious which aligns with the water management strategy. 15% perviousness is not sufficient to achieve water flow and quality objectives.
	4.2.10 – Ecologically Sustainable Development	Water servicing control 8, bullet point 2: please amend to read: <p>“To install rainwater tanks for non-potable water supply, sized to meet required water flow and quality objectives”</p> <p>This reflects the provision of recycled water within the precinct which could also be used to achieve the 80% non-potable demand which is called out earlier in the DCP.</p>
4.5 - Utilities	General, page 78	Unclear why there are two separate sections on utilities? Section 2.14 also addresses utilities.
	4.5.1 – General Principles for the provision of services – page 79	Control 1, bullet point 4 - Change ‘Council’ to ‘Council or other’ for trunk drainage.
		Recommend additional control be included to state: “Where a recycled water network is available, all development is required to connect to this network”.
Section 4.7 – Access and Parking	Design of Parking and Manoeuvring Areas, page 83	Control 13 – states: <p><i>“All carparking areas to be constructed of hard standing, all weather material with parking bays and circulation aisles clearly delineated”</i></p> <p>This control precludes the use of permeable pavement materials in light vehicle parking areas which could reasonably be used to improve site permeability towards the 35% target. Suggest rewording to enable these materials to be used.</p>
Dictionary	Page 99	Add the following terms to the dictionary: <ul style="list-style-type: none"> <li>• MARV – Mean annual runoff volume of a development measured in ML/hectare/annum.</li> <li>• Wianamatta Street Tree – A street tree connected to the stormwater system to allow for passive irrigation, capturing urban stormwater for reuse and nutrient take up. The trees are planted within pits with gravel beds and lining to ensure minimal subsurface infiltration and allowing the tree to take up water as needed to optimise tree health.</li> </ul>

