

Landscape, Open Space & Recreation Facilities Report

Bridge Place 3.0

93 Bridge Road Westmead

February 2024

Bridge Road Unit Trust

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Figure 1.1 Existing Context (Nearmap Aerial)

1 Introduction

1.1 Background

distinctive Living Design were commissioned by the Wentworth Unit Trust to undertake a Landscape, Open Space, and Recreational Facilities Report (LOSRF) for the purpose of supporting a planning proposal for the site.

The subject site has a long history of recent development proceedings, and whilst considered in the Landscape Architectural approach, will not be revisited in this report rather addressing the immediate open space challenges and opportunities of the development proposal.

The aim of this report is to provide a supportive framework for implementing private and public domain landscape facilities for a successful rezoning and development proposal while considering the social, environmental, and aesthetical qualities within the context of the broader Westmead local community and its urban setting.

This report has been prepared by Mark Santangelo (Registered Landscape Architect #1951) of distinctive Living Design.



Figure 1.2 Site Context Diagram Source: UDR by Hatch Roberts Day



PUBLIC BENEFIT (20 STOREYS)

- 411 new apartments (Market Residential)
- **75** new affordable apartments
- 978m² park connecting to Monarco green
- 2,470m² new pedestrian paved area
- 250m² anchor retail
- 1 x new street
- 1 x new shared street
- Tree canopy cover consistent with Greener Places

Figure 1.3 Concept Evolution (Dec 2023) UDR by Hatch Roberts Day 2023 (pg11)

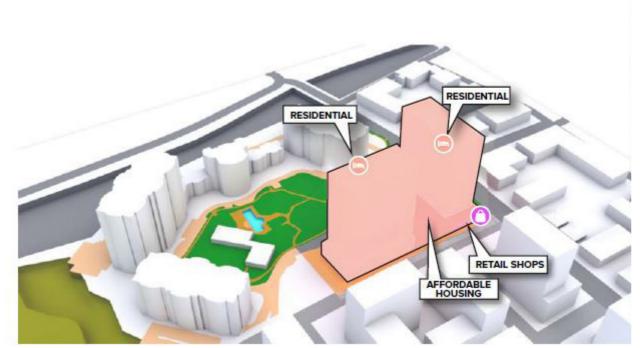


Figure 1.4 The Proposal (Dec 2023) UDR by Hatch Roberts Day 2023

1.2 Objectives

Pioneering high density residential living integrated with high amenity landscape and recreational facilities.

The objectives of the landscape architectural response centre around the need to cater towards a high-density resident population and their immediate outdoor environmental needs. This is exacerbated by the high resident to open space ratio within the development proposal. The open space therefore needs to be robust, diverse, and resilient.

The following documents were observed and considered in guiding this report;

- Westmead 2036 Place Strategy
- Better Placed
- Greener Places Design Guideline
- Draft Urban Design Report, Hatch Roberts Day 2023
- Draft Planning Proposal, Willow Tree Planning 2023

Robust – materials, plants, and facilities are able to take a high frequency of use and wear, but also limited exposure to available sunlight.

Diverse – catering to a range of age groups and recreations preferences across varying landscape profiles – podia, deep soil, rooftops etc.

Resilient – provide landscapes that engage active living and healthy diet while evolving over time and with environmental and social pressures.

Secondary to this is mitigating the impacts to the adjoining Monarco Estate development circa 2003, conversely providing a larger contiguous open space linking our site to the existing Riviera Park.

1.3 The Proposal

Urban Designers, Hatch Roberts Day together with Planners Willow Tree Planning have collaboratively developed the current proposal for the site. And summarised as follows; The Proposal lays the foundation of a consistent ground plane for the Framework agreed with Council in early 2020 where 40 percent of the site is dedicated to publicly accessible places. Ground plane features include creation of a fine-grain street network with new north-south and east-west connections, new publicly accessible people places. In particular, the proposed street on the site's northern boundary is important for unlocking the potential of both the site itself and adjoining Nurses Quarter. Building off this ground plane the Proposal illustrates a built form vision with a pedestrian-scaled podium of 3 storeys addressing streets where towers have a maximum of 53m length and floorplates of 875sqm GFA. With a largely residential focus addressing the current housing demand the Proposal has a FSR 4.25:1 and Height 20 storeys, being comparable with the scale of the Monarco Estate and recently approved Deicorp project i.e. a business-as-usual model for Australia's ambitious innovation district. Bridge Place delivers a response that aligns with Council's principle of not permitting L shaped and connected towers. The built form is designed as 3-dimensional community connected by the ground plane. This approach allows for built form diversity, flexibility and promotes social connectedness within a vertical village. (Hatch Roberts Day Urban Design Report)

1.4 Landscape Analysis

Existing vegetation is very limited and an assumption must be made that site development will result in the allocated deep soil open space being void of any trees. The expansive green 'park' of the adjoining Monarco Development, Riviera Park, serves as a 'borrowed landscape' and a contiguous open space to the proposed deep soil south of the build form of this proposal. A solar amenity study completed by Hatch Roberts days reveals the effects of overshadowing on the open space within the site. Areas of higher average shade can be determined to effectively treat those areas appropriately and in a positive manner. Areas of good solar access can then be used strategically for landscape uses that require it.

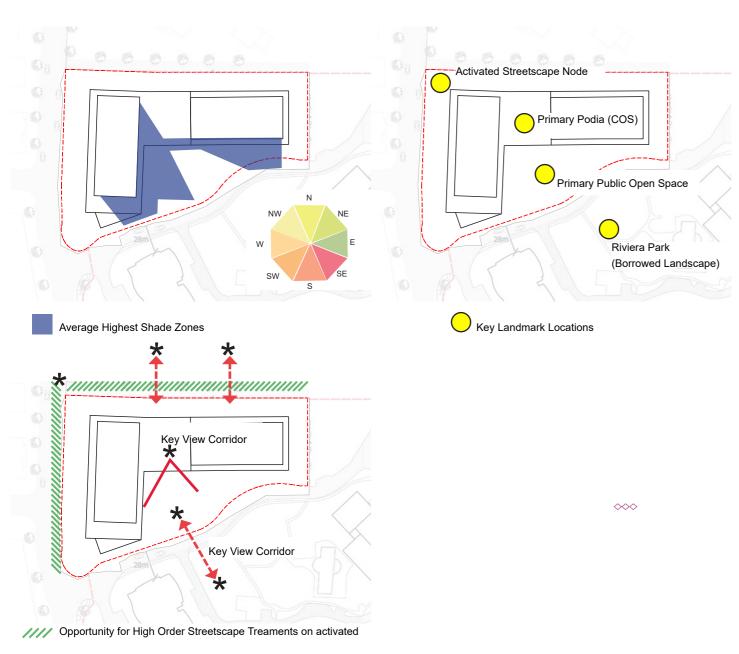
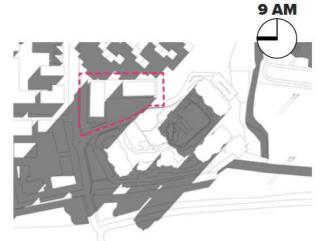
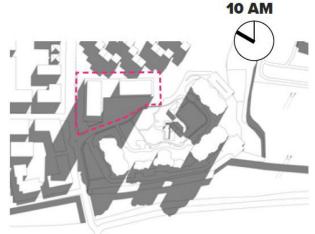
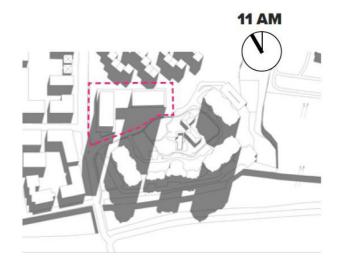
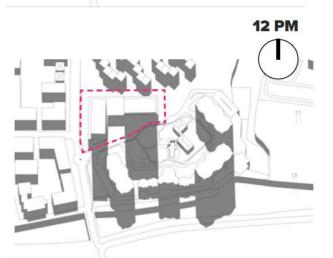


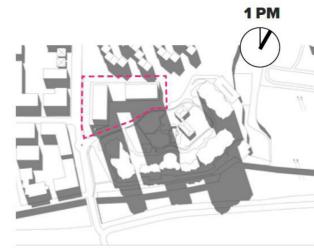
Figure 1.5 Landscape Analysis Diagrams

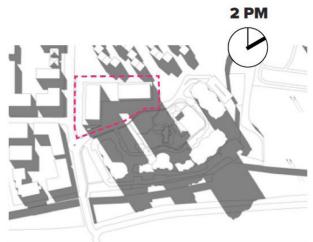












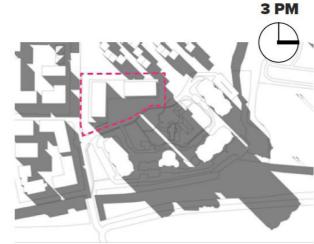


Figure 1.6 Solar Amenity Study: Hatch Roberts Day









2 Core Landscape Principles

Understanding the core landscape design values is crucial to the final design response. Core landscape design values are embedded within every aspect of the design, not just programmed in specific areas of the proposal. These values shape the vision of the proposal and have driven supporting framework, design principles and open space strategies. The values are all landscape led, meaning that landscape is designed as the priority in unison with the built form rather than as an embellishment.

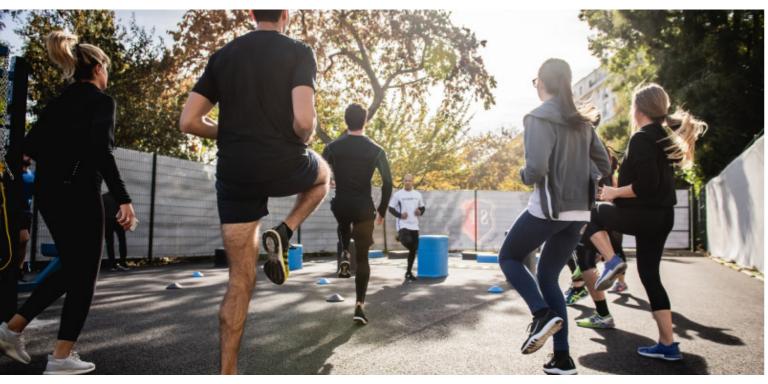
The landscape vision is centred around the following landscape and open space typologies while designing them around their credentials of being robust, diverse, and resilient. The following typologies overlap and intertwine, but cohesive they identify opportunities and set a clear landscape agenda and vision for Bridge Place 3.0.

2.1 Urban Cooling

An opportunity exists to address the overshadowing effects on the open space provided on the ground plane imparted by the proposed 20 storey buildings. Strategic layout can be manipulated to enhance the urban cooling effect that will provide greater shade amenity for the residents in the communal area/s. This is especially an issue of heat stress on people living in Western Sydney and the longer term impacts of a warming climate. Plant material will be used to create pockets of 'temperate' rainforest understory typology vegetation that strives in low solar access zones. Lush green foliaged plants such as palms, ferns, cycads, epiphytes, and mosses will be taken advantage of providing the added value of deep soil objectives and high visual outcomes with limited solar access. Vegetation is set amongst other recreational facilities such as pathways, seating and exercise resources to make use of the positive climatic zone and relief from high environmental ground temperatures in summer contributing to heat island effect. Areas of high solar access and hotter temperatures will be utilised as usual separate to this, providing recreational options for seasonal diversity, such as winter warming, both passive and active for the residents to maximise utilisation of the communal resources all year round. This is especially important for the highdensity environment expected, and expands on one of the landscape directions in the Westmead Place Strategy to "Expand the urban tree canopy" (pg.44) and "Promote a precinct that is resilient and responsive to future climate condition" (pg.48).

2.2 Passive Green Amenity

The challenge around higher density development is the creation of amenity spaces that maintain a level of passiveness. A level of control must be applied through design to limit congregation, noise, and conflicts of activity type. This can be done by hierarchical layouts of pathways, fencing, gates, etc but also through strategic placement of facilities to manipulate the divide between active and passive zones. The 'Green' aspect, looks to do this within a landscape setting that offsets the harshness of built form (buildings) and hardstand, against the softness and relief of vegetation, turf, and tree canopy. Conflicts between residents can be greatly minimised by in the first instance by providing active facilities (see 2.3), but limiting where they extent to and impact on a progammed passive space. Nooks, dead-ends, rooftops, and confined space can all contribute to the creation of such spaces. Contemplative opportunities for quiet relaxation, meditation, and concentration should be delivered for activities such as Yoga, reading, walking, resting, sitting, eating etc. The design should cater for all these activities whether through dedication of space or the installations that facilitate the activity. This can be reinforced through signage and wayfinding in the landscape design but also more broadly through specific strata controls.









2.3 Active Facilities

An opportunity exists to address the high ratio of residents to open space available. High wear facilities must be designed and material sourced in construction, to be robust and high wearing. Areas of garden beds and natural turf for example, shall be controlled to prevent damage or deterioration from overuse or shortcutting by pedestrian traffic. Outdoor amenity would ideally be akin to what you would expect in an urban city public park. Open-air exercise and play are often the most sought-after resource that residents in multi-storey dwellings need. They work as an immediate 'break-out' space from the confines of reduced living spaces as expected in this development. A fixed 'Fitness Court' and/or a flexible outdoor Gym Space like 'Virtuagym' should be considered. These allow for planned group sessions but free space for other users outside of those events. An 'All Ages' playspace or playspaces in key location/s are essential for youth prospects. These do not need to be costly and exhaustive in design, but can include subtle installations such as 'climbable' elements or 'suggestive' areas for activities such as bike and skate, but also informal ball games. Desire lines should be clearly established and a circuitous route established for running, dog walking, and circuit exercise regimes.

2.4 Diverse Opportunities

A need exists to create a range of opportunities for engaging with the outdoor environment, due to the fact the development will house people in tall buildings in a dense living situation. Strategically the development should not disproportionately advantage one user or age group, rather diversify amenity in budget allocations. The development proposal needs to create options across the range of built environment realities such as deep soil, podia, balconies/ terraces, and rooftop gardens. These should range in vertical and horizontal elements that contribute to an overall rich open space amenity, not only physically but also visually. They should consider and engage with the adjoining Monarco Estate open space facilities especially in the ground floor deep soil open space area identified in the proposal. A central meeting or gathering point such as an entertainment screen for viewing sports or major events could establish a heart of congregation. The rooftop terraces will attract high winds, heat exposure, and safety constraints, so they should be treated as such, and not token 'Green roofs'. Recreations facilities here could be open-air alfresco / bbq facilities, sunbeds, viewpoints etc that provide the passive alternative (as per 2.2) depending on season and daily weather cycles. Facilities should be programmed to accommodate resident groups or visitor gathering, being controlled through a 'strata booking system'











2.5 Growing Resilient Community

An opportunity exists to activate a core Westmead Place Strategy direction which looks to improve liveability, strengthening the health, wellbeing and social cohesion of a place, to ensure improvement of the resilience and capacity of a community to be able to respond to and adapt to change. This can be done locally on the subject development site by simply incorporating a community garden. The function of self-sustainability in food production can have an immediate impact and if successful in time, could extend to a paid or barter system with adjoining residential groups or sites. The community garden could be intensive, on podia and value add to the 'greening' of the site. Evidence shows that community gardens are most effective where they have a high level of resident engagement which is closely linked to population density. Cost of living, food security, freight, and the desire to eat healthy are all relevant to the current situation both in Sydney generally but more broadly in the sentiment of everyday residents. Productive gardens could allow for a small Community Orchard, Kitchen Garden, Organics and food waste recycling. Linked to this can be the stormwater management design, incorporating WSUD into non-mains irrigation.

Public Art should feature in establishing a sense of place and identity. Again this doesn't need to be costly or exhaustive, but contribute to the resilience of communality by evoking residents ownership and pride of place for their home and immediate community. The art should relate directly to the locale of Westmead.

2.6 Pedestrianisation

An opportunity exists to reduce the dominance of vehicles on low volume streets to increase the security of open space by placing a higher emphasis on pedestrian movements and connectivity. The proposal identifies a 'New Shared Street' running north-south on the eastern edge of the site, connecting the existing access drive into Monarco Estate. These access roads would highly benefit from being 'shared zones' that slow traffic and create a more pedestrian friendly environment, complementing both sites, and future sites, for example to the north. Implementation, centred around street trees, urban paving, vehicle control devises, and furnishings will facilitate a perceived safe environment for kids to play, dogs to walk, and the elderly to stroll. Finally, to offset the scale and bulk of the towers, open space should address the human scale of the ground and podia open space zones by creating moments of a 'false ceiling' effect through overhead initiatives such as catenary lighting, green canopy, and shade devices. Vertical elements such as climbing plant trellis should also be explored.

Figure 2.3 Indicative Imagery Board 3. Source: various DLD Library

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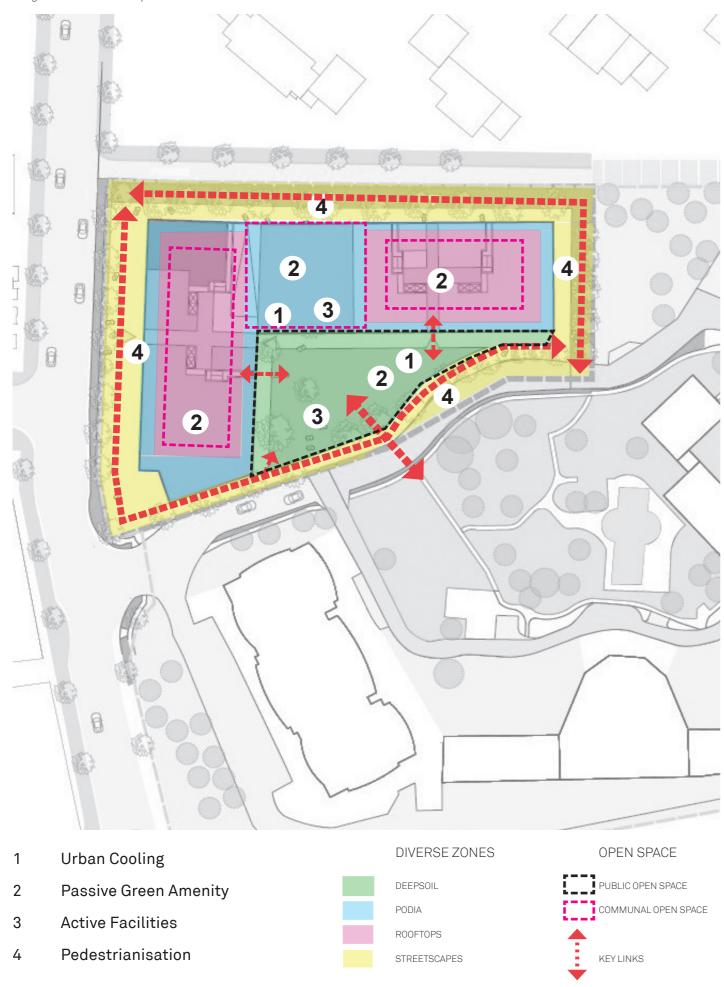




Figure 3.1: Landscape Masterplan

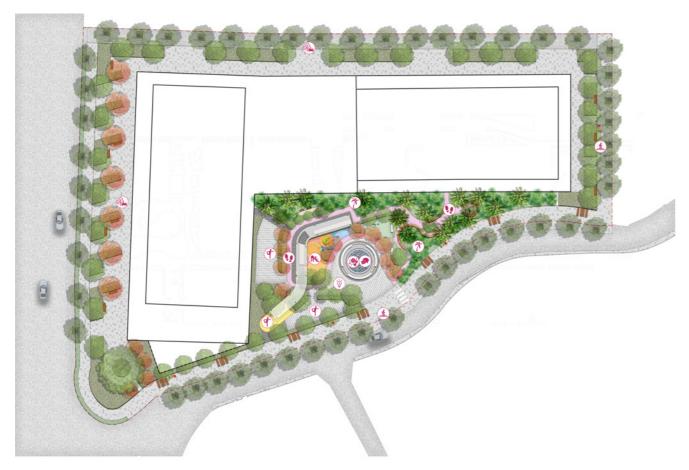


Figure 3.2: Landscape Ground Floor



Figure 3.3 Centre Court Precedent (TCL Monash Northern Plaza 2015)

3.2 Active Facilities

These facilities best refer to those that provide an outdoor amenity resource for interaction, movement, noise, and energy. High density residential increases the need for such resources and usually, if designed well, regular use and engagement.

3.2.1 Centre Court

A central gathering point would create an active heart to the residential community. Uniquely this amenity is both active and passive. The design could be a simple urban style space that provides seating options for interaction or low impact activities. A large television screen could provide an outdoor entertainment point for watching sport, news, or special broadcast events & performances. The centre court should be open to the street and face the adjoining Monacro development to enhance connectiveness to a greater open space feel and sense. The location is placed with higher solar access, juxtaposed to areas of 'Shade Forest' (section 3.3.2) in higher overshadowed areas, for that reason and therefore not be burdened with further evergreen tree or artificial shading, especially during winter, so the planting of deciduous trees on the outer extremity is encouraged.

3.2.2 Virtuagym

The 'virtuagym' refers to an area suitable for outdoor group fitness and personal training sessions. It would be located on the ground floor adjacent to centre court to enable a 'general public' access to facilitate groups coming in externally beyond that of immediate residents and family and roommates per se. Design must avoid conflicts with other activities and thoroughfares, but not enclosed and shutoff from the active connection to centre court. This resource should be 'Tech' focused with plugin points for smartphones (audial) and a virtual screen (visual) for interactive hassle-free sessions. Fixed installations should be minimal as the idea is around provisioning of space (strata) and people bring their own gear (mats, weights, bands etc).

3.2.3 Fitness Court

The 'fitness court' refer to a fixed outdoor gym. This facility provides a resource separate from the virtuagym and allows for a range of capabilities levels, for example from teen to seniors age range. Access is best controlled here to residents only and therefore located on the primary podium (level 3) and more deliberately on the rooftops (level 21). It could also be divided into one for each block (building tower) to distribute the resource and access. A rooftops gym/s would make effective use of the open space on rooftop constraints, and rather than any token 'garden' that is subject to high environmental impacts.

3.2.4 Kids Playspaces

A fixed playspace provides one of the most valuable 'break-out' spaces for children living in a high-density environment. Location is best suited on the ground floor where the most 'natural' landscape environment can be achieved within deep soil zones for deep rooted canopy trees, turf, and naturalistic play elements. The playspace should best provide for a range of ages where possible. Adjacent to centre court enhances passive surveillance and interaction with other children from adjoining developments (i.e the Monarco) can occur. Supplementary 'play' elements should be introduced on the primary podia (level 3) zone and include minor 'climbable' and/or suggestive 'interactive' games without the need for any intensive play equipment. This works synonymously with the community produce garden located on the podia adjacent. Parents can watch kids play while tending the garden.









3.2.5 The Loop

The loop serves two functions. Firstly, it provides a connected thoroughfare access to the whole open space. Hierarchically, the loop would be higher order and other links can branch off it. Secondly, it provides the longest circuitous travel link to maximise effectiveness for activities such as walking, dog walking, running etc, and allows for a return to the original setoff point. Ground plane (paving) treatments or linemarking should allow for wayfinding so the loop is identifiable.

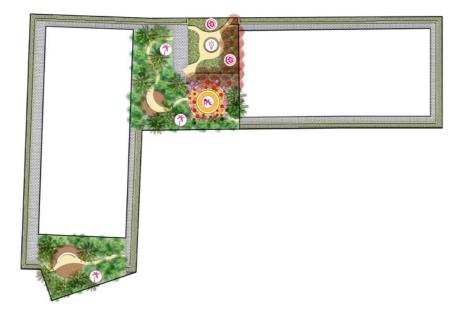


Figure 3.5: Landscape Level 3 Podium

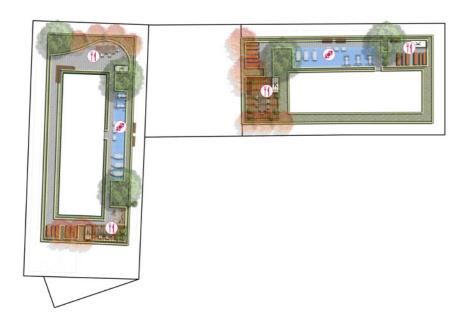


Figure 3.6: Landscape RoofTerraces

3.3 Passive Facilities

These facilities best refer to those that provide an outdoor amenity resource for connectiveness to environment, quieter, focused, and restful. Such resources are more typical in private residential settings, and somewhat harder to create in high density settings, but very essential.

3.3.1 Centre Court

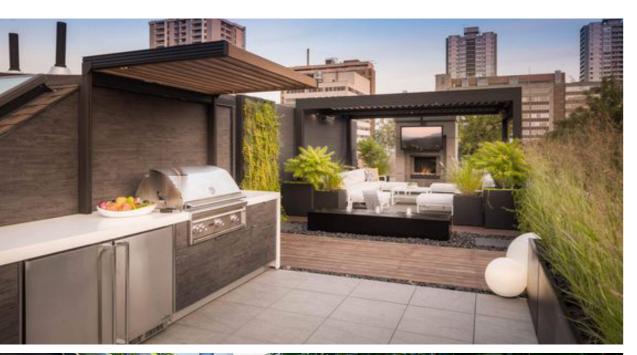
A central gathering point would create an active heart to the residential community. Uniquely this amenity is both passive and active. The design could be a simple urban style space that provides seating options for interaction or low impact activities. A large television screen could provide an outdoor entertainment point for watching sport, news, or special broadcast events & performances. The centre court should be open to the street and face the adjoining Monacro development to enhance connectiveness to a greater open space feel and sense. The location is placed with higher solar access, juxtaposed to areas of 'Shade Forest' (section 3.3.2) in higher overshadowed areas, for that reason and therefore not be burdened with further evergreen tree or artificial shading, especially during winter, so the planting of deciduous trees on the outer extremity is encouraged.

3.3.2 Shaded Forest Zones

The shade forest most effectively addresses the issue of overshadowing from the podia and 20 storey buildings proposed. In a simulated 'rainforest' scenario, the upper stratum (canopy with full sunlight access) is removed due to overshadowing. The mid stratum is introduced by the planting of palms, tree ferns, epiphytes and vines, tolerant of the lower solar levels. The lower stratum is included with groundcover planting, shrubs, ferns, mosses, scramblers etc. Within the vegetative outcome the passive amenity is provided within a cool, shaded environment best served on high heat summer days. It also assists with softening of the built form and hardstand paving. Solitary activities such as reading, resting, sitting, and meditative practices can be done is a welcoming micro-climate. The shade forests are located strategically in the most effected overshadowing zones produced by the buildings proposed.

3.3.3 Community Garden

A community garden for the production of fresh and accessible kitchen herbs, vegetables, and some fruits for daily use in resident cooking. This resource can be effectively managed by a small formal resident group and manager. Location is best suited on the podia (level 3) so a central access point for both towers can be accommodated in a protected elevated position. All soil media on podia must be raised by planter boxes which best serves the function of how veggie plots work. A small working shed for tool storage, greenhouse, rainwater tank, and compost/worms bins should accompany the productive garden facility. Residents can collect organic waste from dwellings reducing overall external waste collection needs. The garden is best situated in the north-east section of the primary podia which receives the most uninterrupted solar access.







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3.3.4 Alfresco Nooks

Outdoor Alfresco (bbq / picnic) cooking can be problematic or even impossible when unit terraces are not offered or are extremely confined in high density developments. Alfresco gatherings in small or moderate groups are great resident facilities and add a practicable amenity and 'break out' space for visitor/resident gatherings. By situating these on the roof terraces, the facilities can be managed in a controlled manner by strata. Wind breaks, fall hazard fencing, and hard surfaces all assist in creating secluded, protected, inward looking rooftop entertaining / alfresco spaces with clear sky, and without the need for elaborate outward looking views. This makes for useful open space amenity on very high rooftops.

3.3.5 Public Art

A simple public art piece or regime is proposed to enhance local awareness and hopefully instil a greater sense of belonging or pride in the immediate environment of the development. The public art should be designed and procured through an inclusive process. The art can take many forms and all options should be explored to provide the most suitable installation for the development. Locating this is arbitrary and should reflect how it is being implemented in the design.

Figure 3.7 Passive Rec Indicative Imagery Board

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3.4 Streetscape Typologies

The multidisciplinary (urban design, traffic engineer, landscape architect) approach has identified street typologies to cater for different traffic levels and localised conditions across the site. Street typologies have been designed with consideration of; activation, vehicles, pedestrians, cyclists, shade and how they are interconnected within a street that proposes various levels of vehicular and shared usage.

3.4.1 Activated Interfaces

This typology would apply to the following roads;

- Existing Collector Road (Bridge Road) western edge
- Proposed Local Road northern edge

Providing generous setbacks from the road reserve to the built form, widened and activated streetscapes can be introduced that interface with ground floor retail tenancies and residential lobby's. These typically attract higher pedestrian volumes and require outdoor space to provide relief from commercial operations. Seating, impromptu eating, rest, and break-out where patrons are encouraged to be active and socialise. The widened verge provided within the private lot boundary, allows for the roads to have double row street trees with interlocking canopies, and one-way cycleways. There is also the opportunity for intermittent parking and a bus zone along the collector road. Stone paving, planter boxes, and incidental seating with urban style street furnishings will make for a robust activated urban street environment with good landscape amenity.

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Figure 3.9: Shared Pedestrianised Streetscape Indicative Imagery Board

3.4.2 Shared Pedestrianised

This typology would apply to the following roads;

- Existing Private Road southern edge
- Proposed Shared Road eastern edge

These roads should be designed for pedestrians and cyclists. This can be achieved by using a change of material as a traffic calming design move that has the potential to also create a sustainability outcome such as the use of permeable paving. Slotted kerbs as part of the WSUD strategy can be utilised to create a self-irrigating landscape that captures water runoff from roads and waters the street trees and planting. To encourage residents to utilise their streets, flexible zones are also proposed within the streetscape to allow for parking, landscape, and street furniture. The north-south shareway lane 'completes the loop' by providing a complete loop around the proposed development. The new road is designed to create an intimate narrow shared zone to vehicles, pedestrians, and cyclists. The laneways proposed are reminiscent of the Private Access Road (east-west) on the southern boundary however, the Laneway can be used as a shared paved space designed also for loading and dropoff access. The narrow nature of this street means it cannot provide for on-street parking as pedestrians and cyclists take precedence over vehicles. The Shared lane should be planted with tall narrow evergreen trees species. Road pavement is raised for flush kerb and vehicular control bollards to create a seamless pedestrian friendly zone where cars slow naturally. Street furnishings designed to make use of the extension of open space.

4 Planting

4.1 Overview

Plant material and species used must be reflective of the masterplan design principles and objectives. The shaded forest zones explained in section 3.3.2 will need to deliver appropriate shade tolerant, temperate zone species that are commercially available and adaptable to the local environmental conditions of Westmead. These can be a mix of some locally indigenous species, but also natives of temperate Australian zones.

Where appropriate, locally indigenous trees and shrubs should be used to be reflective of the endemic vegetation community, but also for fauna refuge in the greater local environment.

Street trees must be urban adaptable resilient species conducive to pollution, shade, heat, drought and wind forces. They should have nuisance-free attributes. Trees on the collector and local roads should be large spreading canopy species, double rowed, and alternate evergreen/deciduous to balance shade and solar access in both summer and winter. Trees on low volume and shared zones should be small to medium reflecting the human scale.

4.2 Vegetation Palette



Figure 3.10 Vegatation Palette distinctive Living Design 32 33

5 Referencing

Ason Group, Transport Assessment, 93 Bridge Road Westmead, 22.12.23

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