

16 December 2022

**Mr Robert Hodgkins**

A/Direction Central (Western) Metro West  
Planning and Land Use Strategy  
Department of Planning and Environment  
Via online submission

**Orchard Hills Discussion Paper**

Thank you for seeking Sydney Water's comments on the Orchard Hills Discussion Paper. The response is provided below with amendment requests tabled in Appendix 1.

**Supporting Growth**

In order to provide accurate and timely services, it is crucial that SW receives detailed housing forecasts including ultimate and year by year breakdowns of additional dwellings within Orchard Hills to greater inform our delivery of water related services to the area and align to wider strategies.

Sydney Water is in support of the proposed direction, which is to realise the vision of the emerging Western Parkland City. It is critical for the precinct to be designed to mitigate urban heat and retain water in the landscape. Importantly, these measure for new development(s) will also contribute to protecting the health of waterways including Wianamatta South Creek and delivering quality of life to residents, businesses and visitors to Orchard Hills.

Effective integrated water cycle management will be critical to achieving this vision. Water is central to this vision, and without climate resilient, alternative sources of water such as recycled wastewater and harvested stormwater, outcomes will be limited. Sydney Water looks forward to supporting DPE in delivering the vision for Orchard Hills.

Sydney Water supports principles for renewed connection to Country, using landscapes qualities to shape urban form, the focus on quality and green public spaces, and creating sustainable and resilient neighbourhoods.

In order to ensure that best practice for water and wastewater servicing and to ensure IWCM is embedded at the earliest stages of strategic planning, Sydney Water welcomes the opportunity work closely with DPE throughout the precinct planning process.

**Stormwater and Recycled Water**

- Stormwater is addressed on page 5 of the Frequently Asked Questions. Sydney Water note that no decision on stormwater management for the precinct has been decided. Sydney Water recommends that a position on stormwater management be stated early in the planning process. To ensure a coordinated response to stormwater management, or a centralised response if one trunk drainage authority is assigned, clarity via specific technical guidelines, DCP controls, appointment of stormwater trunk drainage/waterway manager should be available before any development applications are submitted, and to inform economic analysis of stormwater benefits.

- Stormwater infrastructure could be considered essential infrastructure (p. 25 of Discussion Paper), especially if trunk drainage, water sensitive urban design structures are required to adequately manage the effects of development and protect waterway health.
- Sydney Water recommends that land and footprint requirements for stormwater, wastewater, recycled water and other essential infrastructure be considered early in zoning and land use planning, especially if there are potential or perceived amenity conflicts (e.g., residential properties close to wastewater assets).
- Amenity and greening needs should be considered when planning space and infrastructure requirements (e.g., irrigation to ensure green canopy/recreation space survival).
- Sydney Water recommends that zoning should enable efficient assessment and approvals for essential water, stormwater, recycled water and wastewater infrastructure, reflecting prescribed zones in TI SEPP.
- Sydney Water notes that the stormwater requirements for a 'parkland city' vision was considered in Sydney Water's Options Assessment for Orchard Hills. However, the potential stormwater asset requirements for this area were not assessed as part of the Assessment. The requirements are being considered by the sub-regional planning study.
- Sydney Water notes that the potential for a recycled water scheme has been investigated at a high level, however further assessment is required along with more detailed understanding of growth and timing for the precinct. As a climate resilient water supply, recycled water can contribute to the desired greening and cooling outcomes. Further analysis and discussion on funding strategies will be required.

### Circular Economy

- Sydney Water supports the highlight of water cycle management as a further technical study (p. 26 of Discussion Paper). Sydney Water anticipates this study will also correlate with the other proposed studies such as utilities and services, heritage and sustainability. Here, Sydney Water seeks **clarification as to whether sustainability will also include progressing the circular economy**.
- Sydney Water recommends the vision should mention circular economy measures in pursuit of net zero by 2050.

If you require any further information, please contact the Growth Planning Team at [urbangrowth@sydneywater.com.au](mailto:urbangrowth@sydneywater.com.au).

Yours sincerely,



**Kristine Leitch**

Commercial Growth Manager

City Growth and Development, Business Development Group

Sydney Water, 1 Smith Street, Parramatta NSW 2150

## Amendment Requests

Document and Page	Sydney Water Comment
Orchard Hills Discussion Paper (p. 15)	<p>It is important that <b>retaining water in the landscape and adopting sustainable water management</b> practices are also incorporated into this principle for Orchard Hills.</p> <p>Key to cooling is water availability for irrigation of lawns, trees and other vegetation especially during prolonged dry periods, conserving drinking water supply as much as possible, and encouraged recycled water usage including recycled water from stormwater and wastewater. This is particularly important as the cooling benefits of greening are most needed when temperatures are high and water scarce. It is expected that water sensitive urban design will be a basic requirement.</p> <p><b>Please incorporate retaining water in the landscape and adopting sustainable water management practices into the principle ‘ Create sustainable and resilient neighbourhoods’.</b></p>
Orchard Hills Discussion Paper (p. 25)	<p>Trunk mains are required to service growth in Orchard Hills and were considered as required between 2026 and 2031 (medium term, not short term). They may be required earlier than expected (short term) depending on the growth timing.</p> <p><b>Please amend trunk main delivery to medium term.</b></p>
Orchard Hills Discussion Paper (p. 25)	<p>The Orchard Hills wastewater strategy is to discharge flows to Penrith WWTP via a new pump station and an 8km rising main. The delivery time is between 2026-2031 (medium term, not short term). However, this will depend on the growth timing in Orchard Hills and may need to be delivered earlier than expected (short term).</p> <p><b>Please amend pump station and rising main delivery to medium term.</b></p>
Orchard Hills Discussion Paper (p. 25)	<p>Four wastewater pump stations and rising mains are required to service Orchard Hills. This includes the transfer pump station listed above.</p> <p><b>Please amend number of wastewater pump stations and rising mains to four.</b></p>
Orchard Hills Discussion Paper (p. 25)	<p>No wastewater treatment plant is planned to be constructed within Orchard Hills. The current strategy is to transfer flows to Penrith WWTP.</p> <p><b>Please remove reference to Wastewater Treatment Plant.</b></p>
Orchard Hills Discussion Paper (p. 25)	<p>A recycled water scheme for the area has been investigated at a high level, however further assessment is required.</p> <p><b>Please amend time frame for recycled water infrastructure to Unknown.</b></p>