

ASPECT Studios Pty Ltd ABN 11 120 219 561

## Introduction & Overview

This statement should be read in conjunction with ASPECT Studios Landscape Development Application drawings

ASPECT Studios were commissioned by Macquarie University to prepare a landscape master plan concept for Development Application submission for the proposed mixed-use development at 8 - 12 University Avenue, Macquarie University.

The architectural scheme is being carried out by KannFinch and Sissons Architects - please refer to the architectural DA drawings for further information regarding the proposed development.

Road arrangements and alignments, hydraulic engineering, drainage, site levels and water sensitive urban design strategies are being prepared by the consultant team. Please refer to the Statement of Environmental Effects for further information on the consultant team.

The site is located within the Macquarie University Campus and is bounded by Macquarie walk and University Avenue to its North and South, respectively. There is significant level change across the site.

Currently, the site is occupied by multi-level carpark buildings, a security building and a sub-station with an amount of existing trees and vegetation around the buildings' perimeter.

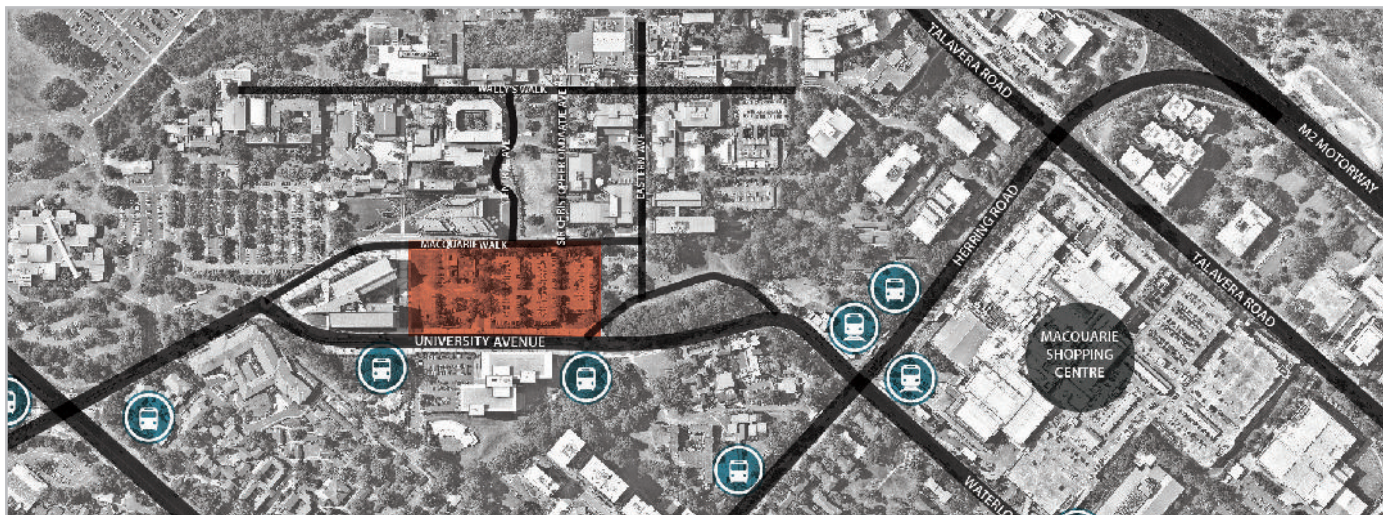
Public domain rectification works associated with the project include new street trees and footpath realignment works to University Avenue along the southern edge of the site.

This statement and accompanying DA report submission have been developed following a concept design report. The scope of works contained within includes: landscape areas within the Through Site Link and Atrium areas; a linear park north of 8-12 University Avenue, levels and grading to both internal and external adjacent landscape spaces; and, additional accessible landscape treatments to the eastern, western and southern site entries.

### Design Principles

The areas of public domain within the 8 - 12 University Ave development have been designed with regard to the principles listed below:

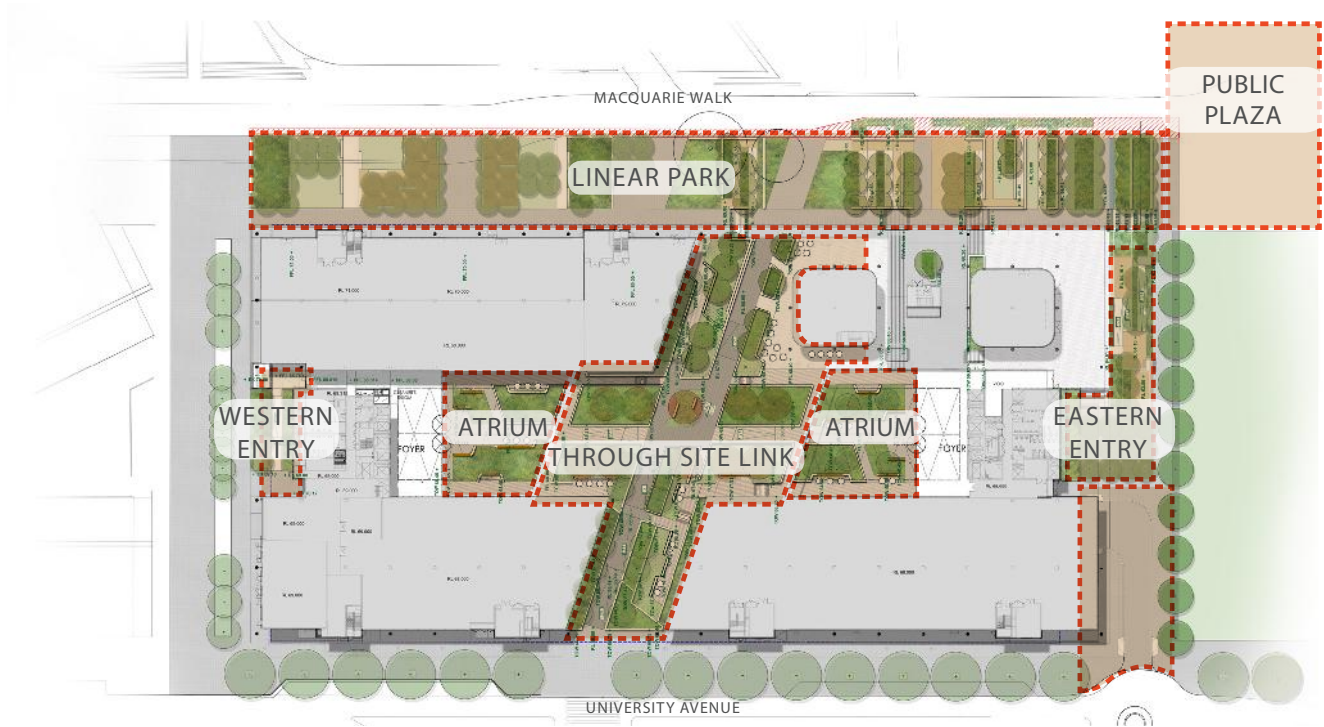
- The provision of high quality and active public domain that allow for a variety of uses and user groups
- A public domain scheme that reinforces clear and accessible connections, integrated within the landscape.
- Creation of a strong relationship between the built form, topography and the landscape through a series of high quality landscape spaces
- The provision of a landscape that harnesses the potential for WSUD within it's design
- Provision of high quality and comfortable streetscape upgrades that prioritise the pedestrian, and encourage safe and legible movement to and from, and within, the site
- Provision of versatile and considered landscape spaces for workers, students and visitors.
- Increased biodiversity and environmental protection through plant species and hard material selection
- Low water consumption planting
- High quality, low maintenance, robust materiality
- A public domain that has been designed with regard to crime prevention through its design (consideration of CPTED principles)



Site Context Plan (NTS)



## Landscape Areas



Site Key Area Plan (NTS)

### Streetscape Upgrade

University Avenue forms a key address to the site's southern edge and serves as the arrival point on campus for a large number of students travelling to the university by bus. Streetscape upgrade works in this area consist of the realignment of the kerb to the northern edge of University Avenue following the removal of an existing roundabout located adjacent to the Southern entry to the public thoroughfare space. New street tree plantings are proposed in keeping with the existing street tree selections along University Avenue.

### Public Plaza - Sir Christopher Ondaatje Avenue

The Eastern edge of the site serves as the point of arrival for large volumes of students and staff travelling to the campus by train. The Public Plaza will act as the interface between Sir Christopher Ondaatje Ave and 8-12 University Avenue, providing accessible routes and stair connections within a set of landscaped terraces. The Public Plaza to Sir Christopher Ondaatje Avenue also provides a series of versatile and inhabitable landscape spaces for outdoor study, reading or for possible occupation as café spill out zones by food and beverage tenancies.

### Public Plaza - Existing Shared Zone

The Public Plaza located to the eastern edge of the site provides a stair connection to 8-12 University Avenue. In addition an accessible ramp set within the landscape allows for equal access to the building entry.

### Atrium and Foyers

The Atrium Landscapes are visual extensions of the Through Site Link and other podium landscapes. They are transitional spaces which can accommodate large volumes of pedestrian circulation and small group gatherings (short stay, e.g. coffee cart, small inhabitable spaces). The Atrium landscapes provide green outlook for the commercial tenants above, and provide visual interest, whether through textural and seasonal planting, lighting or activity.

### Through Site Link

The Pedestrian Through Site Link realises a key Concept Plan move to introduce a pedestrian connection between Cochlear & University Avenue to Macquarie Walk and the University Common. It will provide a direct and accessible link to The Common – the heart of the Campus – from University Avenue, which is a key public transport route servicing over 750 buses daily.

The Through Site Link must provide a graded, accessible and open route (preferably no steeper than 1:21) to encourage permeability by all users. It softens the ground plane and built form through a combination of trees, climbers and dense understorey planting, where possible and with other built form interventions, mitigates the impacts of any high wind conditions to create a pleasant, comfortable and safe environment for people.

The Through Site Link encourages activation with appropriately scaled inhabitable zones for meeting friends, people watching and relaxing. Where appropriate, ground floor activities (e.g. cafes) will spill out into the Through Site Link to further activate this space.

## Landscape Statement

### Macquarie Walk - Linear Park

The Linear Park forms a key part of the Macquarie Walk revitalisation. It is a generous civic spine that extends from Sir Christopher Ondaatje Avenue to the east along the northern frontage of the site.

This link has the opportunity to be a flexible space that is integrated with, and highly responsive to, its surrounding environment and built form. The Linear Park is approximately 13-14 metres wide, extending from the building to where it meets Macquarie Walk's main circulation spine.

The Linear Park introduces a series of landscape spaces within its bounds, including raised turf plinths with sittable edges, garden rooms with textural understorey planting, permeable plaza spaces with a suite of custom furniture and open spaces for key view corridors. Located on the north face of the building, the Linear Park will provide a sunny external spill out space for users to gather and interact adjacent the main stair access of Macquarie Walk

The Linear Park is terraced between Central Avenue and Sir Christopher Ondaatje Avenue. On the northern side of the linear park is a 12.4m wide grand stair which feathers seamlessly into the proposed landscape of the University Commons. It is envisioned that the stair will be an active place to meet, linger and people watch.

### Accessibility

The Linear Park has been designed to accommodate equal access in both a north south and east west manner. It enables people to move directly from the various levels of the building north to the Commons, and it provides an important opportunity for users to move between the 5m level change externally between Sir Christopher Ondaatje Avenue to Central Ave without the reliance on internal lifts.

The design cleverly incorporates 1:21 grades within the landscape so that the space is not dominated by handrails and tactile indicators. Instead, the landscape reads as a series of stepped platforms that gently traverse the slope. Seating edges, furniture under groves of trees and small pockets of turf mean that this will be an active and vibrant landscape for users to gather, and a space that all users can move freely within.

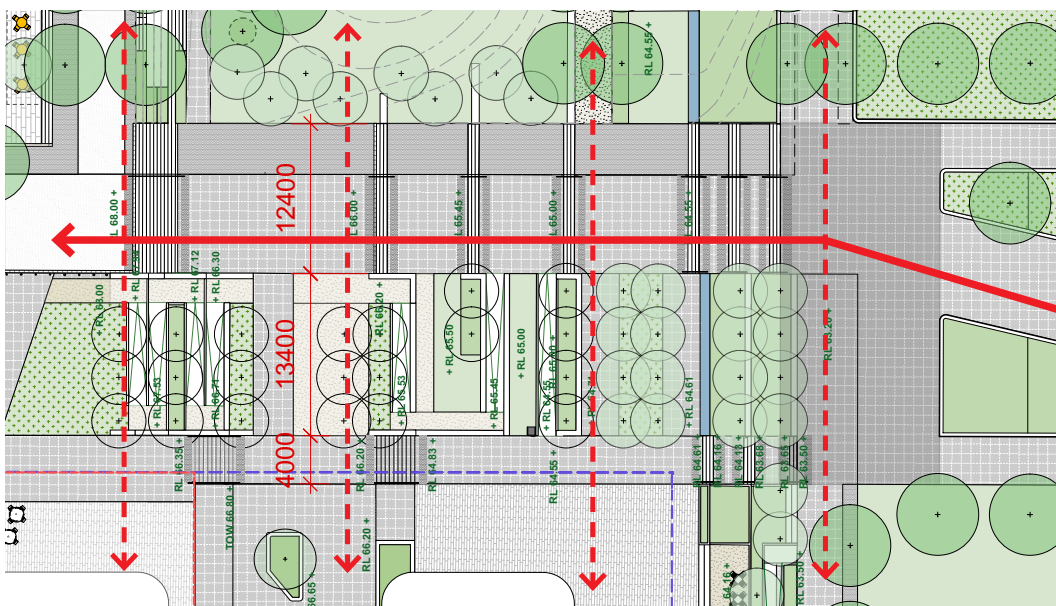
In establishing the proposed levels for the site, equal access has been a key criteria. All new street footpaths and surfaces have been designed to be at accessible grades.

Within the building area, ramps have been provided for equal access. In shared way environments, bollards and visually prominent variations in materiality will provide pedestrian safety.



Linear Park terraced landscape spaces. Equal access occurs subtly within the garden areas.

Seamless on grade north-south movement between 8-12 and University Commons



Grand stair (12.4m wide) positioned to align with new Crossing and pathway upgrade works

Linear Park arrangement of landscape elements

## Landscape Statement

### Macquarie Walk - Temporary Landscape

In order to maintain vehicular access to both The Common and 8-12 University Avenue during their construction it is important that a minimum width of 4m be maintained along the existing grade of Macquarie Walk. The Temporary Landscape treatment to the Northern-most edge of the site boundary addresses the interface between the existing grade of Macquarie Walk and the terraced structure of the Linear Park. (see diagrams to right)

### Sustainability

8-12 University Avenue places an importance on key sustainability principles. Focus has been given to mitigating the urban heat island effect, with large groupings of trees being used to create generous amounts of inhabitable shade, large areas of mass planting and the selection of non-reflective materials wherever possible.

8-12 University Avenue aims to create an address which is underpinned by sustainable design interventions and is situated within a functional landscape setting. The landscape response has been informed by the site's orientation, solar access and surrounding developments, and aims to restore natural water flows, improve water quality and utilise overland flow to irrigate garden and turf areas.

In addition to a spatial response, the use of locally sourced materials, intelligent infrastructure and increased planting to reduce the project's impact on the environment, the project showcases the University's approach to sustainability and creating an enduring landscape for the University's future.

The terraced landscapes of the Linear Park to Macquarie Walk will slow and filter storm water, reducing the quantity of overland flow through the catchment. Both the Linear Park along Macquarie Walk and the Through Site Link and Atrium spaces are predominantly native landscapes. They utilise their remodelled topography to redirect water movement to areas of planting, employ bioswales and filtration/soak zones to slow and filter water, and reuse rainwater to feed the proposed water features.

### Furniture & Fixtures

The proposed public domain works for the 8-12 University Ave development includes the provision of new furniture and lighting within all publicly accessible spaces (park, streets, plaza). The palette of furniture materials are to be high quality whilst being robust and low maintenance. Items are to be bespoke in their design, or selected to be complimentary to The University's existing suite of furniture and materiality.

Bike racks, bins and drinking fountains will be provided in accordance or with sympathy to The University's technical manual and existing collection of fixtures.

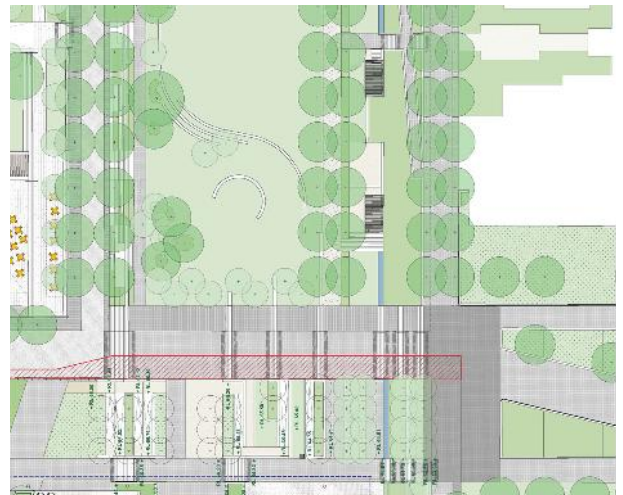
### Planting Strategy

The planting plan and schedule includes a mix of native species and exotics that have been selected for their appropriateness to the site conditions, hardiness and adaptability to varying soil and moisture conditions. The tree selection is predominantly native (indigenous) species to contribute to the urban habitat of the LGA. Additional, smaller scaled exotics trees have been selected as feature trees providing colour/ form contrast.

The public domain has focussed on a hardy and assured palette of plants that perform well in a variety of conditions, whilst requiring limited maintenance. Avenues of trees set up a strong geometry and structure to the public domain, with large canopied feature trees providing visual interest.



Linear Park- temporary interface to Macquarie Walk prior to University Commons upgrade



Linear Park-final design interface to Macquarie Walk and Proposed University Commons. (red hatch indicates 4m wide temporary landscape zone)



## Crime Prevention Through Environmental Design (CPTED) Principles

### Surveillance

Surveillance is achieved when users of the space can see or be seen. Generally, people involved in anti-social or criminal behaviour do not like to have their activities monitored. The layout of the Public Domain, orientation and location and the strategic use of design should make it difficult for criminals to operate with ease. Surveillance should be a by-product of a well-planned, well designed and well used Public Domain. Increased surveillance can help to reduce opportunities for crime to occur.

### Objectives

- There is adequate surveillance to, from and throughout the Public Domain and along the alignment to reduce opportunities for crime.
- Lighting in and around the Public Domain complies with the Australian Standard AS/NZS 1158 – Lighting to increase surveillance opportunities during the hours of darkness. Refer Landscape DA for lighting strategy.
- Lighting in and around the Public Domain is commensurate with the closed circuit television requirements.

### Access Control

Access control should restrict, channel and encourage people and vehicles into, out of and through areas. It can be used to increase the time and effort required to commit a crime and to increase the risk of detection for people involved in anti-social and criminal behaviour. The tactical use of design features including building configuration, security hardware, pathways, landscaping, fencing and on site guardians can control access and help to reduce opportunities for anti-social or criminal behaviour.

### Objectives

- Access through the public domain and to external pedestrian routes are clearly defined and measures of control are implemented to reduce opportunities for crime.
- Access to restricted areas within the development is minimised to reduce opportunities for crime.

### Territorial Reinforcement

Territorial reinforcement is about ownership; who owns the space, who manages the space, and who cares for the space. Criminals are more likely to be deterred by the presence of people who are connected with and protective of a space than by people who are just passing through. Territorial reinforcement is defined by actual and symbolic boundary markers, spatial legibility and environmental cues to 'connect' people with space. When the Public Domain incorporates these distinct cues it encourages community responsibility and communicates to people where they should and should not be and what activities are appropriate.

### Objectives

- The boundaries of the public areas are clearly defined to reduce justification of crime and criminal opportunities.
- Signage provides guidance to users of the University and reduces ability for trespassers to defend themselves for being in locations that are prohibited.

### Space and Activity Management

Space and activity management involves the control, supervision, and care of space. All space, even well planned and well-designed areas need to be effectively used and maintained to maximise community safety. Places that are infrequently used are commonly abused. Space and activity management strategies are an important means of developing and maintaining natural community control.

## Objectives

- The design of the public domain will create well used and frequented spaces that users feel a sense of personal ownership over.
- The public domain will provide hard wearing and robust public spaces that do not require undue maintenance and are fit for purpose throughout their expected lifespan.

## Summary

The proposed landscape works for 8-12 University Avenue provide a range of user experiences and facilitate diverse public realm opportunities for University staff, students and visitors.

Through the selection of robust and attractive hard materials the longevity of the development is ensured. The environmental footprint of the landscape works being offset by the collection of site water and directing it to gardens where it can be absorbed.

The lighting and planting strategies work in tandem to create a lively and interesting public realm throughout the day, into the night, as well as throughout the seasons. This hub of activity will harness the power of passive surveillance to create a safe and secure landscape that offers value to both students and staff.

The proposed landscape works have been designed with equal accessibility at the forefront to ensure that accessibility is achieved for all users of the site despite the large fall across site.