

The background image shows a park scene with a wooden deck in the foreground. A woman is sitting on a wooden bench, and a child is running. In the background, there are many trees and other people walking around. The text is overlaid on the image.

CHAPMAN GARDENS

16-26 CHAPMAN AVENUE & 17-27 DAWES AVENUE, CASTLE HILL

PLANNING PROPOSAL

LANDSCAPE REPORT | 30 JUNE 2017

PREPARED FOR: THE HILLS SHIRE COUNCIL



CONTENTS

01	INTRODUCTION
1.1	PURPOSE OF THIS REPORT
1.2	EXISTING LANDSCAPE
1.3	VISION
1.4	DESIGN APPROACH
1.5	LANDSCAPE PRECEDENTS
02	LANDSCAPE MASTERPLAN
2.1	DETAILED LANDSCAPE AREAS
2.2	TREATMENT OF GROUND FLOOR USES
2.3	DEEP SOIL AND LANDSCAPE AREAS
03	PUBLIC AND PRIVATE DELINEATION
3.1	OVERALL PLAN
3.2	PRIVATE SPACE PLAN
3.3	LAND DEDICATION - CONCEPT OF ENHANCED PARK
3.4	HA-HA STRATEGY
3.5	FUNCTIONAL SEPARATION OF PUBLIC & PRIVATE SPACE
04	LANDSCAPE ELEMENTS
4.1	WSUD
4.2	THE CUMBERLAND PLAIN
4.3	PROPOSED PLANTING PLAN
05	VISUALISATION

01 INTRODUCTION

1.1 PURPOSE OF THIS REPORT

This landscape report has been prepared as part of a planning proposal package for the Chapman Gardens proposal at 16-26 Chapman Avenue and 17-27 Dawes Avenue for the Hills Shire Council. It provides a detailed account of the McGregor Coxall design approach to the landscape, including analyses, design precedents, landscape elements such as WSUD and planting character, and the overarching concept of the delineation between public and private space. Visualisations are provided in the final section.

1.2 EXISTING LANDSCAPE

The current site and its surrounding precinct, mostly consisting of suburban single dwellings in the Castle Hill area, is characterised by a lack of open green space and pedestrian linkages in the public domain. Its typical street drainage presents an opportunity for greater use of ecological measures to treat stormwater runoff. Considering the site’s former setting as critically endangered Cumberland Plain bushland, there is an underutilisation of native vegetation, including mature native trees.

Chapman Reserve is adjacent to the site and presents an opportunity for a new expanded and enhanced park, providing the local community with a children’s play area, informal recreation area and sports fields.



Above: Chapman Reserve. Right: Existing streetscape on Chapman and Dawes Avenues.



01 INTRODUCTION

1.3 VISION STATEMENT

Chapman Gardens is envisaged to provide a singular landscape expression and enhanced open space at a key site within the Showground Precinct



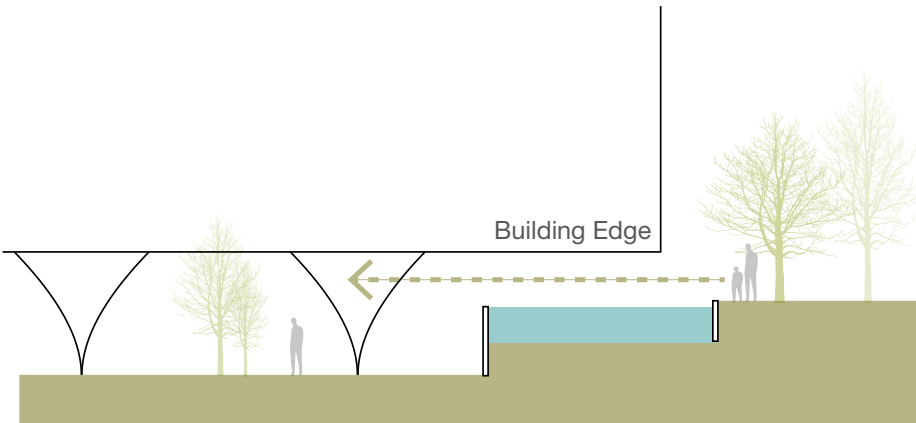
01 INTRODUCTION

1.4 DESIGN APPROACH

- The design of the landscape responds to these existing limitations by:
- Offering high quality open green spaces with a variety of recreational amenity accessible to the public,
 - Providing improved connectivity to the enhanced and expanded Chapman Reserve, to the new residential development and to the new Castle Hill station,
 - Implementing water sensitive urban design in stormwater capture, filtration, storage and re-use,
 - Re-establishing the site's Cumberland Plain bushland character, including mature native trees.

These will be done in a way that seamlessly balances between the privacy and seclusion needs of private residents and the need for a publicly-accessible and open space for the community.

The resultant landscape will feature a mixed-use green pedestal for the new residential development buildings, set in an enhanced and expanded park to be dedicated to the public.



1.5 LANDSCAPE PRECEDENTS



Boardwalk access



Buildings nestled in environment



Visual buffering



Loose furniture for flexible uses



Timber deck in rain gardens



Lawn steps



Passive open space



Play integrated with water sensitive urban design



Water play



Adventure play

02 LANDSCAPE MASTERPLAN

Chapman Gardens adopts the concept of 'buildings in a park'.



PROGRAMME

- | | | | | |
|--|--------------------------------------|---------------------------------------|--|--------------------------------------|
| 1 Timber boardwalk entry to building | 8 Wetland filtering rainwater runoff | 15 Giant swing | 22 "The Carousel" | 29 Potential Kiss & Ride location |
| 2 Cumberland Plains planting | 9 Water spiller to water pond | 16 "The Slide" | 23 Fern garden - lush | 30 Potential street carpark location |
| 3 "The Lawn" for passive recreational uses | 10 Precast steppers | 17 Childcare outdoor | 24 Childcare indoor | |
| 4 "The Green" for residents' use | 11 Steel staircase | 18 Picnic shelter with BBQ facilities | 25 Retaining wall | |
| 5 Main pedestrian walkways | 12 Viewing deck | 19 Cricket nets | 26 New pedestrian footpath | |
| 6 Water pond | 13 "The Spring" | 20 Climbing net | 27 Seating area | |
| 7 Cafe | 14 Natural playground area | 21 Tennis court | 28 Swale with informal natural play area | |

02 LANDSCAPE MASTERPLAN

2.1 DETAILED LANDSCAPE AREAS

Chapman Gardens offers a new landscape experience for the community; for example, in the following features:

Natural playground area

Situated adjacent to ‘The Spring’ biofiltration wetland, the natural playground area encompasses a range of adventure and education play elements that reflect both the WSUD focus of the development and the Cumberland Plain setting of the entire project. Recycled water is channelled through a children’s play pump and water course system while robust play elements are nestled in the natural landscape, creating a unique play experience that both excites and delights.



Through-site link

Following through with the concept of a public space dedication to the public, two generous and clearly-marked north-south through-site links are open 24 hours for public use, providing access and convenience, and contributing to a safer and more open public domain that extends to Chapman and Dawes avenues. These cover a total of 777 sqm.



The Lawn

An open and expansive lawn of grass that covers an area of 2,879 sqm will be dedicated to council. Available to the community - both residents and visitors - it can be used for passive recreation, sunbathing, picnics, occasional festivals, ball and frisbee games.

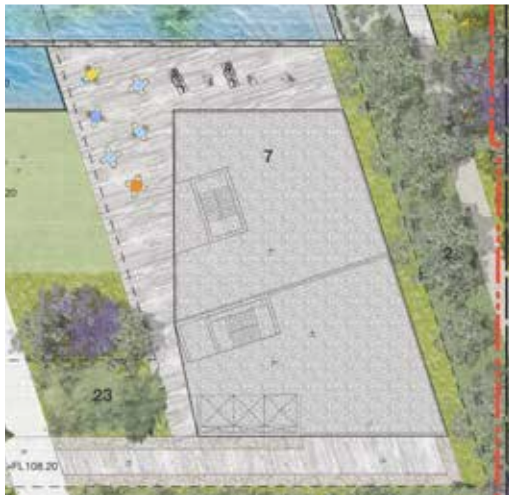


02 LANDSCAPE MASTERPLAN

2.2 TREATMENT OF GROUND FLOOR USES

Chapman Gardens presents an opportunity to activate the ground floor through the proposed childcare and cafe uses. Lansdcaping of these areas have been carefully designed to appropriately treat the new uses and provide community uses.

Cafe



Childcare



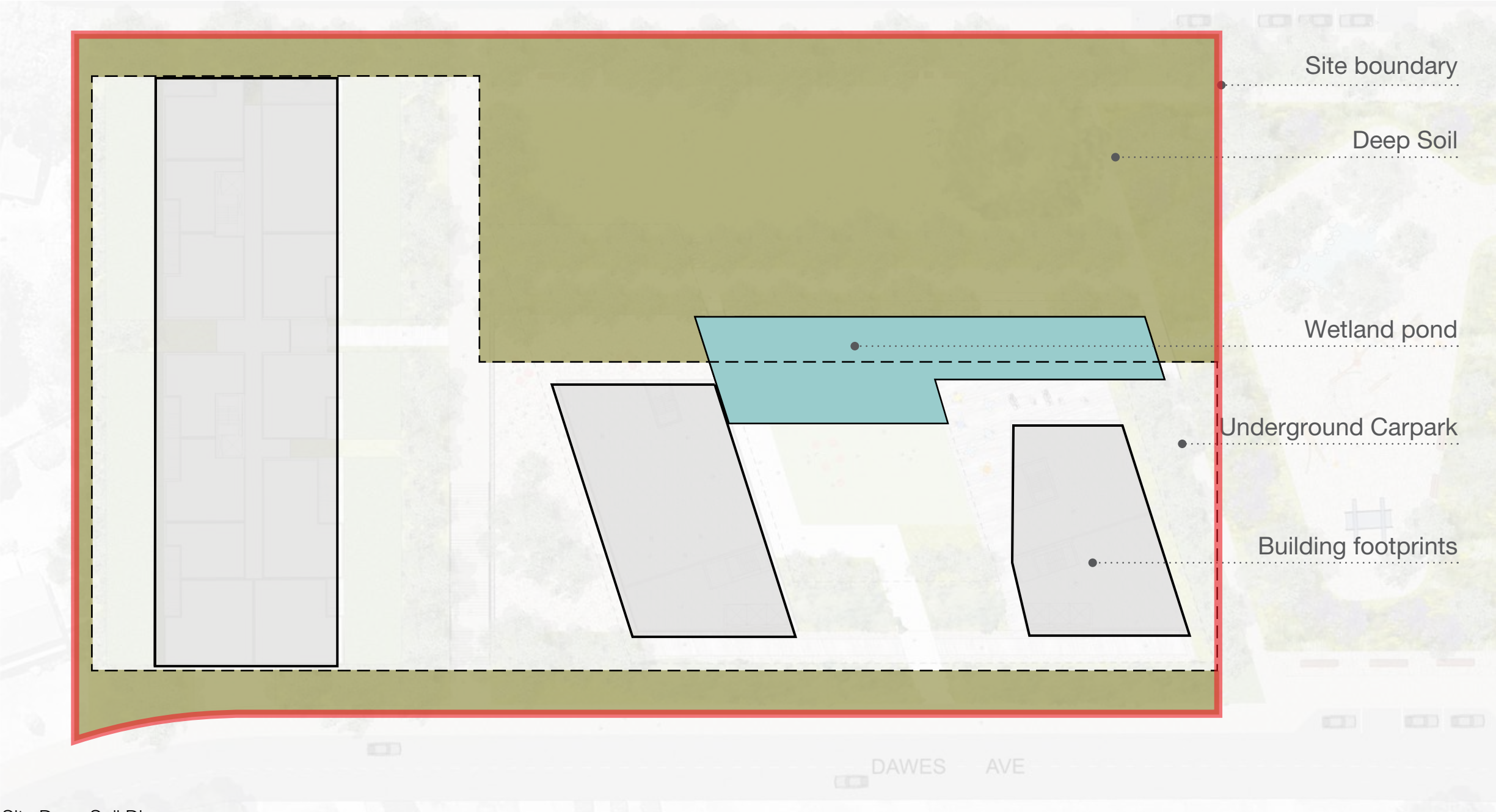
02 LANDSCAPE MASTERPLAN

2.3 DEEP SOIL AND LANDSCAPE AREAS

Chapman Gardens has been designed to maximise deep soil area while minimising the impact of the underground carpark and to comply with the following provisions:

Hills Shire DCP: The landscape area shall be a minimum of 50% of the area of the site, while a minimum of 20% of the landscaped areas should permit deep planting.
Apartment Design Guide: Deep soil zone to be 7% of total landscape area

Proposed deep soil area: 4,582 sqm (40% of overall site area of 11,322sqm)
Proposed landscape area: 8,686 sqm (77% of overall site area not occupied by building footprint)



Site Deep Soil Diagram

03 PUBLIC AND PRIVATE DELINEATION

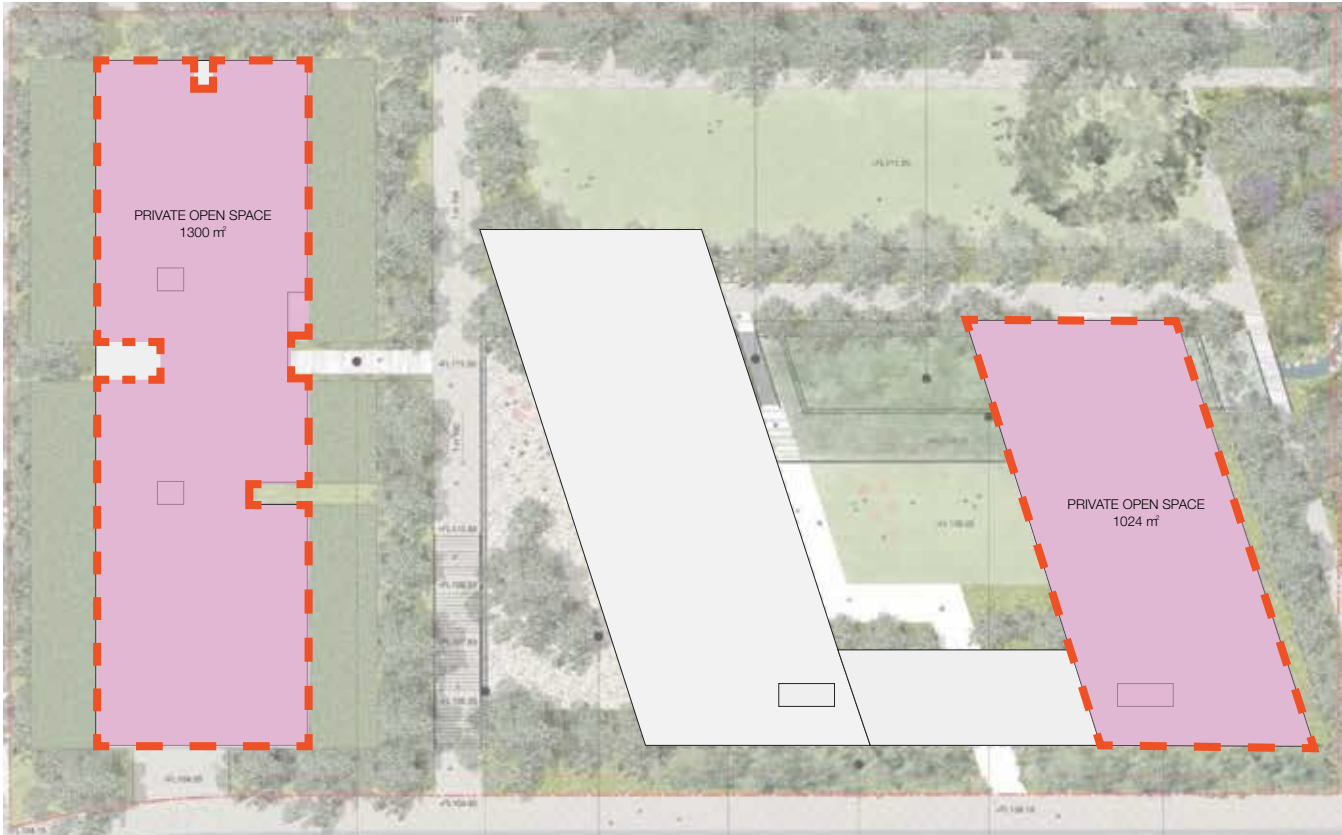
3.1 OVERALL PLAN

- Publicly accessible area
- Through-site link (Total area: 777 sqm)
- Current extent of Chapman Reserve (Total area: 2,220 sqm)
- Site Boundary
- Private space
- Land dedication to public (Total area: 2,879 sqm)
- Potential land acquisition for park expansion (Total area: 3,490 sqm)



03 PUBLIC AND PRIVATE DELINEATION

3.2 PRIVATE SPACE PLAN



ROOF PLAN



GROUND FLOOR PLAN

- Roof - Community open space
- Private gardens
- Roof - Community open space
- Groundfloor - Community open space
- Childcare open space

03 PUBLIC AND PRIVATE DELINEATION

3.3 LAND DEDICATION - CONCEPT OF ENHANCED PARK

One of the project's unique features is the dedication of 2,879 sqm of land to council from the overall site area of 11,322 sqm. This will provide an expanded and enhanced public park to the local community. The existing Chapman Reserve, as envisaged by DPE & Council, is to be augmented with additional space, subject to future site acquisition of existing private lots to the east of the site.



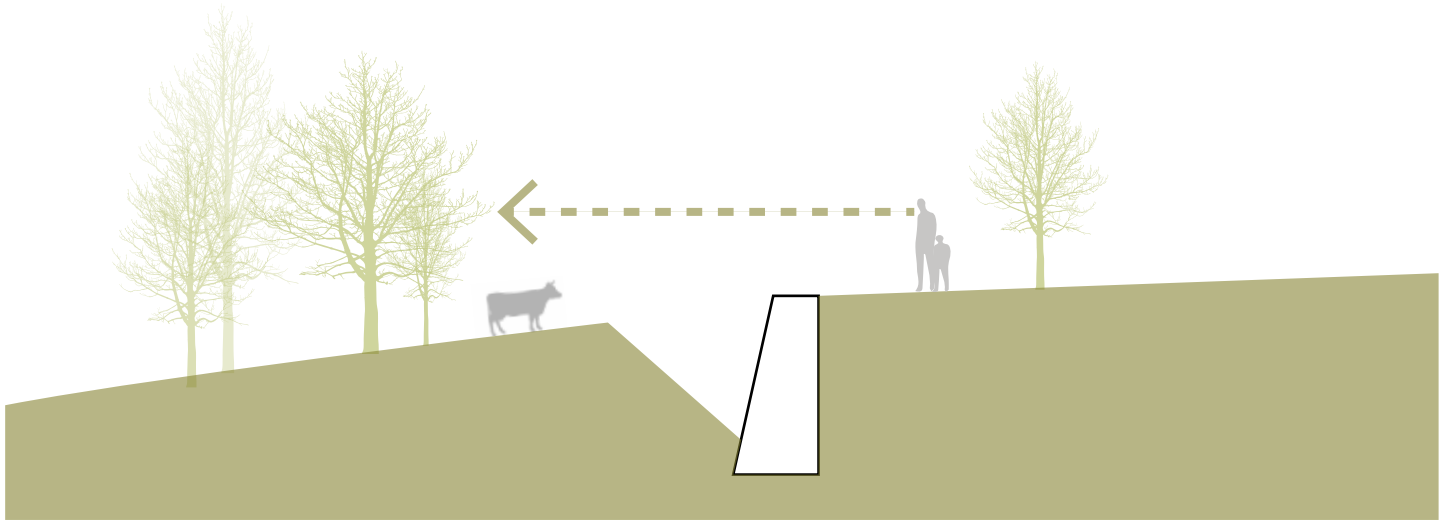
Above: Existing Chapman Reserve
Below: Proposed character of public park to be dedicated to the community



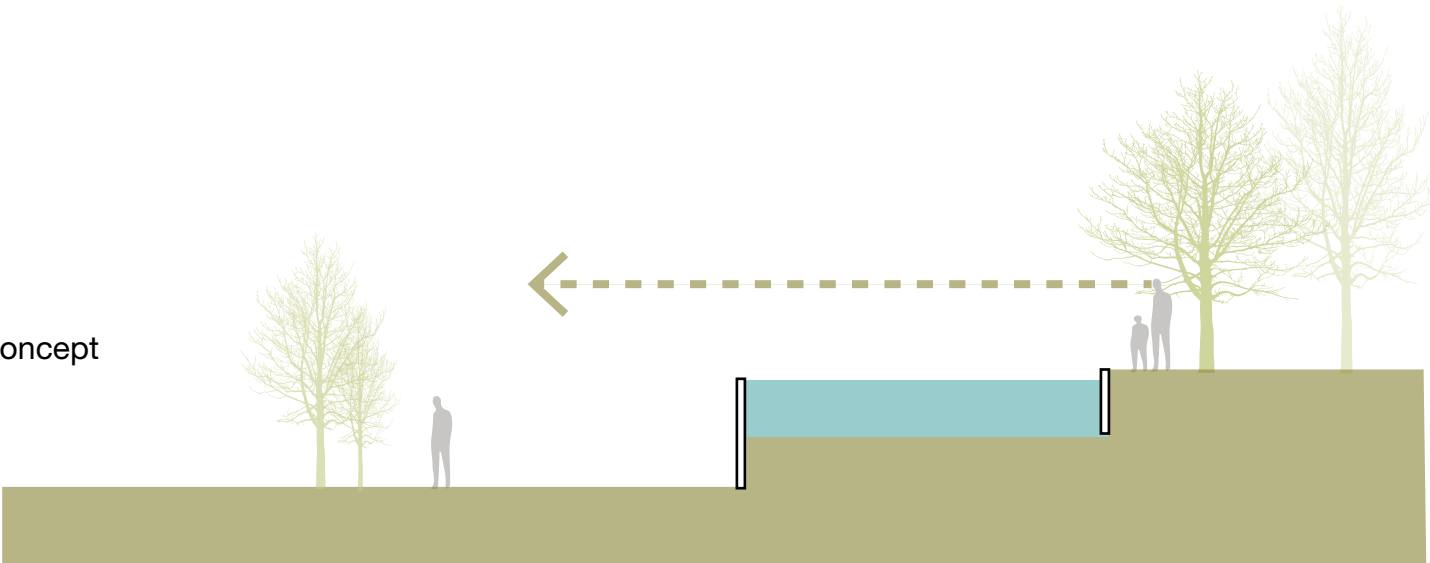
03 PUBLIC AND PRIVATE DELINEATION

3.4 HA-HA STRATEGY - CREATING A NEW LANDSCAPE EXPERIENCE

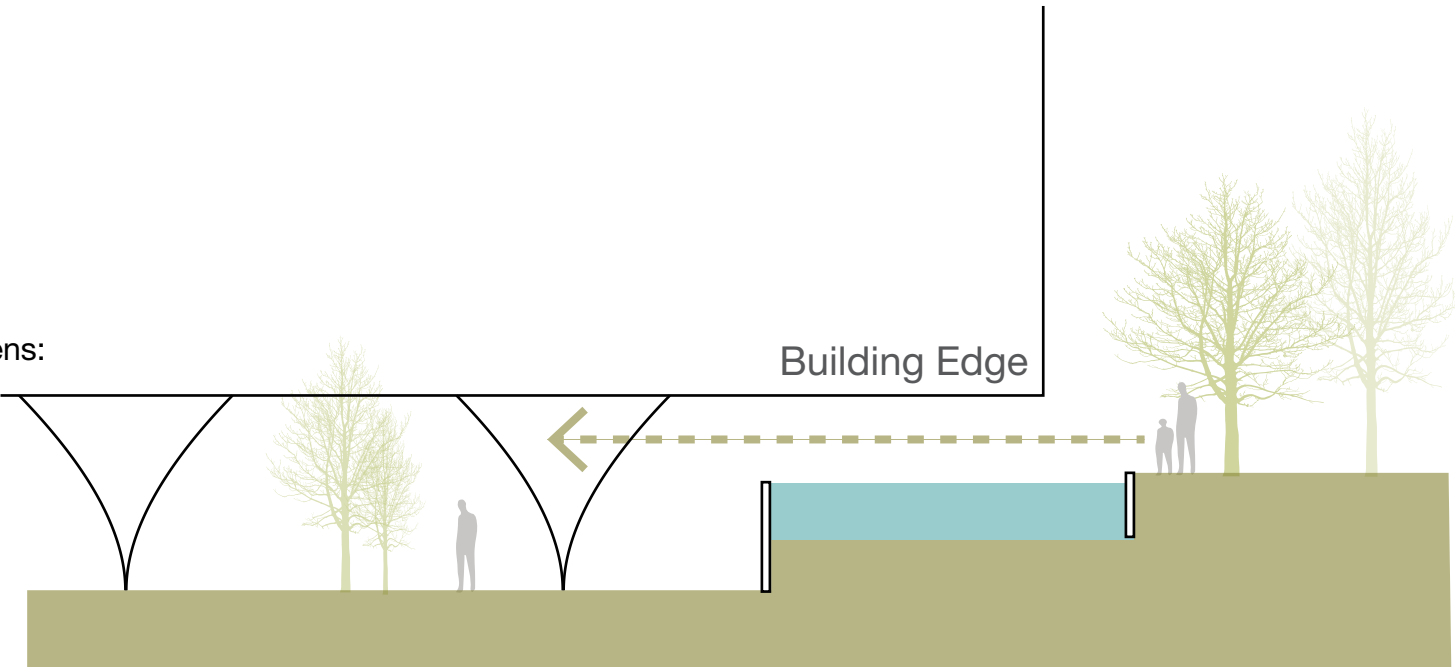
Traditional “ha-ha” concept:
a sunken retaining wall
confines livestock
while maintaining views



Proposed integration of ‘ha-ha’ concept
at Chapman Gardens wetland:
a water body separates
private from public space
without obstructing views

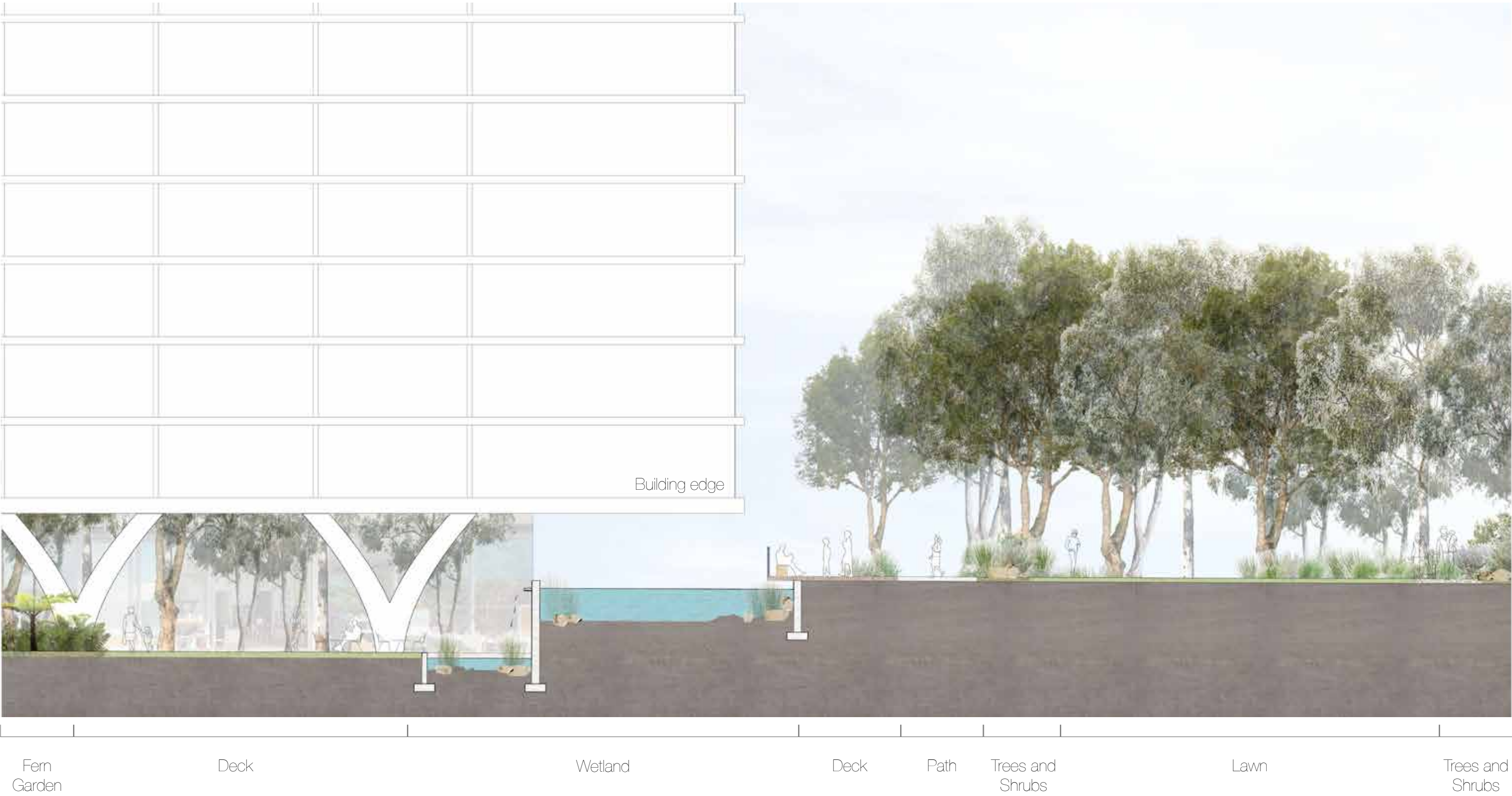


Visual flows at Chapman Gardens:
visual flows under the building
are maintained



03 PUBLIC AND PRIVATE DELINEATION

3.5 FUNCTIONAL SEPARATION OF PUBLIC AND PRIVATE SPACE



03 PUBLIC AND PRIVATE DELINEATION



Stepped water terrace and public parklands forms a central focus for the surrounding community; the visual amenity of the wetland can be accessed by the local neighbourhood while residents utilise the lawn adjacent to the building.

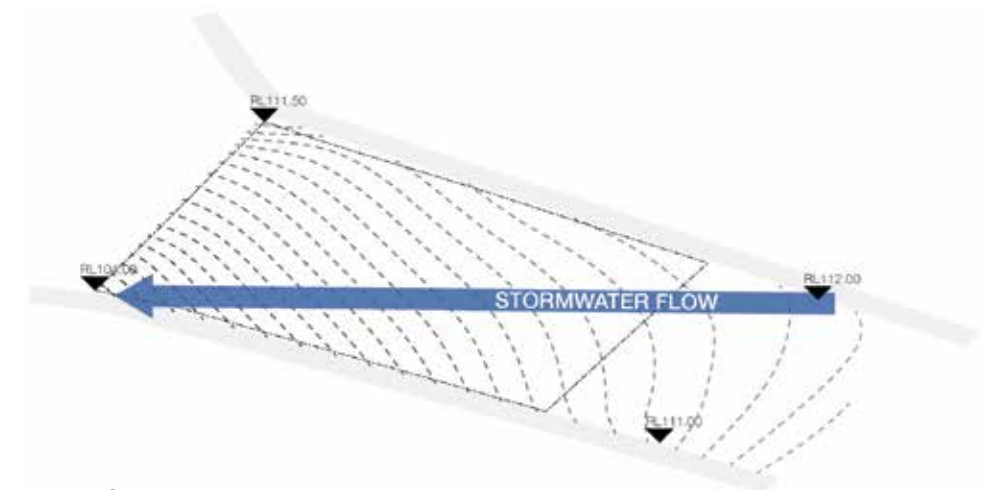
04 LANDSCAPE ELEMENTS

4.1 WATER SENSITIVE URBAN DESIGN [WSUD] OPPORTUNITIES

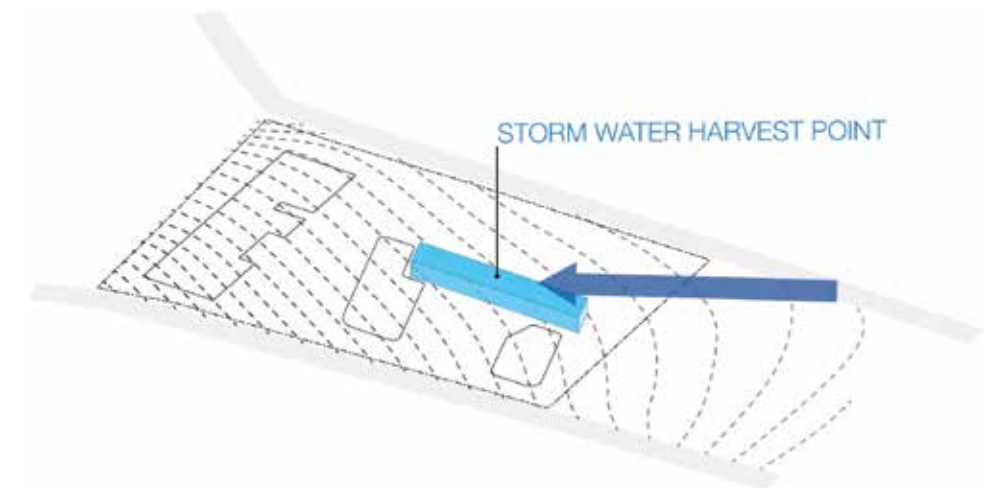
Water Sensitive Urban Design (WSUD) is an emerging concept for achieving the integration of land and water cycle management. WSUD provides more economical and environmentally-appropriate ways of managing water, wastewater, flood control and stormwater solutions in our cities.

WSUD planning and design involves:

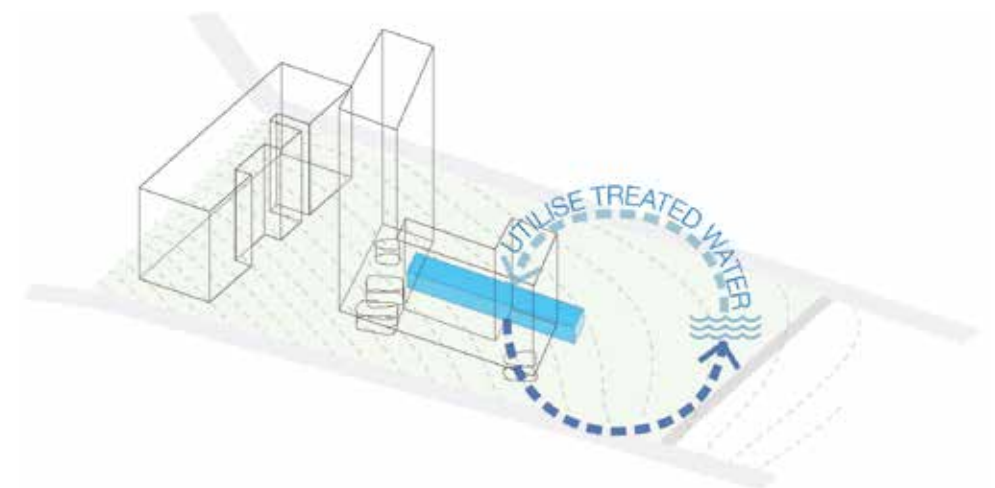
- Detention of stormwater to slow rapid conveyance and reduce flooding,
- Localised water harvesting for reuse, conserving potable water,
- Use of vegetation and constructed devices for water filtering purposes,
- Water-efficient landscape design,
- Conservation of water-related environmental, recreational and cultural assets,
- Restoration of the ecological, recreational and aesthetic values of urban streams and water bodies degraded by channelled drainage and flood mitigation systems,
- Reduction of transported pollutant loads from impervious urban surfaces such as roads and pavements to receiving waters, and
- Triple-bottom-line cost reduction in new, and maintenance of existing, infrastructure of resources such as rivers, estuaries, oceans and fisheries.



Current local drainage infrastructure is limited. There is an opportunity to utilise the existing topography to collect water for treatment before connecting it back to the local network.



The stormwater harvest point captures surface water from paved areas and overland flow paths, and cleans it on site. Rainwater tanks collect treated water for future reuse.



A wetland is located adjacent to the buildings as a passively-irrigated landscape area. The stored water can be used for visual amenity in the wetland, in informal water play areas and irrigation supply when required.

04 LANDSCAPE ELEMENTS - ECOLOGY

4.2 THE CUMBERLAND PLAIN

The site was formerly part of the Cumberland Plain bushland, which has remnants still found in parts of the LGA. This bushland has been extensively cleared since European settlement and a significant effort needs to be made to begin recovery and restoration of its ecology.

The landscape design proposes returning the site to its Cumberland Plains character and restoring its biodiversity. This strategy will provide more mature native trees in the local area while also creating an environment to embrace the buildings - the buildings will be accessed via boardwalks that float through this lush landscape.



04 LANDSCAPE ELEMENTS - ECOLOGY

4.3 PROPOSED PLANTING PLAN

Chapman Gardens will offer buildings floating through lush landscape.

	Spring	Summer	Autumn	Winter
Trees				
Angophora bakeri				
Angophora floribunda				
Bursaria spinosa				
Claoxylon australe				
Eucalyptus bosistoana				
Eucalyptus crebra				
Eucalyptus moluccana				
Eucalyptus tereticornis				
Shrubs				
Acacia parramattensis				
Arthropodium milleflorum				
Daviesia genistifolia				
Daviesia ulicifolia				
Dillwynia parvifolia				
Dodonaea viscosa				
Lissanthe strigosa				
Melaleuca thymifolia				
Pimelea spicata				
Grasses				
Aristida ramosa				
Aristida vagans				
Austrodanthonia tenuior				
Cymbopogon refractus				
Dichelachne micrantha				
Echinopogon caespitosus				
Entolasia marginata				
Microlaena stipoides				
Poa labillardieri				
Themeda triandra				

06 VISUALISATION



Passive recreational lawn space and circulation path

06 VISUALISATION



Through-site connection under building, providing permeable north-south connections.

06 VISUALISATION



Birds-eye view from Chapman Ave of Chapman Gardens

