

WSI3 - Automated Distribution Centre

Lot 208, Lot 209, Lot 210, 475 Badgerys Creek Road, Bradfield

Landscape SSDA Design Report - SSD-105499958

May, 2026



SITE IMAGE
Landscape Architects



Landscape Design Report

Executive Summary

I Claira Kratochvil, confirm this Landscape Design Report addresses the requirement of SEAR ***Landscaping (outlined below)*** and relevant State and local legislation, policies, and guidelines including;

- The Western Sydney Aerotropolis Development Control Plan Phase 2 (DCP)
- IPG Badgerys Creek Road Masterplan (WSA_MP01), Prepared by Urbis
- Western Sydney Aerotropolis Precinct Plan, 2025
- Recognise Country: Guidelines for Development in the Aerotropolis

Relevant SEARs as outlined in EIS Key Issues:
Landscaping – a detailed site-wide landscape plan, including:

- An arborist report, tree protection plan and vegetation management plan if any vegetation is present on the site. Note an arborist report is not required for the site as there are no existing trees present within this allotment
- Detailed plans showing suitable landscaping which incorporates endemic species, heights of trees at maturity and proposed canopy coverage and location of trees to be removed and retained
- Demonstration of how the development would contribute to the long-term landscape setting in respect of the site and streetscape, contribute to the objective of increased urban tree canopy cover, mitigate the urban heat island effect and maximise opportunities for green infrastructure consistent with Greener Places and having regard to any bush fire risk
- Demonstration of consistency with the Western Sydney Aerotropolis Landscape Species List to minimise wildlife attraction risk.

This Landscape Design Report has been prepared by Site Image Landscape Architects to accompany a detailed State Significant Development Application (SSDA) for the construction of a warehouse or distribution facility (as defined), referred to throughout this report as an automated distribution facility (ADC).

The land to which this report relates is referred to as 475 Badgerys Creek Road, Bradfield, which has direct interface with the Western Sydney International Airport (WSI), legally described as part Lot 102 and Lot 105 in DP 1316278. It is noted that the ADC will be located on future lots within the 475 Badgerys Creek Road landholding. For the purpose of this Report, reference to ‘the site’ will relate primarily to the area within the broader lot proposed to be developed for the ADC, unless otherwise specified.

This report has been prepared to address the Secretary’s Environmental Assessment Requirements (SEARs) issued for the project (SSD-105499958).

This report concludes that the proposed development is suitable and warrants approval subject to the implementation of the following mitigation measures associated with landscaping of the site :

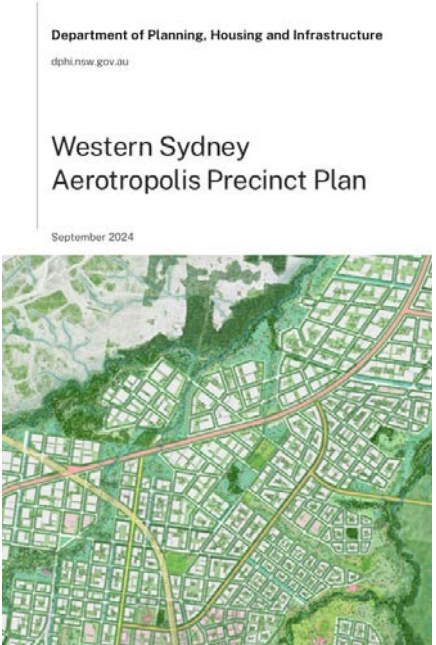
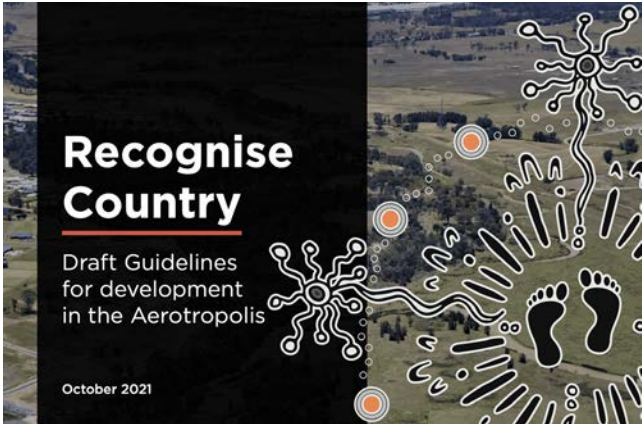
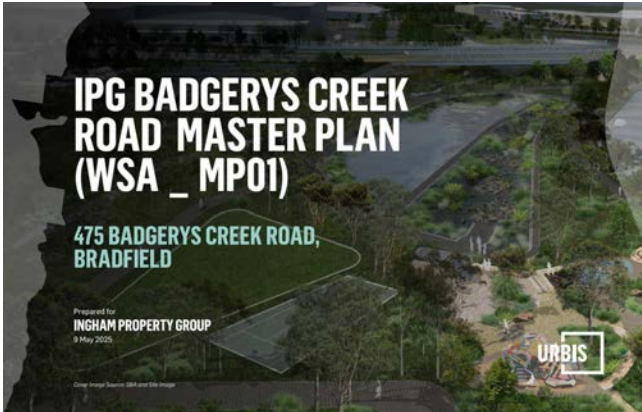
- Wildlife / Birdstrike Hazard Risk & Mitigation Measures
- Canopy Coverage and Defence against Urban Heat Island Effect
- Contribution to Broader Blue Green Grid & Consistency with the Greener Places Framework
- Compliance with the Bushfire Risk Assessment
- Safety and Equitable Landscape

This Report is to be read in conjunction with the prepared landscape plans/ documentation

I further confirm that none of the information contained in the Landscape Design Report is false or misleading.



Issue	Date	Author	Checked By
Preliminary DRAFT Issue for Review	7th April, 2026	Claira Kratochvil	Nick Metcalf
Final Issue for Review	14th April, 2026	Claira Kratochvil	Nick Metcalf
Final Issue for ToA	9th May, 2026		



Landscape Design Report

DCP Compliance

Performance Outcome	Benchmark Solution	Comment	Consistent
2.1 Recognise Country			
2.1.2 Engagement Requirements PO1 The cultural values and heritage, waterways and landscapes of Country form a key structuring element of development. Development retains and connects and provides access to landscape elements including ridge lines, waterways and native vegetation.	1 For development where the Recognise Country Guidelines apply and in conjunction with Aboriginal heritage assessment requirements, cultural values research is to be undertaken by a qualified Aboriginal heritage consultant (with experience in Aboriginal heritage and cultural values research). Cultural values research must be undertaken in consultation with Traditional Custodians (including through an on-site review). Cultural values research must identify within the proposed development site and any adjoining areas: cultural values and heritage significance, particularly within moderate to high areas of Aboriginal heritage sensitivity; significant cultural landscape elements, as they relate to cultural values; and significant waterways or bodies and areas of surrounding riparian vegetation as they relate to cultural values. Development proposals must outline how findings of the cultural values research have informed the planning and design, including the spatial layout of the site and the public domain, including areas used for open space, stormwater management and or biodiversity conservation and outline any potential impacts and mitigation measures. Development is to respect and respond to: Identified significant sites, places, views, traditional movement corridors and narratives of Country; The natural landscape, including topography and native vegetation by providing clear and legible links (within the road network and public domain) between ridge tops and creek lines and retaining native vegetation clusters and corridors through the siting of buildings; and Natural systems, including significant tributaries and waterways in the Wianamatta-South Creek catchment by avoiding significant impacts to ecological condition and the function of ecosystems as well as protect and restore native riparian vegetation. Development proposal design must ensure water management infrastructure and processes are responsive to Country and prioritise natural solutions that enhance the overall waterway systems condition, function and connections.	Landscape Response Using the Recognise Country design considerations outlined in the Masterplan (specifically section 5.3), the Landscape Approach to Country for this site focuses on the following key strategies: Organic forms of the natural landscape to inspire design and physical arrangement Varied colours and textures in plant selection that interact with the wind to add to the sensory experience of the site. WSUD and stormwater treatment capturing polluted water and treating it before it enters the natural watercourse. All design should appreciate the local vernacular. Draw upon and be inspired by Country, what has come before, what is required to sustain the future. Ensure there are spaces on industrial lots that provide refuge/ amenity for human engagement. The design language is informed by the Water Landscape and Sky Country themes identified through the masterplan process. Fluvial landscape forms reference the shapes and movement of Wianamatta South Creek and Badgerys Creek, creating a naturalistic landscape expression across the site setbacks. Subtle landform mounding reflects the historical topography and rolling Cumberland Plain landscape, with opportunities to reuse site fill to shape the terrain in accordance with Care for Country principles	Yes
2.4 Vegetation and Biodiversity			Yes
2.4.1 Deep Soil and Tree Canopy PO1. Consolidate areas of deep soil and tree canopy and provide minimum dimensions which allow for sufficient tree planting	Tree canopy and deep soil is provided in accordance with Table 2. Applicants must also have regard for the site coverage and relevant pervious surface targets outlined in this DCP. Deep soil areas are to be a minimum 3m by 3m in dimension. Consolidate deep soil areas by establishing them right up to abutting boundary walls and fence lines. Consolidate deep soil in setback areas and locate with adjoining deep soil areas in adjoining properties. Other than Urban Parks available under the Aerotropolis Precinct Plan, a minimum tree canopy of 45% for open space is to be achieved. Where open spaces include sports courts or fields, the 45% tree canopy shall be provided outside the spaces identified for the court or field area. Deep soil planting areas are to be de-compacted before planting with no services to be installed within these zones	Carpark planters vary in size but are typically 5-12m long and approx. 2m wide. Contiguous soil trenches to carparks will help tree growth. There is opportunity to provide structural cell or structural soil adjacent to island planter to ensure optimum tree growth. In line with the benchmark solutions, deep soil areas are consolidated. Generous setbacks allow for extensive canopy coverage, helping to improve/ combat urban cooling. There is opportunity to provide structural cell or structural soil adjacent to island planter to ensure optimum tree growth. A canopy coverage target of 14.1% is provided (a shortfall of 0.9% from the masterplan requirement). This shortfall is due to compliance with bushfire requirements, aviation safeguarding & site security measures. Therefore, the shortfall is considered appropriate. Deep soil is 15.8%	No but justified

Landscape Design Report

DCP Compliance

Performance Outcome	Benchmark Solution	Comment	Consistent
2.4.4 On Lot and Streetscape Landscaping and Preferred Plant Species PO1 Plant species are provided in accordance with the preferred species identified for the Aerotropolis.	Landscaping in development is to incorporate a diverse range plant species, as per the Aerotropolis DCP preferred Species List provided at Appendix B of this DCP. Prioritise use of Cumberland species, followed by other species that are suitable for the purpose and the microclimatic conditions of the site.	A diverse range of planting is being utilised (particularly for understory planting). To ensure adherence with Aviation safeguarding, tree species have been selected from the exempt species list from the IPG Masterplan (trees that won't attract birds and wildlife that might pose a bird strike risk for the airport)	Yes
PO2 Landscape design reflects the cultural landscape and is integrated with the design intent of the architecture and built form.	Landscaping is to highlight architectural features, define entry points, indicate direction, and frame and filter views into the site along sight lines. Size and scale of landscaping is responsive to the bulk and scale of the development	The landscape highlights key entry points and key spaces (e.g. feature trees to carpark – a subtle wayfinding element) a diverse range of planting is being utilise Large trees have been proposed to the setbacks to respond to the bulk and scale of the building.	Yes
PO3 Landscaping complements the views to and from the public domain, as well as to and from public and private open spaces within the site.	Use appropriate species to screen side (where sufficient width permits) and rear boundaries and enhance visually obtrusive land uses or building elements (e.g. waste enclosures).	Large trees have been proposed to the setbacks to respond to the bulk and scale of the building. A layered canopy approach helps to create a vegetative screen with depth and variety to draw the eye away from visually obtrusive elements such as carpark or retaining walls	Yes
PO5 Landscaping design promotes safety and surveillance.	Within high use areas (e.g., car parking areas, children's play areas and walkways), trees at maturity have clean trunks to a height of 1.8m around facilities. Medium height shrubs (0.6m – 1.8m) are avoided along paths and close to windows and doors to maintain sight lines and allow for passive surveillance. Landscaping in the vicinity of a driveway entrance does not obstruct visibility for the safe ingress and egress of vehicles and pedestrians.	Clean trunks will be maintained as park of the broader site wide maintenance strategy, post construction. Shrub planting is used sparingly on site to avoid issues with bushfire compliance. Sightlines have been considers in relation to tree placement at entry points and in carpark areas	Yes
PO6 Landscaping is integrated with vehicular access and car parking areas on development lots to soften their visual impact, provide protection from glare, and reduce heat island effect.	Provide 1 medium tree for every 5 at grade car spaces, and maximise shading (as listed and shown in the image below) by: Orienting the tree parallel to the parking space; Staggering the configuration rather than linear; Selecting a tree with a Leaf Area Index of >4; and Using structurally engineered pits or vaults and WSUD design principles to provide appropriate space for tree root development. Landscaping shall not restrict driver sightlines to pedestrians, cyclists, and other vehicles on the frontage road.	Planting has been provided throughout the car park, however the emphasis on numbers has been guided by the requirement for 15% deep soil to be delivered on the site. During detailed design, further work will be undertaken to explore opportunities for structural vaults or structural soil if required adjacent to island planters to improve canopy coverage.	Yes
2.5.2 Mitigating Urban Heat Island Effect PO1 Site layout of development and public domain mitigates urban heat island effect.	Evaporative cooling is enabled through implementation of design initiatives and features, including: Misting infrastructure in public places during high and extreme heat days; and Irrigation of private open spaces (using harvested stormwater) with 50% of grassed areas and 100% trees irrigated. Use pavements which are permeable and have high albedo, resulting in less solar absorption. When using permeable pavers, it must be demonstrated that there is no impact on the salinity or sodicity of underlying soils. Public seating has adequate shading.	Urban heat island impact is mitigated through considered planting – layered canopy and creating of small microclimate pockets. Shade trees to carpark and potential to utilise structural cell to promote healthy growth. Passive irrigation through drop kerbs along hardstand ensure rainwater is harvested and utilised for healthy landscapes. Peremable paving (decomposed granite) is proposed in the outdoor communal area	Yes
2.10 Airport Safeguarding			
2.10.3 Wildlife Hazards PO2 Landscaping does not attract wildlife that could create a safety hazard to the operations of the Airport.	Refer to Appendix B for a list of suitable landscape species. In areas within the 3km wildlife buffer but outside of the Parkland Priority Areas shown in Figure 8, a report prepared by a suitability qualified and experienced ecologist is to be submitted with any application when the landscaping plan: Incorporates alternative landscape species not listed within Appendix B; Incorporates landscape species denoted within the landscape species list; Will result in more than 5 trees being planted in 1 group (group refers to touching mature canopies); and/or Provides a spacing between a group of 5 or more trees that is less than 100m. The ecologist report is to consider building, site, and water body design outcomes and/or landscape maintenance measures that will mitigate bird and flying fox attraction and roosting areas.	The Landscape Plan submitted with the IPG Master Plan provides a list of the landscape species sought to be delivered across the estate. These have been incorporated into the design of the proposed development. The planting provides a balanced approach on these competing requirements has been adopted. Tree species selected are chosen from the exempt species list in the Masterplan (which came from the DCP). "Exempt species" refers to trees that do not pose a risk in attracting wildlife or birds that may cause bird strike issues for the airport.	Yes

Landscape Design Report

DCP Compliance

Performance Outcome	Benchmark Solution	Comment	Consistent
3.0 Development for Enterprise and Industry and Agribusiness			
3.3.3 Landscape setbacks PO1 To provide functional areas of planting that enhance the presentation of a building, provide amenity, cooling and shade, and contribute to overall streetscape character.	Landscaped area is to be provided in accordance with Table 5. Note control (4) and (7) in PO1 of Section 3.6.2 allows different landscape setbacks to those identified in Table 5 for loading dock manoeuvring areas and on-site car parking. A Landscape Plan prepared by a Landscape Architect is to be submitted with all development proposals. Existing remnant vegetation and paddock trees shall be retained where practical within setback areas and integrated with landscaping plans. Landscaped front setbacks should include canopy trees whose mature height is in scale with the proposed development. Setbacks shall include suitable tree planting along the northern and western elevations of buildings to provide shade and assist with cooling. Developments adjoining existing sensitive receivers (e.g. educational establishments) shall be designed to mitigate impacts on sensitive receivers such as through generous buffer zones and landscaping, and locating noise generating activities away from the sensitive interface, as well as traffic management measures to improve safety and minimise conflicts. Tree planting in the form of island planter beds shall be provided at a rate of one planter bed per 10 car spaces within car parks to reduce the heat island effect of hard surfaces that are a minimum 1.5m dimension. Evergreen shrubs and trees shall screen car parks, vehicular manoeuvring areas, garbage areas, storage areas from the street frontage. Paving, structures and wall materials should complement the architectural style of buildings	The Landscape proposal complies with all benchmark solutions listed.	Yes
3.3.5 Communal outdoor areas PO1 To contribute to amenity for employees	Each building shall be provided with at least 1 communal outdoor area for the use and enjoyment of employees and visitors to that development. The space shall be commensurate with the scale of the development and be accessible from the main office. In locating communal areas, consideration should be given to the outlook, natural features of the site, and neighbouring buildings. Communal areas shall be embellished with appropriate soft landscaping, shade, paving, tables, chairs, bins, and access to drinking water commensurate with the scale of the development, activities, and anticipated number of workers. Communal areas shall be relatively flat and not contain impediments which divide the area or create physical barriers which may impede use. Communal areas must receive a minimum of 2 hours direct sunlight between 11am and 3pm on 21 June. Outdoor communal areas shall immediately adjoin a staff room/lunchroom with kitchen facilities. Where this is not possible, the outdoor communal area is to be provided with a suitably designed weatherproof outdoor kitchen for the use of staff.	A generous outdoor space has been provided close to the carpark and front entry for visibility and ease of access. The amenity area includes gathering spaces for groups, an open lawn for flexible use, shaded areas, fixed seating and picnic tables.	Yes
PO5 Landscaping design promotes safety and surveillance.	Within high use areas (e.g., car parking areas, children’s play areas and walkways), trees at maturity have clean trunks to a height of 1.8m around facilities. Medium height shrubs (0.6m – 1.8m) are avoided along paths and close to windows and doors to maintain sight lines and allow for passive surveillance. Landscaping in the vicinity of a driveway entrance does not obstruct visibility for the safe ingress and egress of vehicles and pedestrians.	Clean trunks will be maintained as park of the broader site wide maintenance strategy, post construction. Shrub planting is used sparingly on site to avoid issues with bushfire compliance. Sightlines have been considers in relation to tree placement at entry points and in carpark areas	Yes

Landscape Design Report

IPG Masterplan Compliance

Alternative Benchmark Solution/ Additional Control	Relevant Consideration	Comment	Consistent
5.3.4 Aboriginal Heritage (AC)	Development within the Master Plan is to consider opportunities for Heritage Interpretation where appropriate, including the following: – Engaging Aboriginal artists to develop designs/artworks that depict both tangible and intangible aspects of traditional Aboriginal culture across a diverse range of traditional and modern media should be considered for the future development. Incorporation into the built forms of the future development through design features such as: Paving – footpaths, communal areas and parks Murals - Large industrial buildings are often large expanses of plain concrete. Murals could be commissioned to assist with connecting to country and intergenerational equity across the precinct. Incorporating local Aboriginal naming conventions within the precinct design such as street names, building names, or identification naming between the different sectors of the precinct, this should be done through consultation with RAPs as part of the connecting to country. Incorporating native plant species into any landscape plantings in open spaces and street plantings. These species should have been native to the study area and can assist with the aesthetics and cultural connection. Providing interpretive information regarding the Aboriginal history of the site within common areas, developed in consultation with RAPs as part of connecting to country.	The Landscape design incorporates the Recognise Country design considerations outlined in the Masterplan (specifically section 5.3). The intended design outcomes for this site focus on Water Landscapes, Sky Country and Topography –these are expanded upon in the design report.	Yes
8.6.2 Tree Canopy Cover and Deep Soil (ABS)	1. On-lot development for enterprise and light industrial development within the Master Plan to achieve canopy cover target of at least 15% and a deep soil target of at least 15%. 2. Streetscape and road corridors to achieve a canopy cover target of at least 50%. 3. On-lot development within the local centre to achieve a canopy cover target of at least 30% and a deep soil target of at least 10%.	Tree canopy coverage has been maximised on the site as far as reasonably possible. The proposed provision reconciles several other key considerations and constraints including bushfire risk management requirements; wildlife attraction (i.e. bird strike); and operational requirements. A total canopy coverage of 14.1% is proposed. This comprises a significant amount of landscaping, which provide amenity, cooling and shading and enhance appearance of the streetscape. The canopy coverage has been carefully designed to increase the visual impact of the trees and screen and soften the proposed built form. The proposed development does not seek approval for any road corridors and does not relate to the local centre.	Variation – justified.
8.6.4.1 On Lot Planting Strategy	1. Boundary trees on-lot must be spread out with no interconnecting canopies. 2. Where on-lot planting for industrial lots is delivered, trees are to be planted in groups of no more than five (5). Although tree groups are spaced in higher densities than 5 trees every 100sqm, large gaps have been created in the Master Plan between trees to ensure it will not be a dense forest-like setback that appeals to larger birds. 3. On-lot tree planting is to contribute to the appropriate screening of developments from the public domain, whilst ensuring passive surveillance can be maintained from visible locations such as parking areas, pedestrian pathways or ancillary office interfaces. 4. Planting within the on-lot industrial development within the Master Plan is to be designed in accordance with the On-lot Planting Typologies in Figure 72 and the Onlot Planting Schedule in Figure 73 and Figure 76a. .	Boundary trees still have clusters with interconnecting canopies to ensure we can achieve as much canopy as possible. Additionally, The rationale for the higher densities in tree groups is: The understory planting has no shrubbery (compliant with bushfire) The tree species are non bird attracting (a separate compliance issue) A monitoring strategy will be in place to assess the trees as they mature (as per ecological report) Larger tree groups create stronger micro climates and help with urban cooling – this is especially relevant as we do not have the layered shrub understory beneath tree canopies Tree canopy coverage targets try to maximise useable space whilst trying to meet a middle ground between DCP requirements and other constraints	Variation – justified.
8.6.6 Airport Safeguarding	1. Landscape species within the Badgerys Creek Road Master Plan are to be delivered in accordance with the planting strategy, planting typologies and species selection in Section 8.6.4 of the Master Plan.	Species are selected from the masterplan list	Yes

Landscape Design Approach

Introduction

In addition to addressing the Secretary’s Environmental Assessment Requirements (SEARs) issued for the project the purpose of this landscape design report is to outline the rationale and guiding principles in which the proposed landscape design is based on. The report demonstrates how the design approach has been carefully considered and is appropriate to the site’s environmental, cultural, and urban context.

Key considerations informing the design include:

- A strong Connection with Country approach, ensuring that the landscape responds respectfully to the themes that have been developed as part of the original Masterplan with Yerrabingin.
- Urban cooling and heat mitigation strategies, incorporating planting and material selections that contribute to improved microclimate conditions.
- Canopy coverage - Integrate Canopy trees to provide shade, enhance amenity, and support long-term environmental resilience.
- Wildlife risk mitigation and bushfire compliance, ensuring that safety and ecological factors are appropriately balanced.

This report has been prepared in conjunction with, and with reference to, the following reports and supporting documentation:

- AT&L – Civil Engineering Design, Stormwater Management Plan, and Integrated Water Management Strategy
- SBA – Architectural Design and Design Report
- Blackash – Bushfire Assessment Report
- Watson Young – Peer Review Report
- Avipro – Aviation Impact Assessment
- Ecological – Biodiversity, Riparian, and GDE Report

This report is to be read in conjunction with the detailed technical landscape drawings, which provide comprehensive information on plant species selection, spatial arrangement, landscape levels, and coordination with the broader civil and architectural design response.

Landscape drawings are listed below:

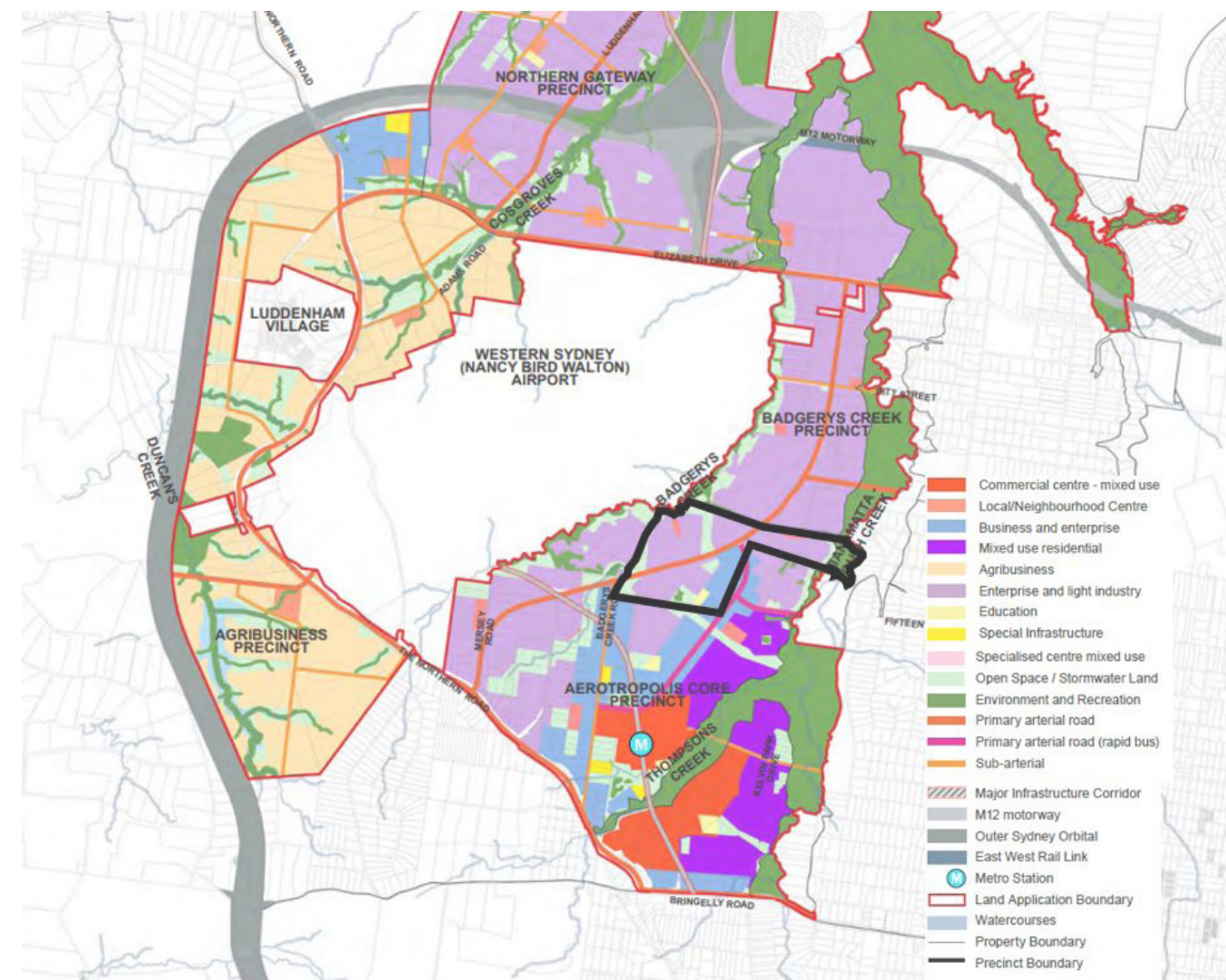
Drawing Number Drawing Title Scale

- 000 Landscape Coversheet
- 001 Planting Schedule
- 100 Landscape Masterplan
- 101 Landscape Plan
- 102 Landscape Plan
- 103 Landscape Plan
- 104 Landscape Plan
- 105 Landscape Plan
- 106 Landscape Plan
- 107 Landscape Plan
- 108 Landscape Plan
- 109 Landscape Plan
- 110 Landscape Plan
- 501 Landscape Details
- 502 Landscape Details
- 503 Landscape Details
- 601 Landscape Sections
- 602 Landscape Sections
- 701 Canopy Coverage Plan
- 702 Deep Soil Plan



Landscape Design Approach

Site Context



- The land to which this report relates is referred to as 475 Badgerys Creek Road, Bradfield, which has direct interface with the Western Sydney International Airport (WSI). It is noted that the ADC will be located on proposed Lots 208, 209 and 210 within the broader 475 Badgerys Creek Road, Bradfield landholding. These lots are not yet formally registered.
- The broader landholding has an area of approximately 184 hectares and is subject to an
- approved Master Plan prepared by Inghams Property Group (IPG). The proposed ADC will be located in Stage 2 of the IPG master plan site. The application site has an area of approximately 172,000m²
- The location of the application site is shown in Figure 1 below.

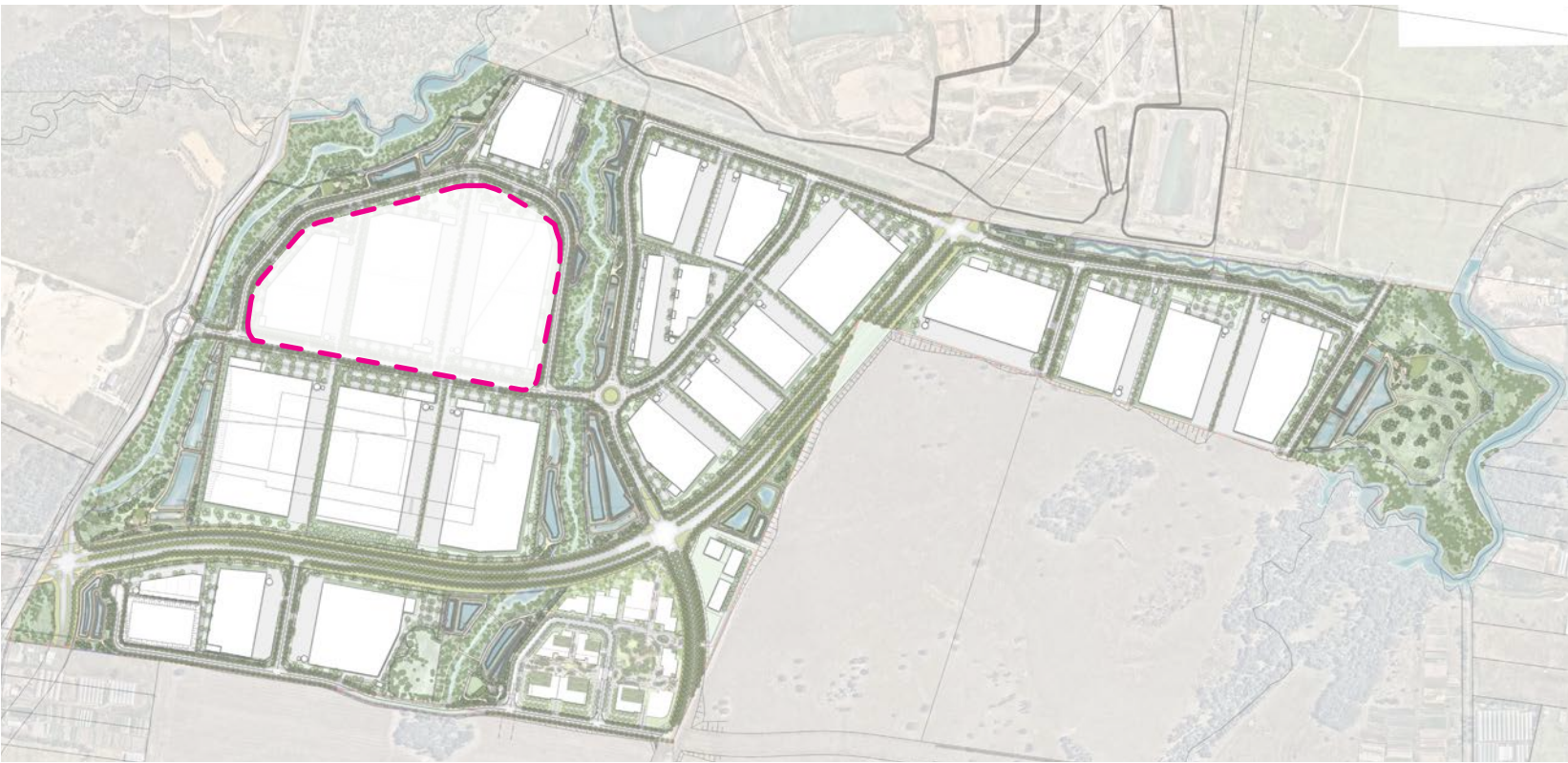


Figure 1

Landscape Design Approach

Landscape Statement

The landscape design approach looks to push beyond the standard solutions within the DCP by adopting a holistic approach that considers Country, Ecology, Amenity and Urban Design as one entity. The plan prioritizes the implementation of green and blue grids to enhance ecology, biodiversity, and canopy coverage. It strikes a balance between creating inviting spaces for people and restoring natural habitats whilst mitigating the wildlife hazards and Bird-strike issues that need to be factored into development within the Aerotropolis.

Within the IPG Badgerys Creek Road Masterplan (WSA_MP01), Prepared by Urbis the following key design drivers were identified for On Lot Landscapes (specifically section 8.6) :

- Providing communal space and public amenity spaces on lots for use by employees and pedestrians.
- Ample on-lot canopy coverage to soften the built form and reduce urban heat island effect, especially in areas with extensive paving, such as carparks.
- Staggered tree arrangement and clustered trees to balance wildlife mitigation
- Strong screening planting to lot boundaries and setbacks, with feature planting to publicly accessible lot entries to indicate points of interest to pedestrians at street level.

Utilising the above points and the Greener places framework, the WSI3 landscape design pushes beyond the ‘business as usual’ single grey infrastructure development and intertwines the following design principles:

Connecting to Country

This proposal embeds a strong connection to Country by adopting themes developed in the masterplan and applying them in tangible thread through the design.

A Focus on Canopy and Cooling

Responding to the extreme heat conditions characteristic of Western Sydney, the landscape strategy prioritises increased canopy coverage and shade provision to mitigate the urban heat island effect. Tree planting, combined with understorey and groundcover, contributes to microclimate regulation, reduces surface temperatures, and improves overall thermal comfort for users across the site.

Places for People

The landscape is designed to be inclusive, accessible, and visually engaging for all users of the broader site, not just staff. Clear sightlines, inviting open spaces, and integrated pathways create opportunities for passive recreation, movement, and social interaction, enhancing the overall user experience and encouraging connection with the landscape.

Landscape-Led Approach

A landscape-led design approach underpins the proposal, where engineering and infrastructure solutions are integrated and softened through green infrastructure. Elements such as passively irrigated planting zones, and swales are carefully coordinated to deliver both functional performance and ecological value



Connection with Country

The design aims to apply the themes and narratives of Country through physical design elements and Care for Country practice



A Focus on Canopy and Cooling

Canopy Coverage and Cooling to Combat Heat island effect underpins the design approach



Places for People

Communal areas and places with high pedestrian traffic are design with human experience at the forefront



Landscape Led Approach

Civil and Engineering elements to be softened and multifunctional with a landscape led approach. Improves visual amenity and sustainability initiatives as well as designing with Country

Landscape Design Approach

Greener Places

Alignment with the NSW Greener Places Framework

This development adopts a green infrastructure approach consistent with the NSW Greener Places Framework, supporting connected, cool, resilient and inclusive places through integrated landscape within the broader Masterplan context

Integration

Combine green infrastructure with urban development and grey infrastructure

The proposal supports the “Integration” principle by forming part of a broader masterplan with connected road corridors and active transport networks and a larger Green-Blue grid. A consistent canopy coverage approach is applied across the site and wider aerotropolis. Warehouses also follow site-wide design quality standards to ensure an integrated outcome. Rather than operating as separate elements, the proposal integrates these components through landscape buffers and shared corridors, improving both functionality and amenity. This integrated approach ensures infrastructure supports the surrounding open space.

Connectivity

Create an interconnected network of open space

The proposal moves beyond “business as usual” for a logistics estate by embedding Connection with Country themes into the industrial landscape and emphasising value in open space, canopy cover and layered landscaping as well as pedestrian connections across the site and to the broader open space network.

Participation

Involve stakeholders in development and implementation

The proposal balances the needs of key stakeholders through an inclusive design approach. It enhances staff amenity and access to open space, supports Indigenous stakeholders by committing to the Connection with Country Framework, and meets developer priorities through optimised building layouts and sustainable outcomes. This ensures a well-rounded and responsive design.

Multifunctionality

Deliver multiple ecosystem services simultaneously

Key site elements perform multiple roles. Passive irrigation and civil infrastructure are designed to also function as green infrastructure, supporting habitat and ecological processes. The extensive site setbacks enhance site biodiversity while simultaneously providing open space amenity for users. The location of fencing tight around the hardstand means that the landscape is visually accessible from the roads and acts as an extension to the riparian corridors. This approach maximises the value of each element, delivering environmental, functional, and social benefits within the same footprint.



Landscape Design Approach

Connection to Country

Utilising the NSWGA Elements of Designing with Country will ensure the environmental and social well-being of the site is addressed in a way that will provide an enduring legacy for the place and community. As outlined in the IPG Masterplan document, a lot of valuable work has been done with Yerrabingin and Aboriginal stakeholders through the masterplan process for the broader Inghams site.

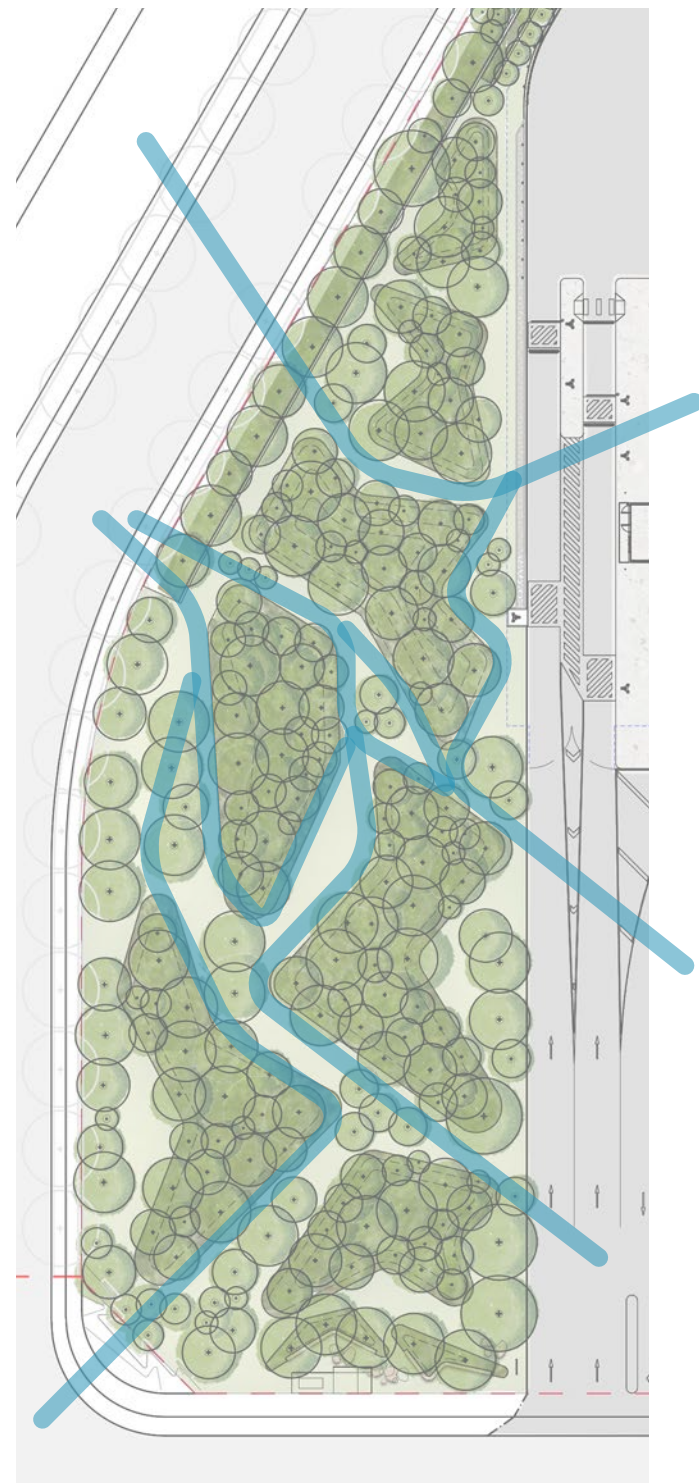
Using the Recognise Country design considerations outlined in the Masterplan (specifically section 5.3), the Landscape Approach to Country encompasses but is not limited to, the following:

- The Master Plan is designed to work with the organic forms of the natural landscape and to provide views to significant surrounding features.
- Varied colours and textures in plant selection that interact with the wind to add to the sensory experience of the site.
- WSUD and stormwater treatment capturing polluted water and treating it before it enters the natural watercourse.
- Vegetation and green spaces as buffers to existing waterways on site
- All design should appreciate the local vernacular. Draw upon and be inspired by Country, what has come before, what is required to sustain the future.
- Plant selection consists of a majority of endemic species whilst aligning with aviation safeguarding controls.
- Ensure there are spaces on industrial lots that provide refuge/ amenity for human engagement.

Developed from the above points, the following key themes for the site specific Connection with Country approach are:

Water Landscape (One of the three Key themes developed by Yerrabingin)
- the shapes and forms of **Wianamatta South Creek and Badgerys Creek**, which frame the site, drive the fluvial shapes in the deep landscape setbacks. The small islands that can form in the creek are represented through the edges of the garden bed appearing to be cut away by a flowing creek. No European style formal rectilinear gardens are located within high visibility zones

Sky Country and Site Topography- The subtle mounding of the garden beds within the larger setbacks reference the site historical topography and the soft hills of the Cumberland Plain Woodland. There is opportunity to utilise excess site fill to create the undulating forms, reaffirming the Care for Country practice that underpins the landscape methodology. We note that the site will be inherited as a benched site but there will be opportunity to utilise stockpiled site fill.

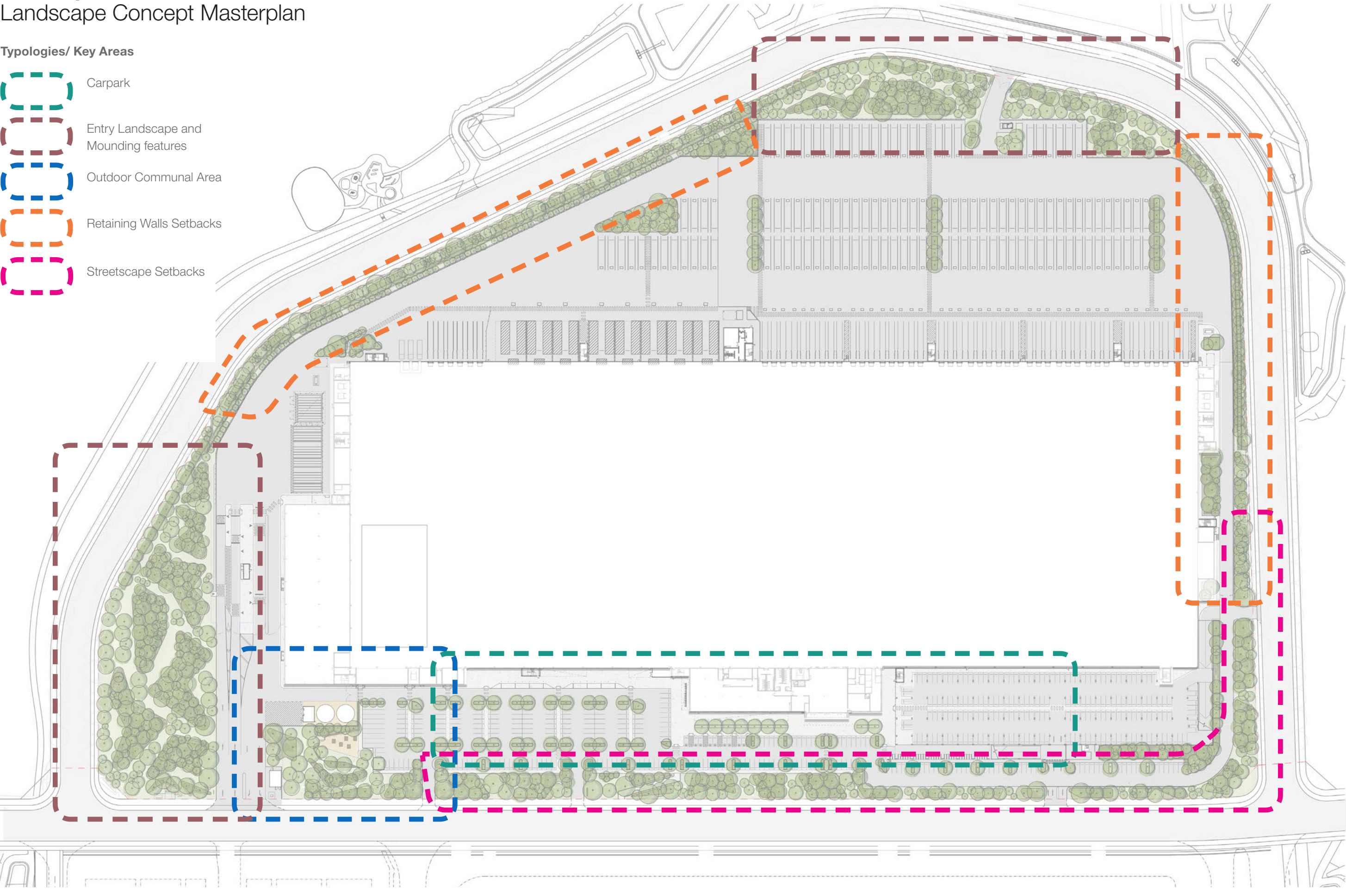


Masterplan

Landscape Concept Masterplan

Typologies/ Key Areas

- Carpark
- Entry Landscape and Mounding features
- Outdoor Communal Area
- Retaining Walls Setbacks
- Streetscape Setbacks



Landscape Design Approach

Canopy Coverage & Urban Cooling

Urban trees have a critical role in creating healthy cities. They provide shade and shelter, improve air quality, absorb carbon and rainfall, cool local environments, and support wildlife.

Trees contribute to attractive urban places, providing seasonal variation and creating memorable landmarks. The network of trees in our cities plays a critical function, and provides an array of benefits.

Draft Greener Places Design Guide, 2020

WSA DCP & Greener Places Objectives for Canopy Coverage

The target for the Greater Sydney Region is to achieve 40% urban tree canopy cover by 2056 (Draft Greener Places Design Guide). For medium-to-high density areas, the target is 25% canopy cover.

Performance Outcomes, Recommendations and Benchmark Solutions (DCP):

- Consolidate areas of deep soil and provide minimum dimensions which allow for sufficient tree planting.
- Encourage connected soil networks with ample soil volume to encourage healthy tree growth
- Assess opportunities to achieve increases in urban tree canopy on all State government managed lands
- Garden beds and Landscape setbacks adjacent to Hardstand is to be passively irrigated
- Water supply and hydrology to be designed with civil engineer to ensure optimum tree growth. The canopy cover provided by a tree planted with access to an appropriate soil volume and soil moisture has a canopy area over 6 times greater than a tree in constrained conditions with limited access to any water supply.

Industrial Estate Landscape Canopy Coverage

The tree canopy coverage target for industrially zoned land within the Aerotropolis is generally set at 25%; however, this was reviewed under the IPG Masterplan and subsequently modified and approved to a reduced target of 15% in response to site-specific constraints.

These constraints include aviation-related birdstrike risk, feasibility limitations associated with lot size and deep soil provision, as well as

needing to align planting outcomes with operational requirements. As a result, the Masterplan adopts an offset strategy, whereby broader site-wide canopy targets are supported by substantial contributions from the adjacent open space areas and riparian corridors running north to south. The heavily vegetated riparian corridors, road corridors and open space areas significantly improve the sites overall canopy coverage to support any shortfall that may occur due to limitations within the industrial lots.

Tree canopy coverage has been maximised on the site as far as reasonably possible. The proposed provision reconciles several other key considerations and constraints including bushfire risk management requirements; wildlife attraction (i.e. bird strike); and operational requirements.

A total canopy coverage of **14.1%** is proposed and **15.8%** deep soil. Although there is a slight shortfall (in the canopy target) the proposal is in line with the requirements and benchmark solutions setout in the DCP (*2.4.1 Deep soil and Tree Canopy*) These include:

- Deep soil areas are to be a minimum 3m by 3m in dimension.
- Consolidate deep soil areas by establishing them right up to abutting boundary walls and fence lines.
- Consolidate deep soil in setback areas and locate with adjoining deep soil areas in adjoining properties.
- Deep soil planting areas are to be de-compacted before planting with no services to be installed within these zones.

Despite the site constraints and operational requirements, the proposal delivers quality amenity and a layered, robust landscape outcome that contributes positively to the character and function of the broader Masterplan. The planting strategy has been carefully coordinated to provide shade, urban cooling, and visual relief, while reinforcing the streetscape and softening the appearance of the built form. The design balances practical project constraints with the delivery of a high-quality landscape setting.

Mitigating Urban Heat Island Effect

Utlising the key principles of the WSROC Urban Heat Planning Toolkit, The landscape approach mitigates urban heat buildup through the following methods:

- Integrating canopy planting, deep soil zones, and Water Sensitive Urban Design (WSUD) initiatives to improve urban cooling outcomes across the site. Despite the operational and environmental constraints associated with the development,

the design seeks to maximise shade provision, reduce heat absorption from hardstand areas, and increase landscape performance through interconnected planting and passive irrigation opportunities (note this is further discussed in the civil and WSUD coordination section of the report).

- The proposal adopts a landscape-led approach, integrating stormwater management and rainwater reuse initiatives to support long-term vegetation health and cooling performance. Large contiguous deep soil areas, structural soil systems, and opportunities for passive irrigation are intended to improve water infiltration and optimum tree growth in line with the toolkits recommendations for integrated water and landscape planning.

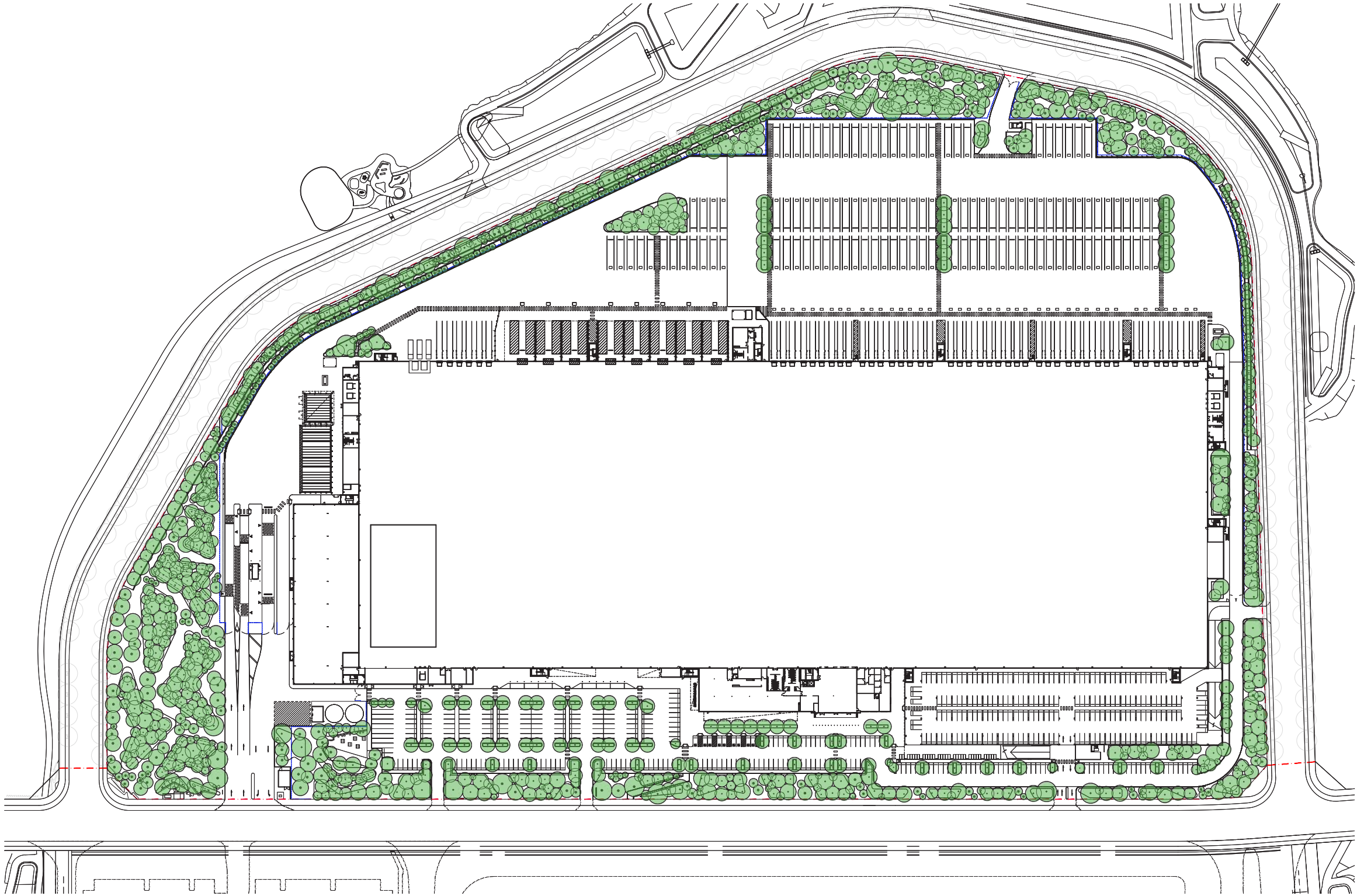
The canopy planting strategy has also been carefully considered to maximise visual softening, shading, and thermal comfort within the available site opportunities.

- Shade and canopy trees have been provided to pedestrian areas and outdoor amenity spaces to ensure these areas are relief.
- The use of smaller, non bird-attracting species ensures compliance with aviation safety requirements while still delivering cooling benefits through shading and evapotranspiration. In addition, the offset strategy leverages the extensive canopy provided by adjacent open space and the riparian corridor, which enhances cooling across the wider precinct.

Together, these measures provide a balanced and effective response to urban heat, achieving meaningful thermal comfort outcomes despite site limitations.

Landscape Design Approach

Canopy Coverage Plan



Tree Canopy Coverage

Trees are proposed throughout landscaped areas. Generous tree canopy along streetscapes, Warehouse frontages and amenity areas will provide amenity cooling and shade.

To ensure the key objectives outlined in the WSA DCP are reached, the following considerations have been made:

- Trees within the frontage and boundaries are staggered to increase the visual impact of canopies within the setbacks
- Trees within the front setback include large native species whose mature height and canopy width is in scale with the proposed development
- Throughout the site, tree species vary in height and width to break up the scale of the buildings and help to re-establish the Cumberland Plan Character and Riparian Landscape
- Sufficient space has been given to allow trees to grow to maturity
- Canopy Coverage is calculated by estimating the tree crown size approximately 70% maturity (10-15 years growth). Coverage does not include canopy over buildings or boundaries.

Legend

Site Boundary

Canopy Cover Area

Site Canopy Cover	
Site Area	171682 m2
Required Canopy Cover	25752 m2
Required Canopy Percentage	15 %
Provided Canopy Cover	24399 m2
Provided Canopy Percentage	14.2 %

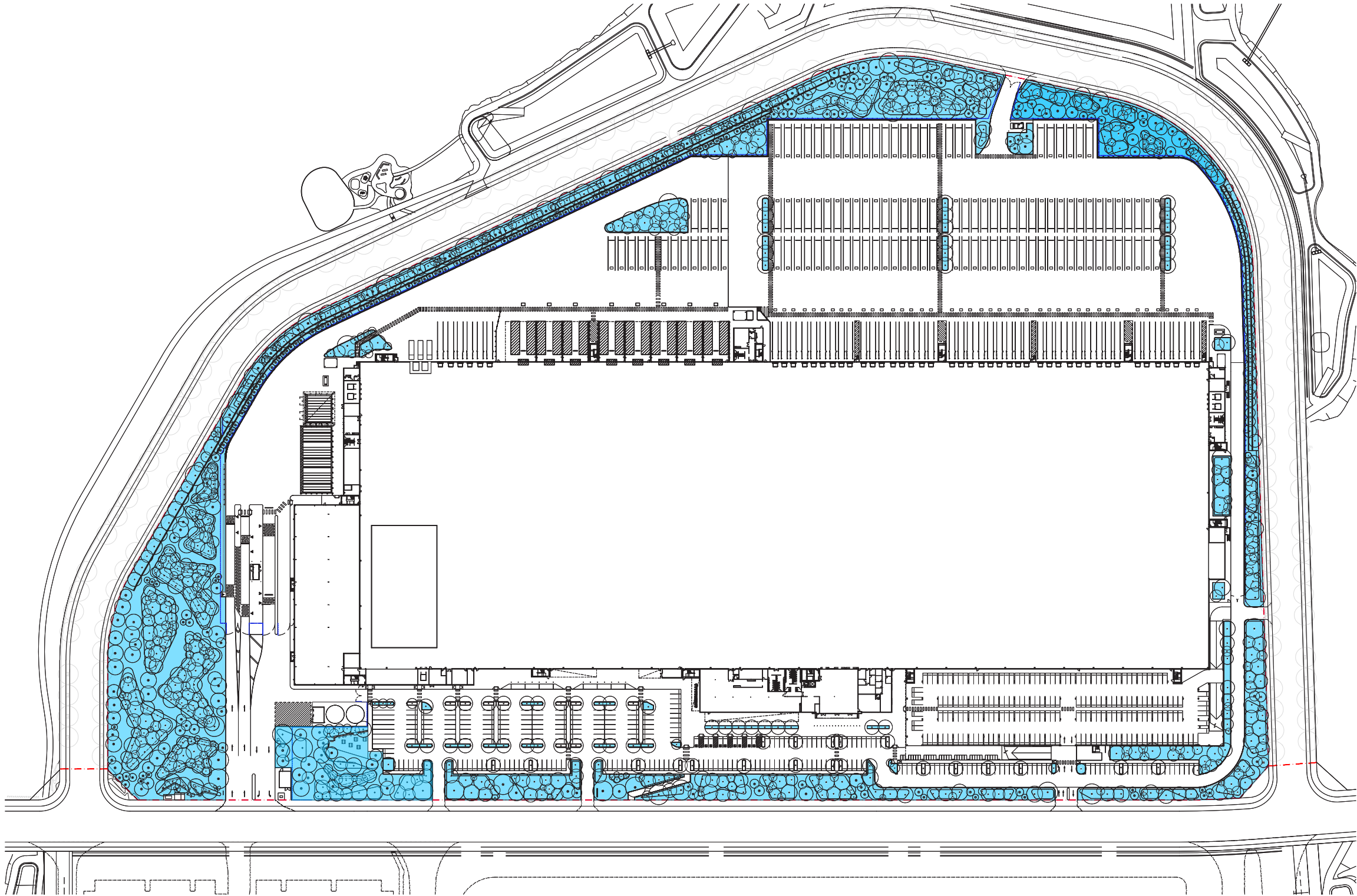


Landscape Design Approach

Deep Soil Plan

Deep soil

- The DCP requirement f



A Architectural Coordination CS NM 08.05.2026
Issue Revision Description Drawn Check Date

- Legend
- Site Boundary
 - Deep Soil Area

Site Deep Soil	
Site Area	171682 m2
Required Deep Soil	25752 m2
Required Deep Soil Percentag	15 %
Provided Deep Soil	27057 m2
Provided Deep Soil Percentag	15.8 %



Landscape Design Approach

Aviation Safeguarding & Bushfire Risk Mitigation

Wildlife Risk & Bird-strike Issues

“Safeguarding the Western Sydney Airport against wildlife strikes is seemingly at odds with the vision of the Western Sydney Aerotropolis that includes natural area revitalisation, water retention, enhancing biodiversity, establishing an extensive blue-green grid, and increasing tree canopy coverage to 40%” - Executive Summary - Western Sydney Aerotropolis Draft Wildlife Management Assessment Report

Western Sydney Planning Partnership May 2020

The proposal addresses birdstrike, bushfire, and broader wildlife risks through a range of mitigation strategies, while recognising the above statement that highlights the issues/contradictions between aviation safeguarding requirements and the project’s canopy coverage and Connection with Country objectives for a layered, biodiverse landscape.

While the design seeks to minimise risk, it cannot eliminate it entirely and therefore aligns with the strategy outlined by Ecology in the Wildlife Risk Assessment prepared as part of the masterplan (main points are highlighted below). The use of exempt species trees (refer to adjacent list) supports compliance by reducing the likelihood of nesting birds, although smaller clusters of planting may still attract some wildlife.

The Eco Logical Australia Wildlife Hazard Assessment – 475 Badgerys Creek Road, Bradfield concludes:

The design and mitigation measures will reduce habitat attractiveness, however they are unlikely to eliminate high risk species utilising the site.

Monitoring will therefore be necessary to determine if and how high risk species are using the site. Adaptive management will then be required if the species are deemed to present a significant risk to airport operations.”

Recommended monitoring is provided in Table 8 of the Wildlife Hazard Assessment which details the landscape element and the proposed mitigation and monitoring. In accordance with Table 8 of the Wildlife Hazard

Assessment, ‘Landscaping on-lot’ and ‘warehouse (non-food storage) and office’ would involve the following:

Landscaping on-lot is a wildlife attraction risk of ‘moderate’ and the actions for proposed development is to ‘mitigate’.

- Proposed mitigation includes Planting aiming to achieve canopy target of around 15% for the Enterprise and Light Industry. ** Note this site proposes to meet a target of 12% whilst balancing the previously mentioned constraints
- Species to be planted will only include those in the DCP species list that do not have additional considerations for wildlife risk ** These species are clearly highlighted in the plant schedule within the landscape documentation package.
- Monitoring is recommended twice annual diurnal bird survey
- Warehouse (non-food) and Offices is a wildlife attraction risk of ‘Very Low’ and the actions for proposed development is to ‘monitor’. In Proposed mitigation includes:
 - Waters storage and collection to be in accordance with a Waste Management Plan that ensures all waste is inaccessible to wildlife.
- Regular monitoring surveys;
- Wildlife hazard assessment by qualified ornithologists or biologists;
- Wildlife awareness and management training for relevant staff;
- Establishment of bird population triggers;
- Implementation of activities to reduce hazardous bird populations; and
- Adoption of wildlife deterrent technologies to reduce hazardous bird populations.

Bushfire Risk Mitigation

In line with the Bushfire Assessment Report prepared by Blackash, the sites bushfire risk is mitigated through the introduction of breaks within the landscape, including areas of low, managed turf that help limit the spread of fire. As the entire site will be managed as an APZ, beneath tree canopies no shrubs will be planted, but low native groundcovers and grasses that do not exceed 0.4m will be planted beneath canopies. There are no shrubs to act as “ladder fuels”. This means an ember ignition in ground covers is unlikely to allow the fire to fully develop, as there is no shrub layer to carry a fire into the trees. This also helps with sites safety in design strategy but will still allow for strong biodiversity and cooling.

Key Tree Species To Be Utilised For Mitigating Wildlife Risk



Allocasuarina littoralis
Black Sheoak (10 x 4)



Acacia decurrens
Black Wattle (10 x 8)



Acer buergerianum
Trident Maple (6 x 6)



Brachychiton populneus
Kurrajong (20 x 6)



Auranticarpa rhombifolium
Diamond-leaf Pittosporum (25 x 4)



Casuarina cristata
Belah Tree (13 x 8)



Casuarina cunninghamiana
River Sheoak (25 x 6)



Fraxinus 'Urbanite'
Urbanite Ash (11 x 9)



Leptospermum petersonii
Lemon-scented Teatree (5 x 2)



Jacaranda mimosifolia
Jacaranda (10 x 8)



Glochidion ferdinandi
Cheese Tree (30 x 10)



Waterhousea floribunda
Weeping Lilly Pilly (30 x 10)



Koelreuteria paniculata
Golden Rain Tree (6 x 4)



Hymenosporum flavum
Native Frangipani (8 x 6)



Rhodosphaera rhodanthema
Deep Yellow-wood (20 x 15)



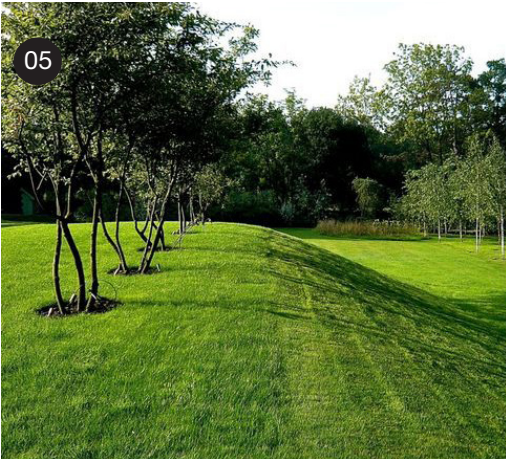
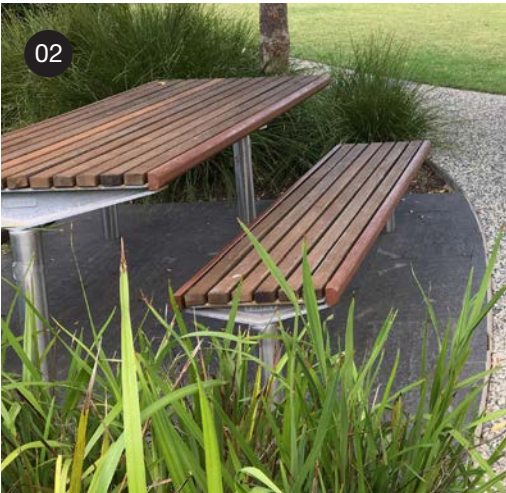
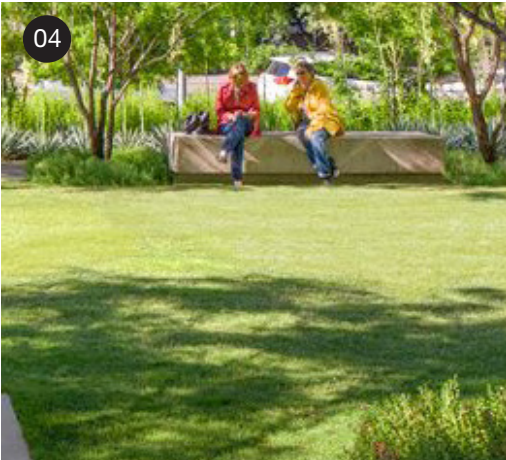
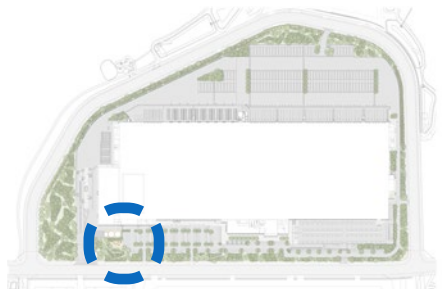
Lagerstroemia indica
Crepe Myrtle (8 x 6)

Landscape Design Approach

Communal Outdoor Space



- 01 Fixed bench with small cafe tables
- 02 Picnic tables
- 03 Sandstone logs - informal seating
- 04 Open turf for passive use
- 05 Landscape mound - acoustic barrier, landscape feature- reuse of site soil - ties into Designing with Country response



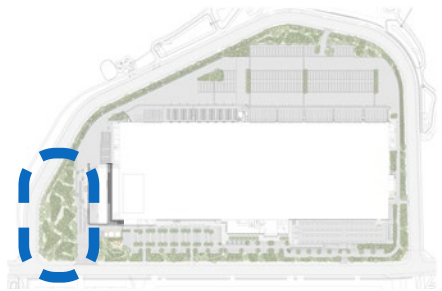
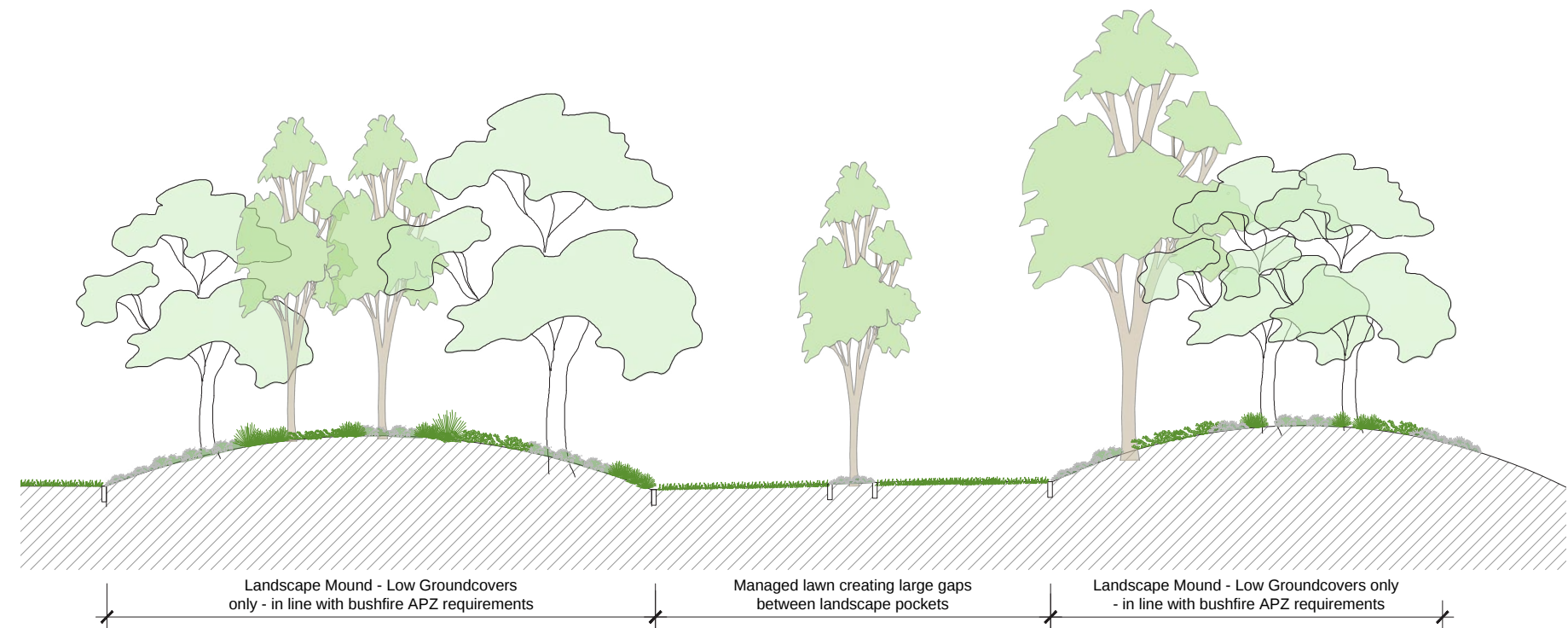
Landscape Design Approach

Entry Landscape & Mounding Features

Warehouse Security and Landscape Management

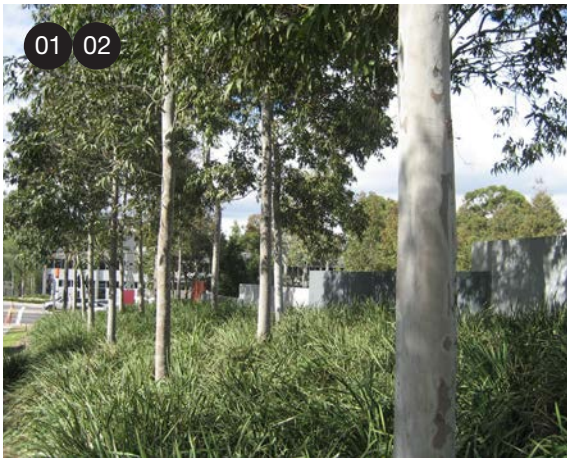
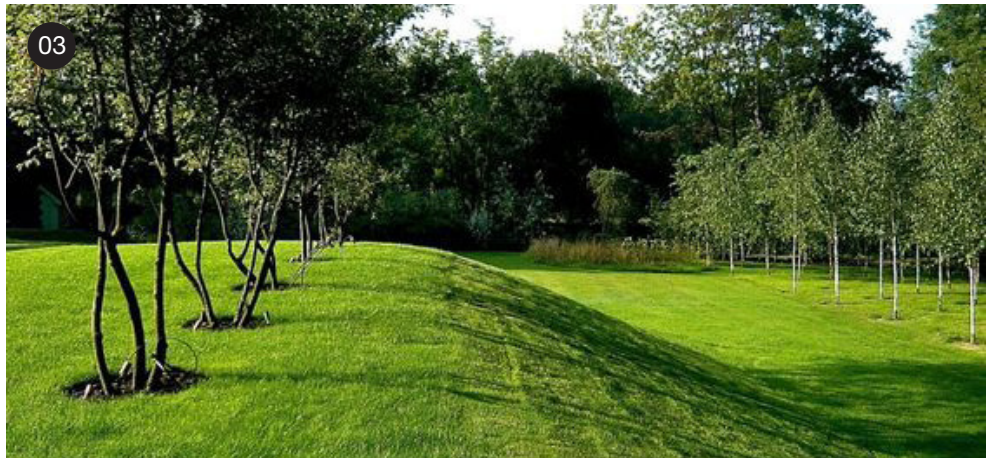
The front setback mounding is informed by the Connecting to Country narrative, drawing on themes of water and landform. The undulating forms reference the fluvial patterns and sandbanks created by the creeks that define the site, translating these natural processes into a contemporary landscape expression.

This approach establishes a strong sense of place, using landform to create visual interest and reinforce connection to the site's ecological context. At key entry points, sandstone boulders and feature walls—utilising locally sourced or recycled materials where possible—further embed the materiality of the local landscape, aligning with the key themes identified in the Masterplan's Connecting with Country framework.



Landscape Design Approach

Streetscape Setbacks



- 01 Sculptural planted zones to setback along street front
- 02 A mix of low grasses and groundcovers beneath trees to maintain visibility and adhere to bushfire advice
- 03 Levels fall away to road corridor - some area will host trees in grass mounds
- 04 A staggered canopy arrangement in line with IPG Masterplan



Landscape Design Approach

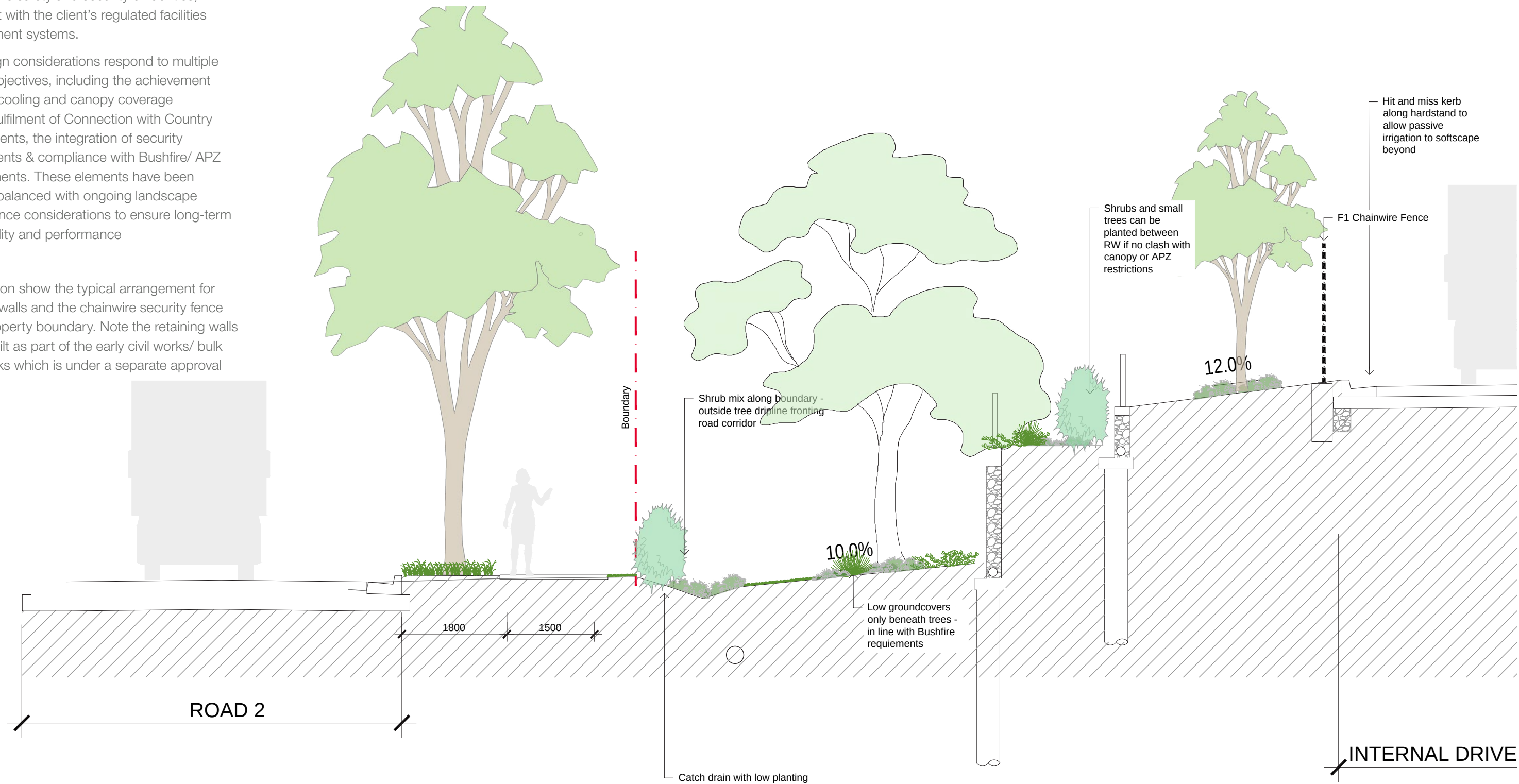
Retaining Walls (Narrow Setbacks)

Warehouse Security and Landscape Management

The landscape design has been developed to support the safety and security of facilities, in alignment with the client's regulated facilities management systems.

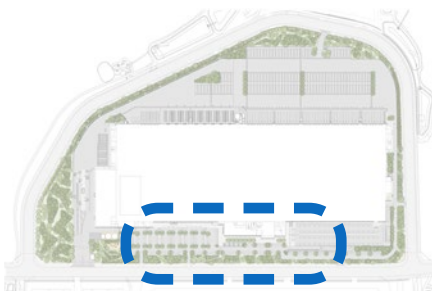
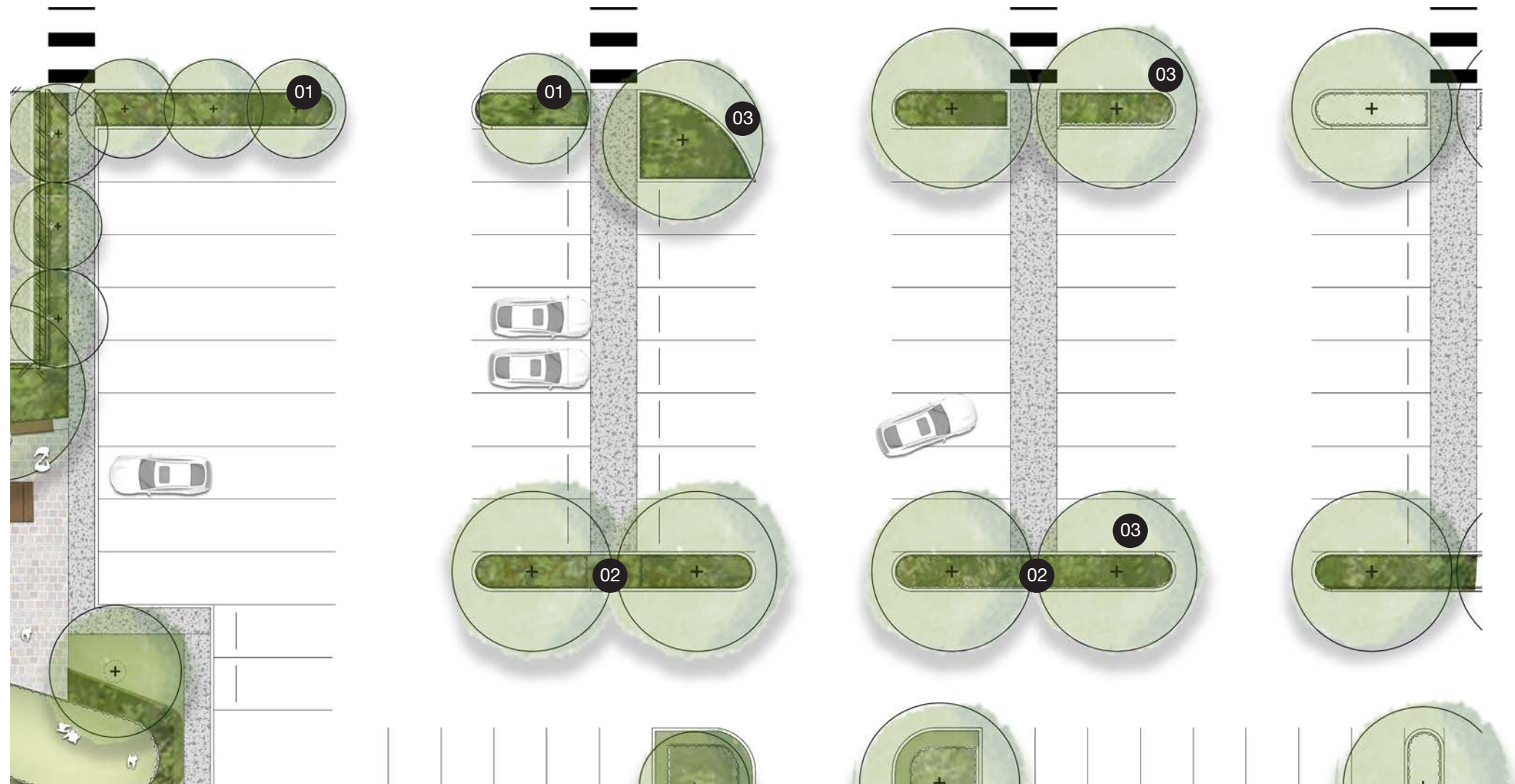
Key design considerations respond to multiple project objectives, including the achievement of urban cooling and canopy coverage targets, fulfilment of Connection with Country commitments, the integration of security requirements & compliance with Bushfire/ APZ Requirements. These elements have been carefully balanced with ongoing landscape maintenance considerations to ensure long-term functionality and performance

This section show the typical arrangement for retaining walls and the chainwire security fence to the property boundary. Note the retaining walls will be built as part of the early civil works/ bulk earthworks which is under a separate approval

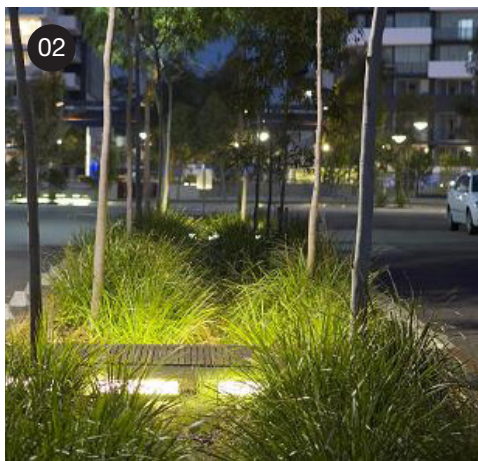


Landscape Design Approach

Carpark Planting



- 01 Smaller tree species to corner planters (for vehicle swept path safety)
- 02 Low native grasses mix beneath canopy trees
- 03 *Fraxinus* 'Urbanite' trees to island planters



Landscape Design Approach

Water Sensitive Urban Design & Civil Coordination

The proposal seeks to incorporate multiple Water Sensitive Urban Design (WSUD) initiatives across the site and maximise rainwater and recycled water reuse as part of the landscape-led design approach. In coordination with the civil engineering design by AT&L , the following WSUD opportunities are proposed for further development and refinement through subsequent design stages:

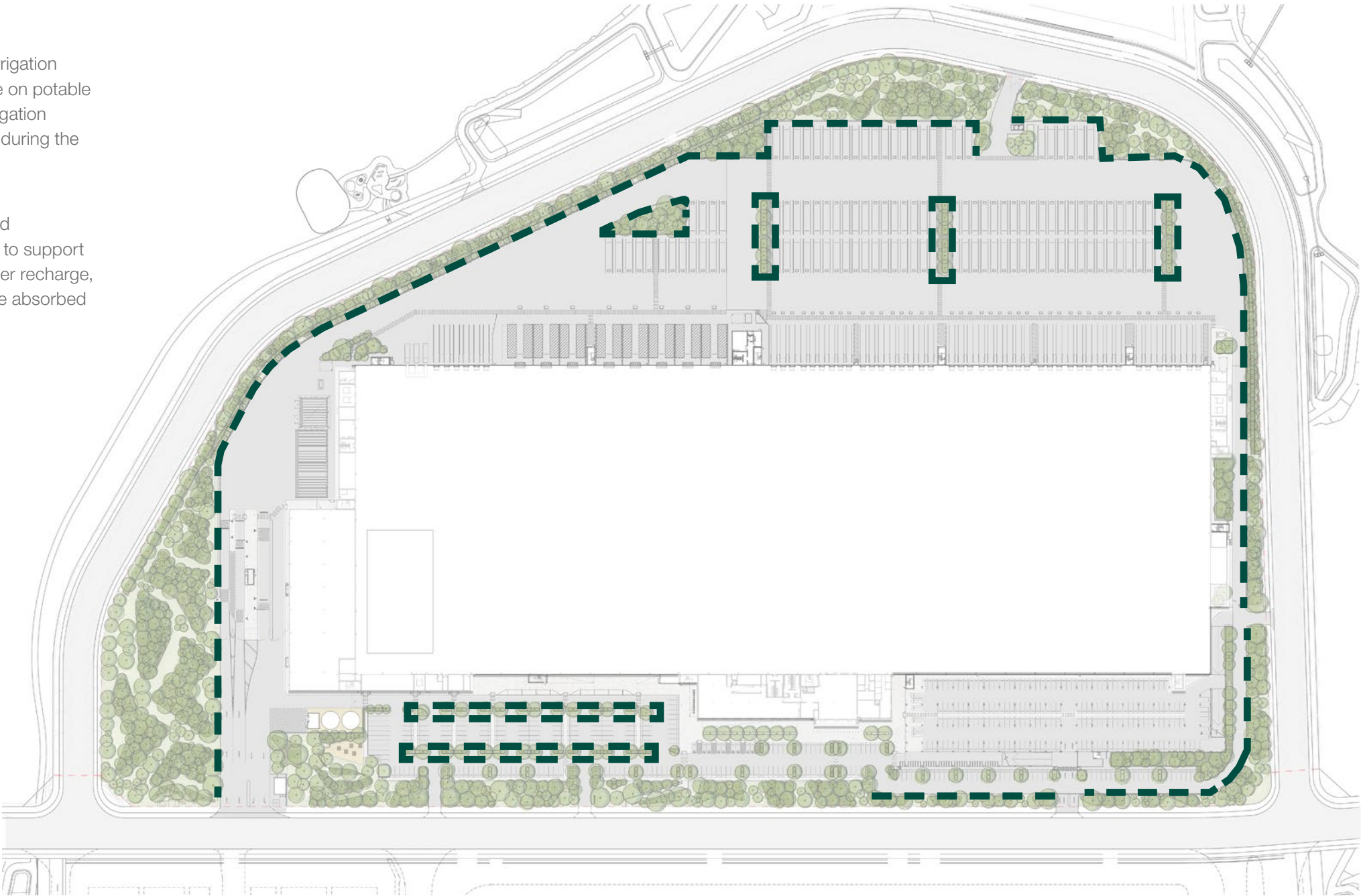
- Passive irrigation to the edges of hardstand areas through a range of potential measures, including drop kerbs, dolphin kerbs, kerbless biofilter zones, and the incorporation of structural cells or structural soil systems adjacent to tree pits.
- Rainwater and recycled water reuse systems, subject to detailed civil design and site catchment capacity. The intent is to maximise harvested

rainwater for landscape irrigation demands prior to reliance on potable water supply. Detailed irrigation design will be developed during the documentation stage.

- Large deep soil zones and contiguous soil trenches to support infiltration and groundwater recharge, enabling stormwater to be absorbed back into the water table

LEGEND

— Passive irrigation to hardstand areas

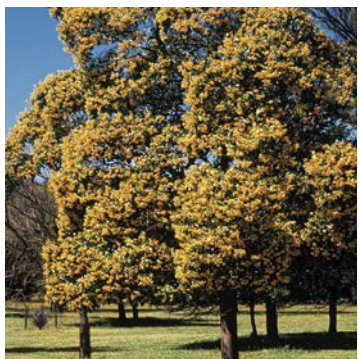


Examples of passive irrigation` methods to hardstand areas WSUD elements.

Landscape Design Approach

Planting Strategy

Trees

							
<i>Allocasuarina littoralis</i> Black Sheoak (10 x 4)	<i>Acacia decurrens</i> Black Wattle (10 x 8)	<i>Acer buergerianum</i> Trident Maple (6 x 6)	<i>Brachychiton populneus</i> Kurrajong (20 x 6)	<i>Auranticarpa rhombifolium</i> Diamond-leaf Pittosporum (25 x 4)	<i>Casuarina cristata</i> Belah Tree (13 x 8)	<i>Casuarina cunninghamiana</i> River Sheoak (25 x 6)	<i>Fraxinus 'Urbanite'</i> Urbanite Ash (11 x 8)
							
<i>Leptospermum petersonii</i> Lemon-scented Teatree (5 x 2)	<i>Jacaranda mimosifolia</i> Jacaranda (10 x 8)	<i>Glochidion ferdinandi</i> Cheese Tree (30 x 10)	<i>Waterhousea floribunda</i> Weeping Lilly Pilly (30 x 10)	<i>Koelreuteria paniculata</i> Golden Rain Tree (6 x 4)	<i>Hymenosporum flavum</i> Native Frangipani (8 x 6)	<i>Rhodosphaera rhodanthema</i> Deep Yellow-wood (20 x 15)	<i>Lagerstroemia indica</i> Crepe Myrtle (8 x 6)



Landscape Design Approach

Planting Strategy

Shrubs and Groundcovers

