

# CADDENS HILL STAGES 2, 3, 4

Landscape Masterplan Report

Prepared for  
Legacy Property

Project Reference: 2516063  
October 2016



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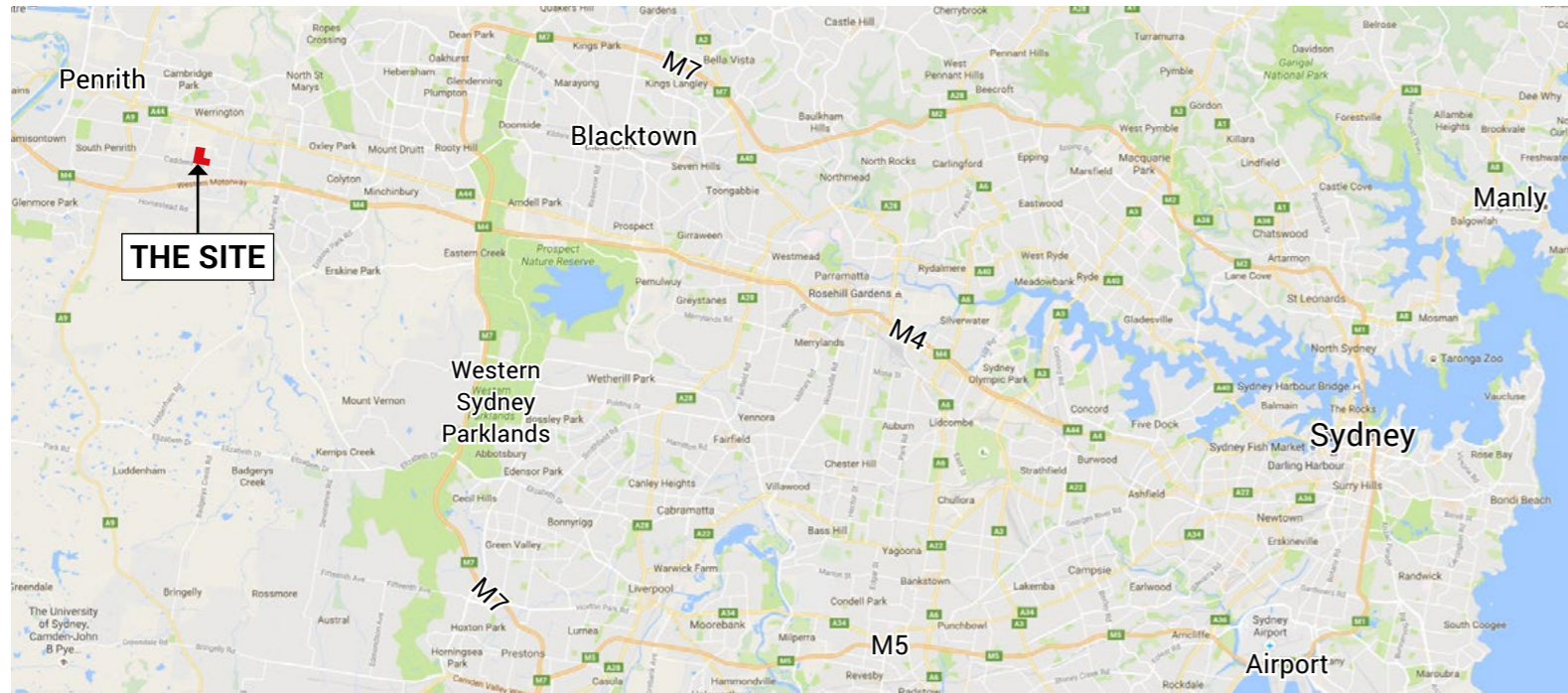
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# INTRODUCTION



GoogleMap Location of the Site, NSW

NOT TO SCALE NORTH



PLACE Design Group have been engaged by Legacy Property to provide landscape DA documentation for stages 2,3,4 of the Caddens Hill Development, in Caddens, Penrith, NSW. The scope of this document includes Basin A which will form part of the future sports precinct.

This document is intended to assist in defining the development and landscape character of Caddens Hill and to guide the future development of the site. It is intended that Caddens Hill will provide a quality sustainable development that recognizes and interprets the rural character, landscape features and undulating topography of the site. It will create special places centred on public amenity such as the Hill Top Park with elevated views across the development and district.

The landscape Design as set out in this DA Report is intended to:

- Ensure continuity of design not only from Stage 1 but also the adjacent UGNSW Caddens site
- Create a strong sense of arrival and identity for the site with a low key thematic entrance statement located close to the sports precinct at the junction of the existing Caddens Road and Cadda Ridge Drive
- Through carefully planted basins provide habitat for a range of native wildlife and meet sustainability and ecological benchmarks across the site
- Provide an exciting adventure play area that utilises the changes in level at the hill top park and complements the native revegetation to the east. Equipment could include swings, basket swings (all abilities) slides, climbing nets and rope systems.
- Ensure that views are maximised from key areas in the hill top park.
- Provide high quality, low maintenance public domain which affords the community with a high level of amenity and creates a strong sense of place for the development.
- Create attractive streetscapes which retain and enhance significant views and vistas, landmark elements and Landscape Features and;

View toward the Hill Top Park from the Basin 1 location



View from the east of Stage 4 in a southerly direction toward Caddens Road

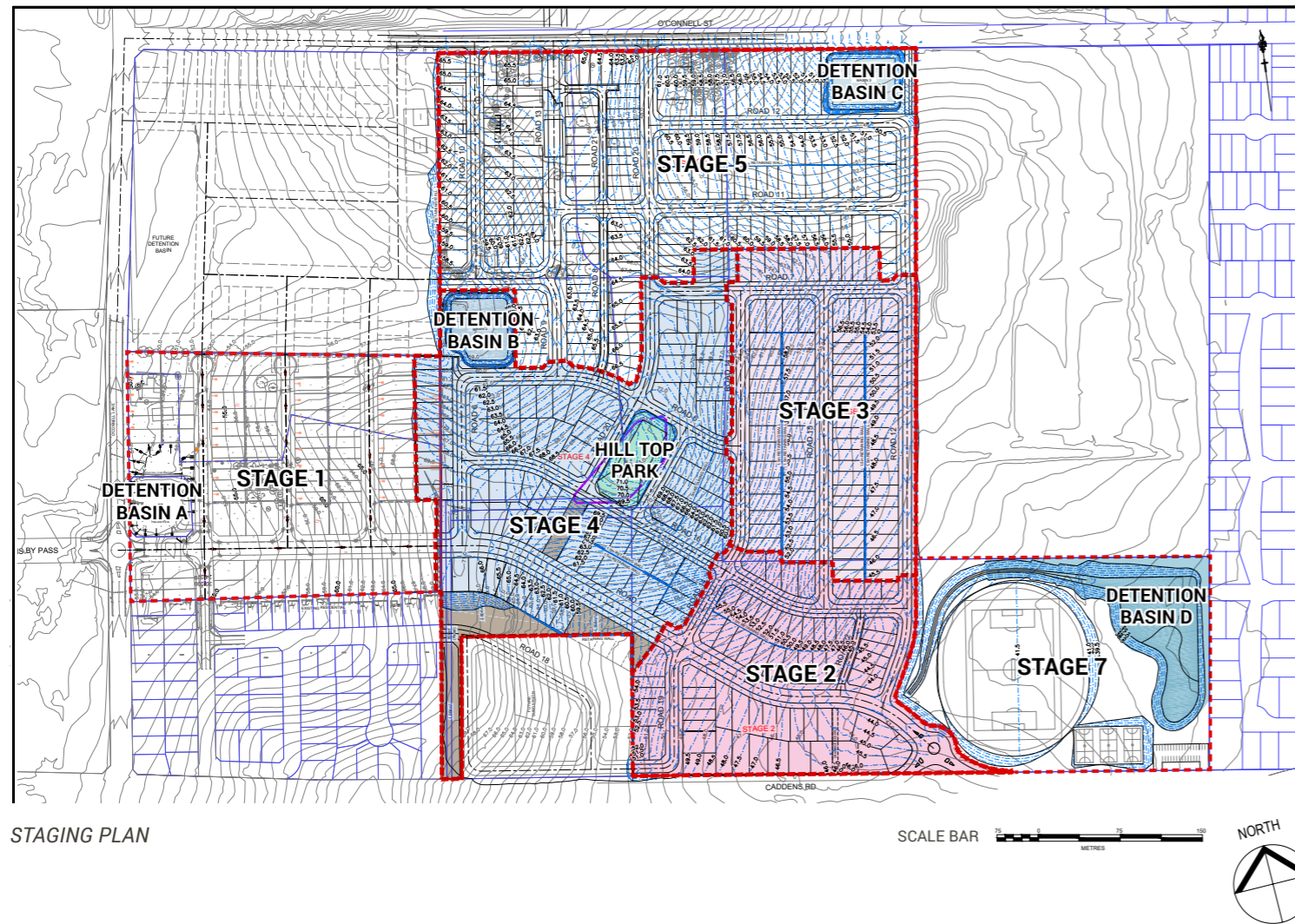


View of the elevated land at the location of the Hill Top Park



Images taken from GoogleMaps

# STAGING PLAN & DOCUMENT REFERENCES



STAGING PLAN

SCALE BAR 0 25 50 75 100 METERS



## Control Documents:

Background Information

- DCP - Penrith City Council. Items for the site include:

## Penrith DCP 2014 Volume 2 E1 Caddens

### 1.3 The Public Domain

#### 1.3.3 Pedestrian and Cycle Network

Figure E1.6 – Street Hierarchy

Figure E1.7a-j

Figure E1.8 – Pedestrian & Cycle Routes

1) Key pedestrian and cycleway routes are to be provided generally in accordance with Penrith Development Control Plan 2014 E1 Caddens E1 - 25 Figure E1.8.

2) The design of cycleways located within the road reserve is to be in accordance with Figure E1.7.

3) The minimum width of off-street shared cycle and pedestrian pathways is to be 2.5m (as shown in Figure E1.7g).

4) The minimum width of pedestrian footpaths is 1.5m.

5) All pedestrian and cycleway routes and facilities are to be consistent with the Planning Guidelines for Walking and Cycling (DOP & RTA 2004).

### 1.3.5 Open Space, Environmental Conservation and Landscape Network

Figure E1.10 – Open Space and Environmental Conservation Network

Figure E1.11 – Eastern Hilltop Park Concept

Figure E1.14 – Active open space concept

Figure E1.15 – Detention Basins Concept

7) The 0.35 hectare Eastern Hilltop Park located on the ridgeline to the east of the site is to present as natural woodland. It is to incorporate the following elements as illustrated in Figure E1.11:

- heritage interpretation of the ruins of the 19th century farmhouse and re-use of materials where appropriate;
- viewing platforms to other vantage points within Caddens and beyond;
- an informal kick about space on the flatter land;
- accessible paths where possible;
- seating areas and shade structures;
- canopy trees;
- existing trees, Cumberland Plain Woodland species as well as other endemic robust native plant species and where necessary saline-tolerant species; and
- low maintenance and robust finishes.

## Associated Consultant Documents:

Caddens Hill Project Stage 1 to 7 Soil Investigation by SESL (October 2016)

View of the existing low quality vegetation at the Hill Top Park Precinct

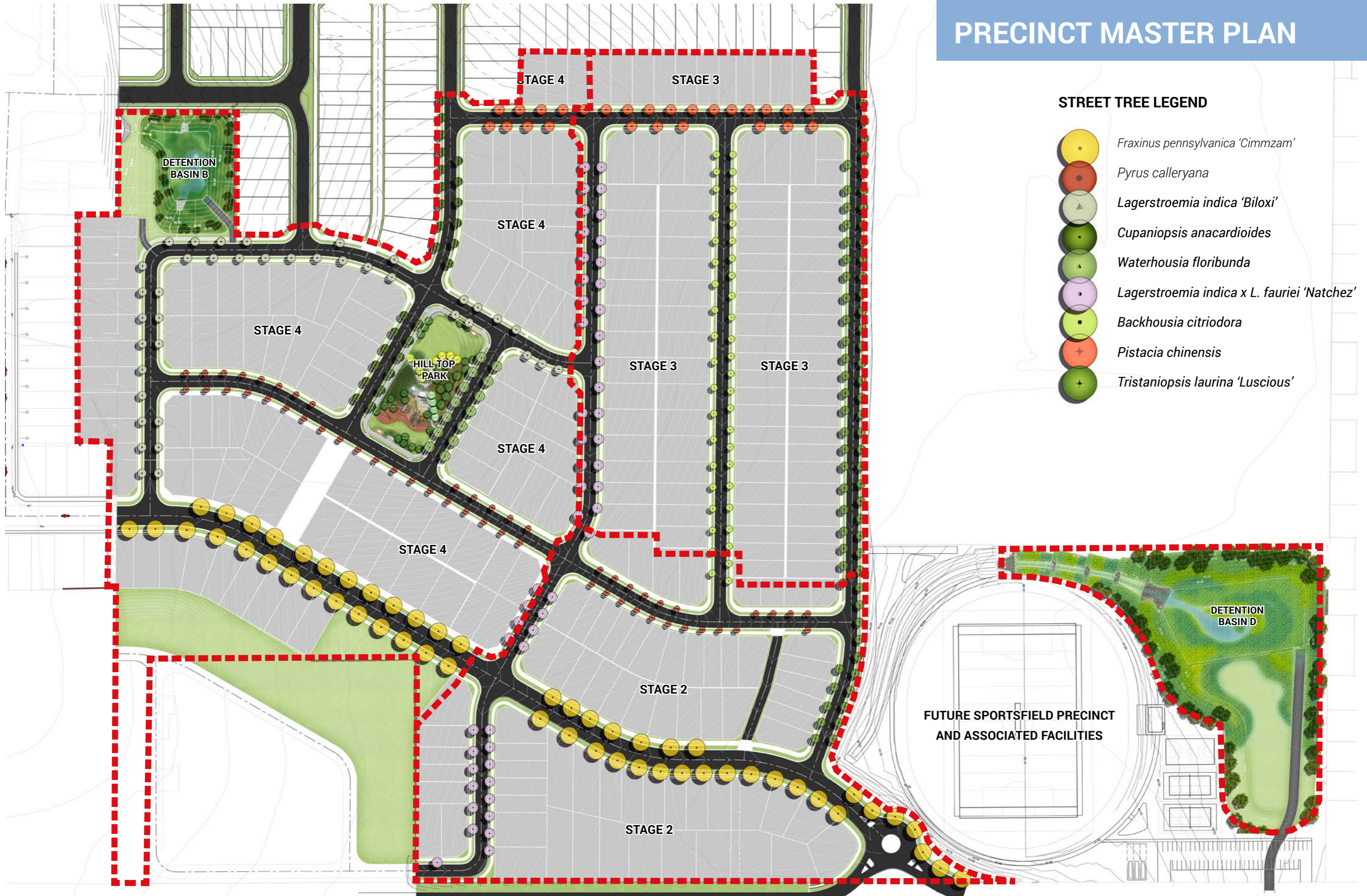


View of Stage 2 Residential Precinct (Toward the East)












Images taken from GoogleMaps

# PRECINCT MASTER PLAN



## STREET TREE LEGEND

-  *Fraxinus pennsylvanica* 'Cimmzam'
-  *Pyrus calleryana*
-  *Lagerstroemia indica* 'Biloxi'
-  *Cupaniopsis anacardioides*
-  *Waterhousia floribunda*
-  *Lagerstroemia indica* x *L. fauriei* 'Natchez'
-  *Backhousia citriodora*
-  *Pistacia chinensis*
-  *Tristanopsis laurina* 'Luscious'



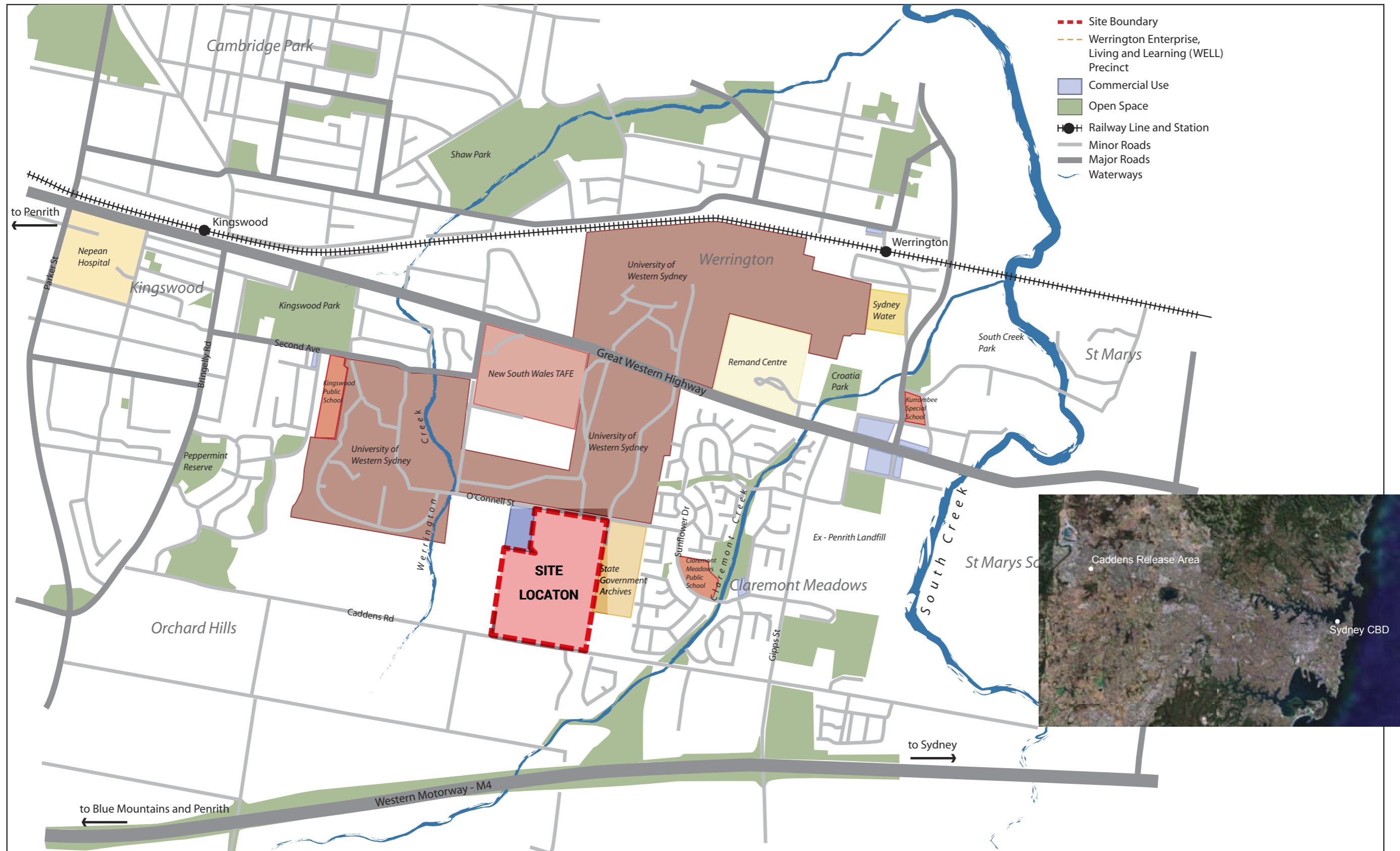
## DESIGN PRINCIPLES & OBJECTIVES FOR THE CADDENS HILL ESTATE

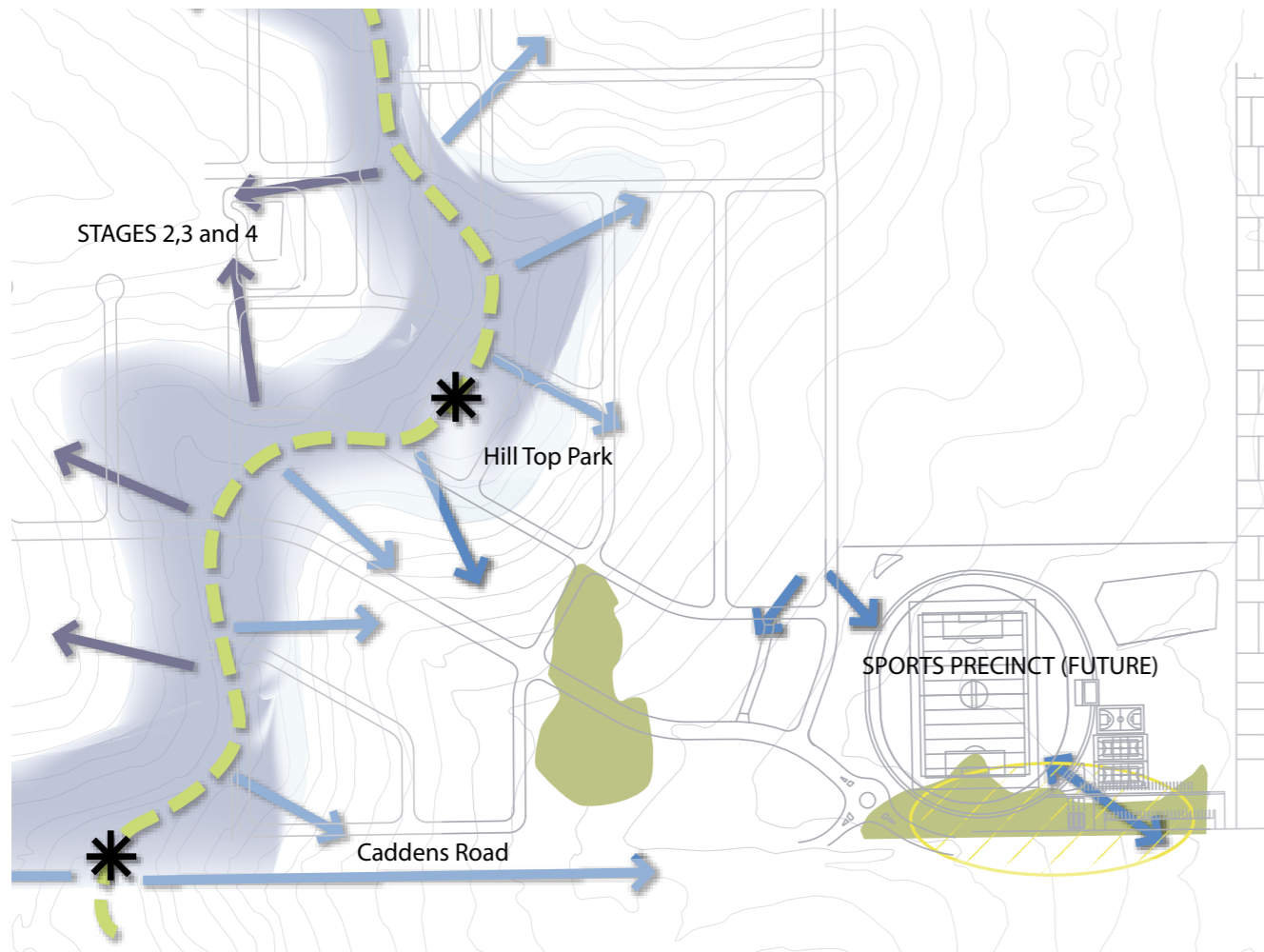
- To create a memorable and marketable overall landscape image for the Caddens Hill Development that contributes significantly to the proposed cultural identity of the overall development.
- To continue the principles set out in the WELL Precinct Control Documents and the Penrith City Council DCP
- Provide a legible project entrance statement at the junction of Caddens Road and Cadda Ridge Drive that incorporates project branding through signage and that relates to the Stage 1 Entry Design.
- Capitalise on the many views and vistas shaped by the existing topography to create a variety of spatial experiences that exploit view opportunities from and within the site. In particular the hill top park.
- Address site drainage and retention issues, and integrate water sensitive urban design principles where feasible. Will include suitable planting to detention basins
- Incorporate environmentally sustainable design principles.
- Incorporate Crime Prevention through Environmental Design principles.
- To balance quality landscaping with cost effective maintenance
- Consider Penrith City Council's objectives of quality, low maintenance and robustness for open space planting, furniture and finishes.
- To provide open space and play areas suitable for a range of users,
- Consider existing open space facilities throughout the Caddens Precinct and provide alternative play elements in the parks and open spaces
- To all extents possible ensure accessibility and mobility for all users within the development by adopting the appropriate Australian standards. It is noted that this may not be achievable or feasible at all times as a result of the existing topographical constraints.

The objective of our landscape design strategy for Caddens Hill Stages 2-4 is to achieve the above design principles in the following ways:

- The streetscapes are to enhance the idea of a combined 'natural' and appropriate urban landscape character and reinforce the road hierarchy, through their arrangement, size and species selection. The streets provide important green links and view corridors throughout the site, making connections between the basins, parks and sports precinct.
- Extend the planting strategy of Stage 1 of the development and continue the streetscape language from the UGNSW Caddens development adjacent.
- The streets will provide a circulation network that is safe, permeable and legible for pedestrians, cyclists and vehicles alike.
- A selection of high quality street furniture, hard and softscape finishes and planting which relate to the natural environment, low maintenance and robust have been proposed for the site.
- Integration of contemporary interpretive themes throughout the Hill Top Park will assist in providing a strong sense of character. This will include references to the house previously located on the hill top and Cumberland Plain revegetation.
- The active and passive components of the open spaces will provide a range of amenities and uses for the future community.
- To meet the needs of the project there will need to be an emphasis and focus on the development and realisation of a multifaceted pedestrian amenity.
- Be sensitive to the needs of pedestrians, cyclists, motorists and promote connections across the site where possible to the future sports precinct, neighbouring developments, and public transport facilities;
- Encourage a sustainable urban ecology by understanding landform, views, microclimates, spatial quality, built form and sun and shade patterns.

# PRECINCT WIDE CONTEXT





## LANDSCAPE ANALYSIS

- High Points
- Primary Views
- Secondary Views
- Ridge line
- Existing Site Attributes
- Areas with Expansive Panoramic Views  
- Optimise the unique existing views, from the local undulating landscape and rural character extending as far as the Blue Mountains.
- Existing Vegetation  
- These ecological communities have minimal intrinsic value.
- Contour Lines at 5m Intervals
- Indicative Development Layout

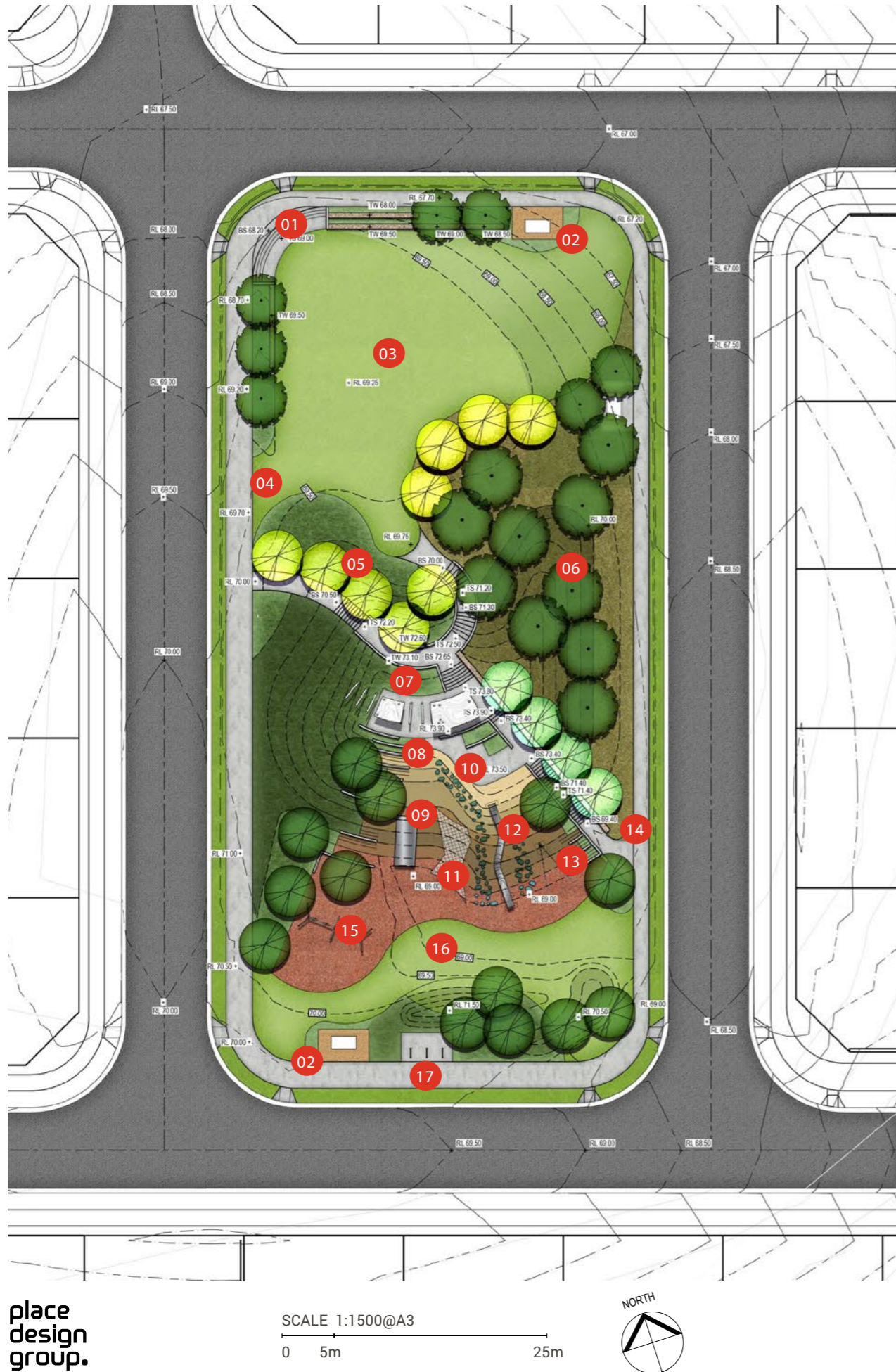


## LANDFORM ANALYSIS

- Greater than 9% Slope  
(PB 21st April 2006)
- 5 - 9% Slope  
(PB 21st April 2006)
- 0 - 5% Slope  
(PB 21st April 2006)
- High Points
- Main Ridge Lines
- Caddens Road
- Contour Lines at 5m Intervals
- Indicative Development Layout



# HILL TOP PARK LANDSCAPE PLAN



The Hill Top Park is located along the higher ridge line to the east of the Caddens Precinct and within Stage 4 of the Caddens Hill development. The park is intended to become a focus of the development and area for active play, adventure play, passive and active recreation. The park is located on an elevated position affording views to the blue mountains to the west and district views to the east and south. The grading to the perimeter of the park (road reserves) has ensured that there will likely be views over adjacent housing to the horizon beyond.

The proposed Hill Top Park design reflects and responds to the criteria outlined throughout the DCP where possible. The 'native woodland and potentially significant trees' identified in the DCP can not be retained due to the requirements of new road levels. In return an area of endemic native revegetation (6) has been identified aiming to create a new woodland. The commemoration of site specific heritage items, accessibility, seating, native plant species and a viewing platform have also been taken into consideration.

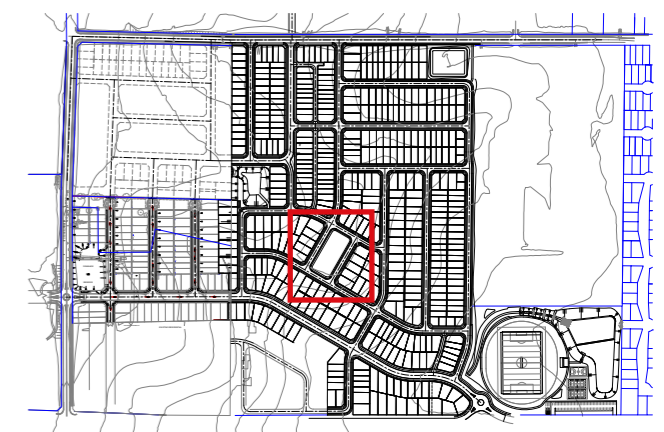
The park has been designed to include:

- Active Play Area making the most of the change in level (5m) which includes slides, swings mounded soft-fall (all abilities suitable) and rope climbing elements
- Mounded lawn areas with shade trees to the south
- Terraced walling / Timber sleeper steps at various angles to both sides of the soft-fall zone
- Step access to the hill top from the south east and access to the shelter via steps to the west of the park
- Hill Top Shelter and pergola structure with furniture
- Open active lawn area to the north
- Passive lawn to the south
- Revegetated area to the east of the park
- Step access to the active lawn in the north-west corner
- Distinctive Araucaria trees to the hill top
- Bicycle parking hoops to the south
- Remnant materials used in the design of the pavement where feasible
- An optional signage board with information on the historic house and past land usage in Caddens

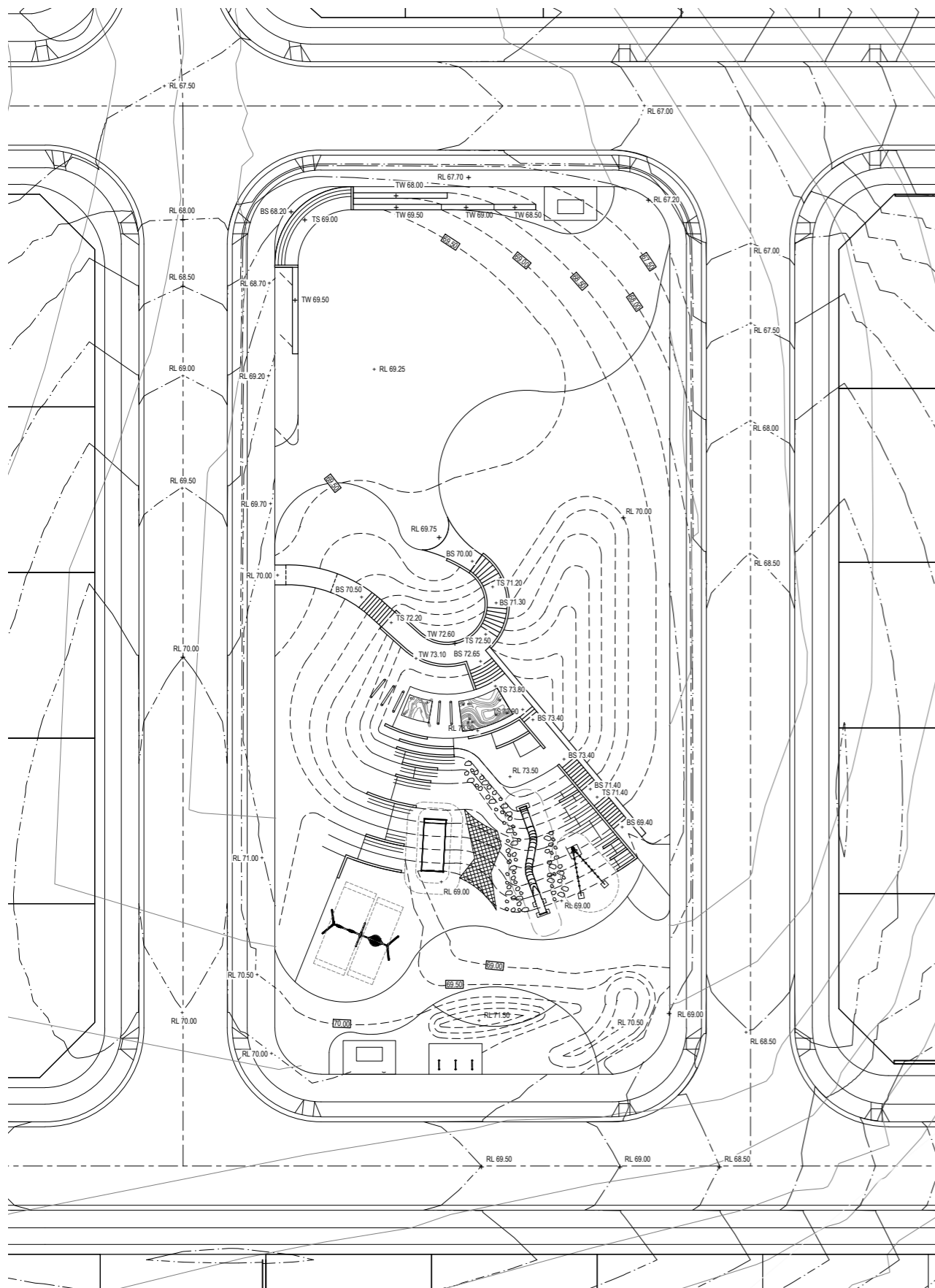
The park will contain low maintenance, robust planting and hardscape materials in accordance with Penrith City Council maintenance capabilities and guidelines.

## LEGEND

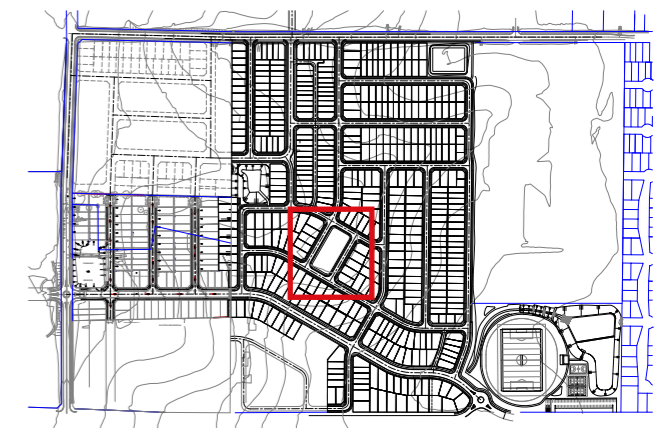
- 01 Proposed northern stair entrance to lawn area
- 02 Proposed substation locations with medium height shrubs to screen.
- 03 Proposed large open lawn area, sloping away at the north eastern corner towards the road.
- 04 Proposed at grade entry to lawn area allowing for disabled access.
- 05 Proposed line of feature trees - *Araucaria heterophylla* (Norfolk Island Pine)
- 06 Proposed area of native revegetation.
- 07 Proposed elevated lookout/ viewing area with pergola structure. Various elements, incorporated throughout this space will reflect the original homestead.
- 08 Proposed combination of terraced wall elements in the form of sandstone gabion rock walls and timber.
- 09 Proposed large stainless steel wide slide.
- 10 Proposed softfall climbing rocks traveling from the base of the mound to the top.
- 11 Proposed climbing net, suspended over the mound.
- 12 Proposed large stainless steel slide
- 13 Proposed rope climber.
- 14 Proposed park stair entry to lookout/ viewing area.
- 15 Proposed combination swing (1x basket swing and 2 x typical swings).
- 16 Proposed passive lawn area, with grass mounds
- 17 Proposed bicycle parking area.



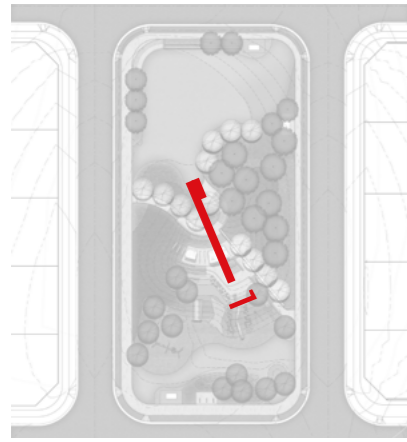
# HILL TOP PARK GRADING PLAN & PLANT SCHEDULE



SYM	Botanical Name	Common Name	Mature Height	Pot Size	Spacing /m2	QTY
<b>TREES TO HILL TOP PARK</b>						
AH	<i>Araucaria heterophylla</i>	Norfolk Island Pine	20m	200L	As Shown	0
CA	<i>Cupaniopsis anacardioides</i>	Tuckeroo	10m	100L	As Shown	0
LI	<i>Lagerstroemia indica</i>	Crepe Myrtle	10m	100L	As Shown	0
TL	<i>Tristaniopsis laurina</i> 'Luscious'	Watergum	8m	100L	As Shown	0
SA	<i>Syzygium australe</i>	Brush Cherry	8m	100L	As Shown	0
WF	<i>Waterhousia floribunda</i>	Weeping Lilly Pilly	10m	100L	As Shown	0
<b>SHRUBS TO HILL TOP PARK</b>						
ADD	<i>Anigozanthos</i> 'Dwarf Delight'	Dwarf Delight Kangaroo Paw	0.5	300mm	3	0
CS	<i>Callistemon</i> 'Slim'	Slim Bottlebrush	3m	200mm	1	0
MCT	<i>Melaleuca</i> 'Claret Tops'	Honey Myrtle	1m	200mm	3	0
WAB	<i>Westringia</i> 'Aussie Box'	Coastal Rosemary	0.9m	200mm	3	0
WM	<i>Westringia</i> 'Mundi'	Coastal Rosemary	0.5m	200mm	3	0
<b>GRASSES TO HILL TOP PARK</b>						
BFT	<i>Baloskion tetraphyllum</i> 'Feather Top'	Feather Rush	0.5m	75mm	4	0
LKB	<i>Lomandra</i> 'Katie Belles'	Lomandra Katie Belles	1.5m	75mm	3	0
LTB	<i>Lomandra</i> 'Tropic Belle'	Lomandra Tropic Belle	0.8m	75mm	2	0
PE	<i>Poa eskdale</i>	Poa	0.6m	75mm	5	0
JU	<i>Juncus usitatus</i>	Common Rush	0.9m	75mm	5	0
PN	<i>Pennisetum</i> 'Nafray'	Swamp Foxtail Grass	0.6m	75mm	3	0
TA	<i>Themeda australis</i>	Kangaroo Grass	0.5m	75mm	4	0
FN	<i>Ficinia nodosa</i>	Knobby Club Rush	0.8m	75mm	3	0
CA	<i>Carex appressa</i>	Sedge	1.3m	75mm	4	0
<b>TREES TO REVEGETATION AREA</b>						
AD	<i>Acacia decurrens</i>	Black Wattle	8m	100L	As Shown	0
EM	<i>Eucalyptus moluccana</i>	Grey Gum	20m	100L	As Shown	0
ET	<i>Eucalyptus tereticornis</i>	Forest Red Gum	20m	100L	As Shown	0
ER	<i>Eucalyptus sideroxylon</i> 'Rosea'	Pink Ironbark	20m	100L	As Shown	0
<b>SHRUBS / HERBS &amp; GRASSES TO REVEGETATION AREA</b>						
BS	<i>Bursaria spinosa</i>	Blackthorn	5m	140mm	0.5	0
DL	<i>Dianella longifolia</i> var. <i>longifolia</i>	Smooth Flax-lily	1m	140mm	3	0
DC	<i>Dodonaea viscosa</i> ssp. <i>cuneata</i>	Sticky Hop Bush	1.5m	140mm	1	0
ES	<i>Entolasia stricta</i>	Wiry Panic	1m	140mm	3	0
IC	<i>Imperata cylindrica</i>	Blady Grass	0.5m	140mm	6	0
IA	<i>Indigofera australis</i>	Native Indigo	1-2m	140mm	1	0
LL	<i>Lomandra longifolia</i>	Spiny-headed Matt Rush	0.8m	140mm	1	0
MS	<i>Microlaena stipoides</i>	Weeping Meadow Grass	0.2m	140mm	25	0
PL	<i>Poa labillardieri</i>	Tussock	0.8m	140mm	3	0
PP	<i>Pratia purpurascens</i>	White Root	0.1m	140mm	3	0
SG	<i>Stypandra glauca</i>	Nodding Blue Lilly	1m	140mm	3	0
TA	<i>Themeda australis</i>	Kangaroo Grass	1m	140mm	4	0
WC	<i>Wahlenbergia communis</i>	Tufted Bluebell	0.4m	140mm	11	0



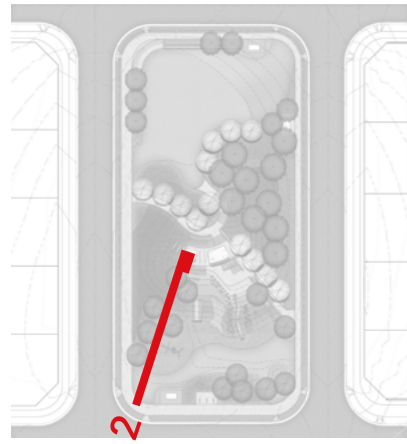
KEY PLAN



# HILL TOP PARK - SECTION 1



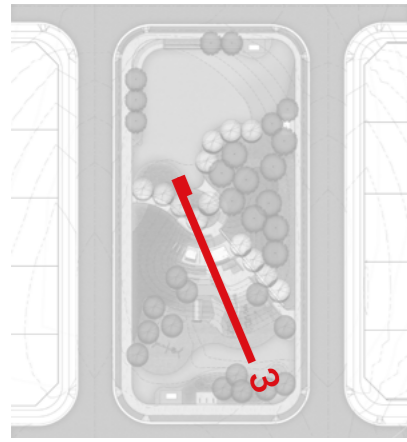
KEY PLAN



# HILL TOP PARK - SECTION 2

Upper Playground Area | Stainless Steel Slide and Terracing | Open Playground/ Run Around Area | Open Lawn Area | Footpath and Verge | Proposed New Road





# HILL TOP PARK - SECTION 3

Battered Garden Bed with Stairs to Lookout/ Viewing Area

Upper Walkway and Stairs to Lookout/ Viewing Area

Lookout/ Viewing Area

Upper Playground Area

Large Stainless Steel Slide

Lower Playground & Lawn Area



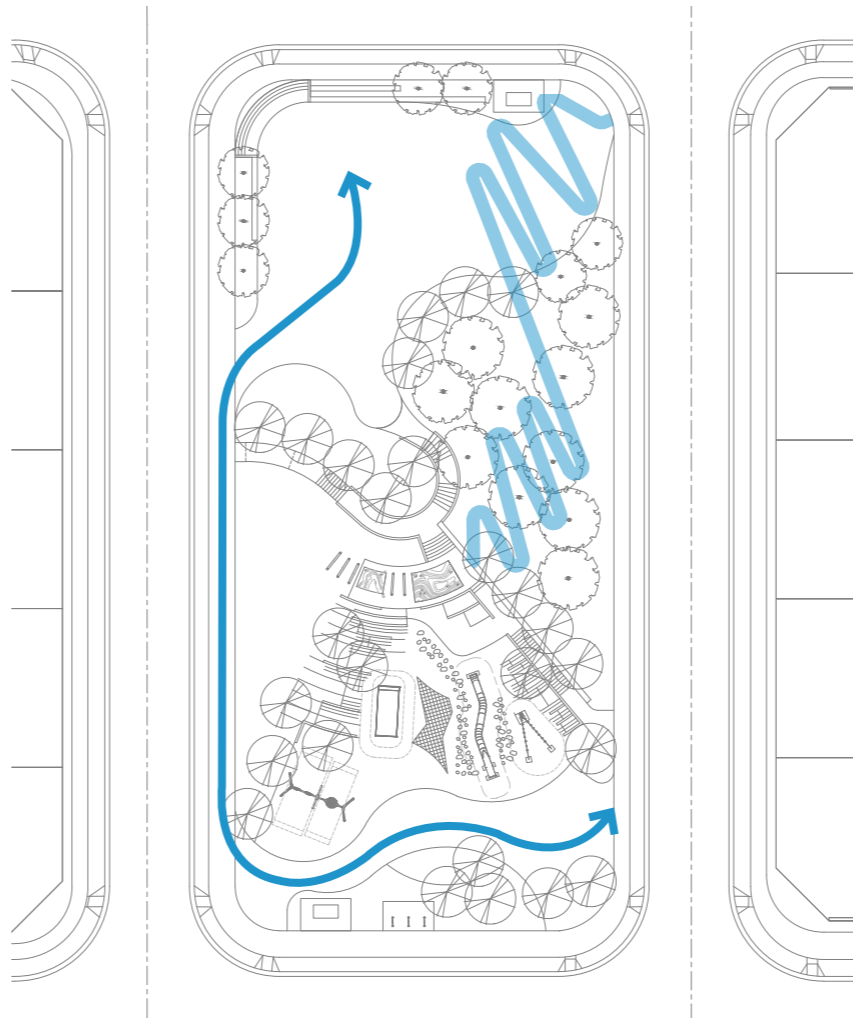
# HILL TOP PARK DIAGRAMS





## EXISTING LEP & DCP BOUNDARY

The detailed development of the residential subdivision to the periphery of the park has resulted in minor changes to the alignment of the park. The diagram shows the original alignment of the park boundary overlaid onto the final design for the park. Existing trees have also been shown.

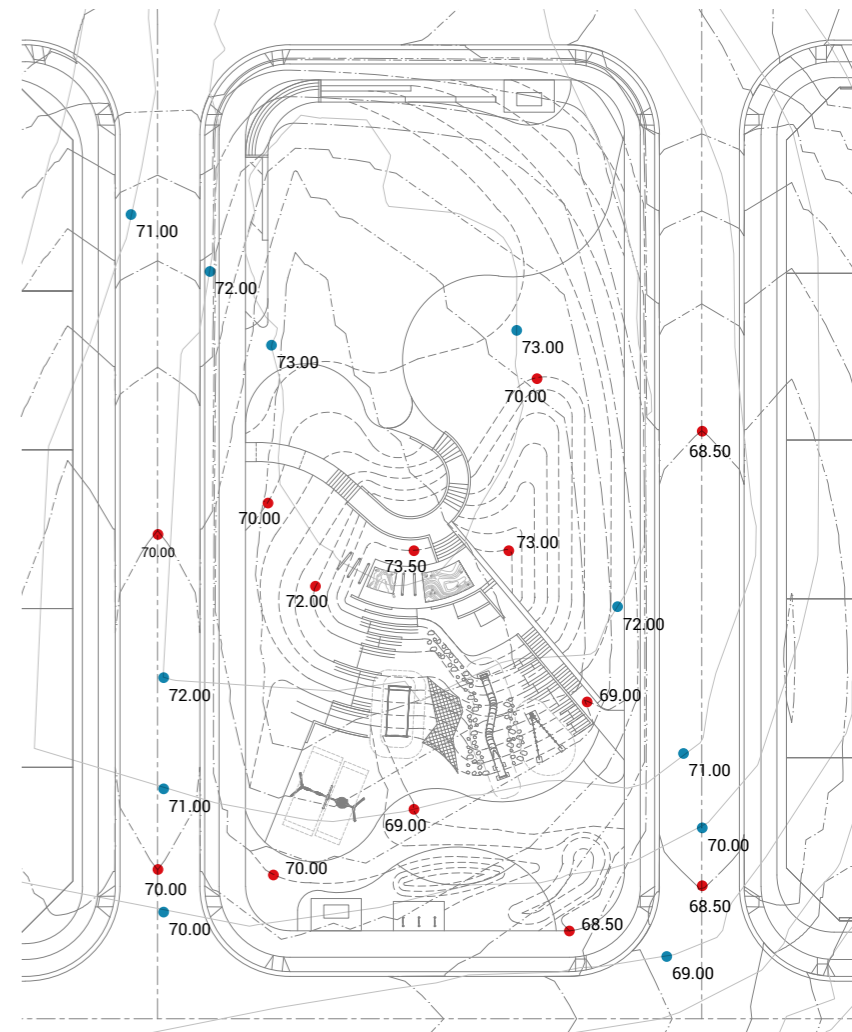
Recent survey information has uncovered that a large number of the existing trees on site are unable to be retained as part of either the original or proposed design. The proposed park design coupled with the removal of low quality existing vegetation ensures maximum usage of the park for residents and visitors. The regular shape of the park, to that outlined in the DCP will perform better in terms of accessibility points from all four corners and satisfying the CPTED principles as greater sightlines for visual surveillance will be possible.





-  Proposed Disabled Access
-  Disabled Access Ramp (not feasible)

## PROPOSED DISABLED ACCESS

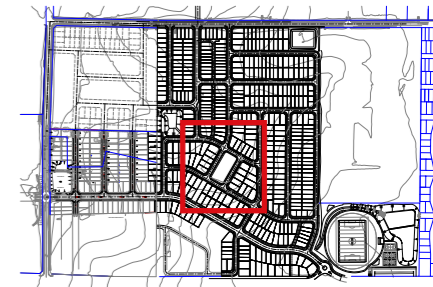
The Caddens site presents significant topography and requires a balance between working with existing levels and satisfying engineering standards for new roads. The grades have therefore determined that disabled access to the shelter is not possible, however as the diagram shows, we have provided access to equipment at the base of the slope and also the active recreation lawn to the north. The play area will include sensory based design to cater for mentally impaired children. The diagram also shows what would be required to provide disabled access to the upper level. The design would be severely compromised, cost prohibitive and we therefore do not deem this response to be acceptable.



-  70.00 Existing Site Levels
-  70.00 Proposed Site Levels

## EXISTING AND PROPOSED LEVELS

The digram shows the relationship between existing, proposed and engineering grading to the road carriageways. The park has been designed to minimise cut and fill whilst ensuring that the play area will function as intended and also tie in to proposed road levels. In order to provide a large flat area of lawn for active recreation (that is disabled accessible) the level of the park the to the north has been reduced. This has also reduced the amount of walling required to the periphery of the park which helps integrate the park into the fabric of the development and provides greater access to all areas.

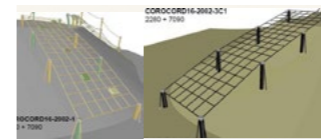


# HILL TOP PARK - PLAY DETAIL

The Park has been designed to maximise excitement, whilst remaining a true focal point of Caddens Hill. With the construction of more traditional play areas in surrounding suburbs, Legacy Property were keen to look at an alternative approach focussed on adventure / nature play and utilising the significant change in level. The equipment has been chosen to provide a variety of experiences for children and young adults of all levels, ages and abilities. The play space will include sloped and mounded softfall allowing for ease of access from the lower park to the shelter. Terraced walling and sleeper steps to the sides of the space provide informal play elements / alternative access to the upper slopes. There are a number of platforms and seat walls surrounding the space to provide surveillance and opportunities for parents to supervise small children.



01



COROCORD custom shape elevated climbing net (or equivalent)  
Provides informal access from the base of the slope northwards, encourages activation, fitness and balance

02



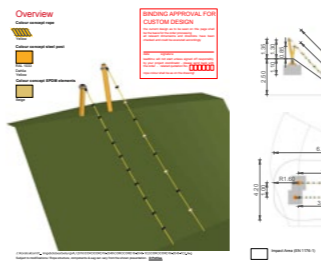
KOMPAN Two Bay Combi Swing, Pine (or equivalent)  
2.0/2.5m Height with posts made of impregnated pine or hardwood. It will include 2 standard swings and a bird nest swing.

03



COROCORD Hawker 2614 Open Curved Embankment Slide (or equivalent)  
Approximately 9.75m length aluminium open slide for use by all ages. Minimal maintenance and will appear integrated into the slope.

04



COROCORD Climbing Rope (or equivalent)  
Approximately 6.75m length Colour Concept Rope (colour to match site branding and coloured perspex screens. Combined Coloured steel and pine posts.

05



COROCORD HRB200s/300s Wide Slide (or equivalent)  
Provides an opportunity for multiple people to slide together including parents and adults. Low maintenance and robust.

06



Mounded Climbing Softfall  
A very versatile gentle climbing element for all ages, but in particular 1-3 yr old children. This element assists in separating the slide elements.

# HILL TOP PARK - HERITAGE & ART

## KEY THEMES

- HISTORIC HOUSE
- ORCHARDS AND WINE GROWING
- CUMBERLAND PLAIN WOODLAND
- SITE BRANDING COLOURS

### 01 SIGNAGE

Signage will play an important part in the appreciation and interpretation of previous land use on the Caddens Hill site, in addition to educating visitors and residents about the revegetation locally at the Hill Top Park. A Signage board will be designed to match the furniture palette and may contain details about previous land use, architecture, photographs and site map. This will include references to the historic house, aboriginal history across the site, farming and ecological history,



### 02 REFERENCES TO THE 'HISTORIC' HOUSE

We have highlighted opportunities for the interpretation of the historic house into the design of the park. There are a number of existing artefacts existing on site that extend to bricks, partially rendered walls and rusted steel sheeting. We intend to integrate the brick into concrete pavement as banding and step treads at various key points in the design.



Reuse site material  
Recycled brick, approx. 500 usable bricks

### 03 LANDMARK PLANTINGS

The design will reference landmark plantings that have likely occurred in the past and are associated with historic houses such as Eucalyptus trees, specimen Callistemon trees and Grevillea plantings. A grid of trees representing the heritage orchard planting will also be considered in the design



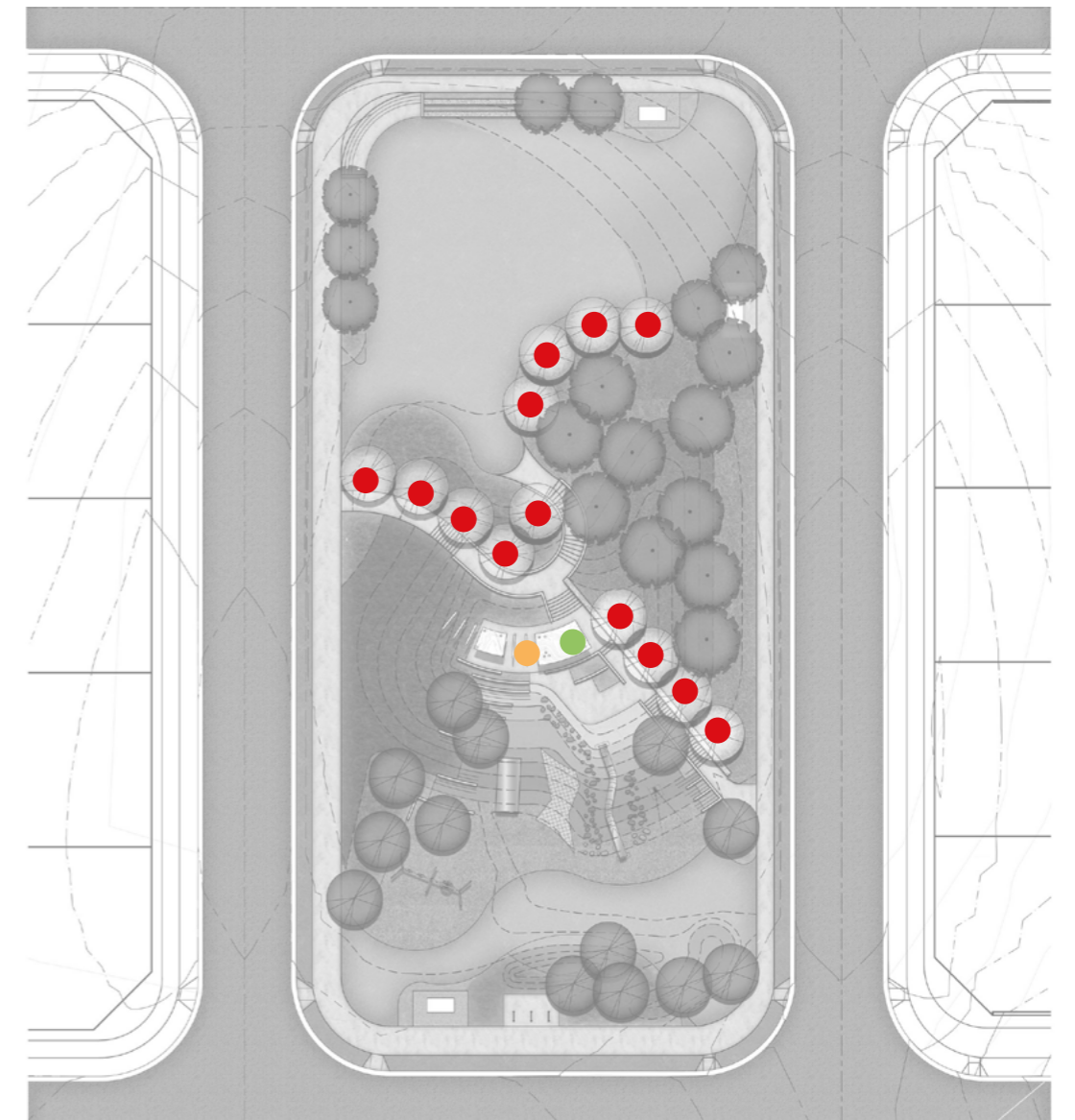
Callistemon sitrinus  
'White Anzac'



Callistemon viminalis  
'Little John'



Grevillea  
'Honey Gem'





## classic plaza bench

Sep 2014

CMP4

### General Description

Classic, contoured bench supported by strong marine-grade stainless steel frames.

### Dimensions (mm)

625W x 470H x 1750L

### Specifications

Tick one box per category to specify your project.

Seat Type:  
CMP4

Battens (mm):  
40W x 20D x 1750L  
 Eco-accredited Hardwood Oiled\*  
 Aluminium Anodised  
\*Street Furniture uses sustainably sourced timber from certified managed forests.

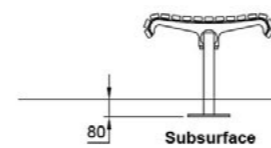
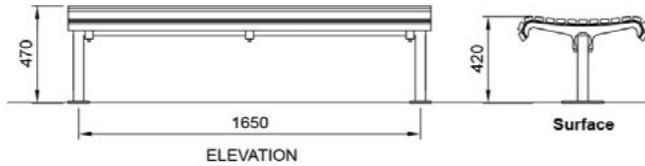
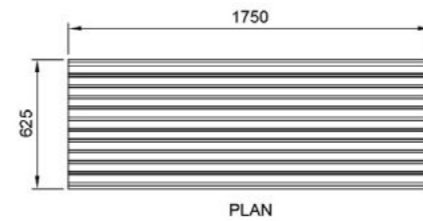
Mounting:  
 Surface  
 Subsurface

Powder Coat Finish:  
Please refer to Colour Chart

*Tailored options are available for all Street Furniture products. Additional fees and lead times may apply.*

### Related Products

Classic Plaza, Promenade and Galleria products



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**street furniture Australia**  
1800 027 799 streetfurniture.com

## classic plaza seat

Sep 2014

CMP1

### General Description

Classic, contoured seat supported by strong marine-grade stainless steel frames.

### Dimensions (mm)

705W x 800H x 1750L

### Specifications

Tick one box per category to specify your project.

Seat Type:  
CMP1

Battens (mm):  
40W x 20D x 1750L  
 Eco-accredited Hardwood Oiled\*  
 Aluminium Anodised  
\*Street Furniture uses sustainably sourced timber from certified managed forests.

Mounting:  
 Surface  
 Subsurface

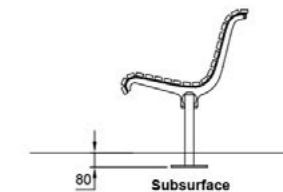
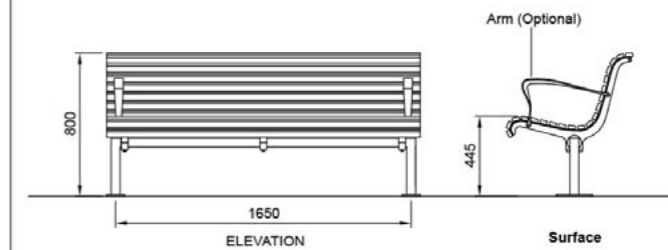
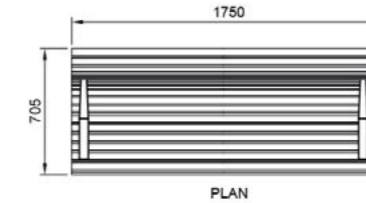
Arms:  
 None  
 Angle Powder Coated (Pair)

Powder Coat Finish:  
Please refer to Colour Chart

*Tailored options are available for all Street Furniture products. Additional fees and lead times may apply.*

### Related Products

Classic Plaza, Promenade and Galleria products



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## frame bin enclosure 140K

WBE-F140K

Aug 2013

### General Description

An attractive enclosure for the common 140K wide wheeled bin.

Frame bin enclosures are fabricated to order.

### Dimensions (mm)

Single 705W x 705D x 1190H  
Dual 1415W x 705D x 1190H  
Triple 2125W x 705D x 1190H

### Specifications

Tick one box per category to specify your product.

#### BIN ENCLOSURE TYPE:

- WBE-F140K Single
- WBE-F140K Dual
- WBE-F140K Triple

#### ROOF:

- Angle
- Curve

#### FRAME:

- Aluminium Powder Coated\*
- Stainless Steel 304 Linished
- Stainless Steel 316 Linished

#### PANELS:

- Aluminium Powder Coated\*
- Stainless Steel 304 Linished
- Stainless Steel 316 Linished
- Timber Vertical Battens\*\*
- Alum Woodgrain Vertical Battens\*

\*Please refer to Colour Chart.

\*\*Street Furniture uses sustainably sourced timber from certified managed forests.

#### PERFORATION TYPE:

- Not applicable to battens
- Solid
  - Holes
  - Slots

#### SIGNAGE:

- Garbage
- Recycle
- Paper
- Empties
- None

#### MOUNTING:

- Surface (Standard)
- Subsurface
- Freestanding

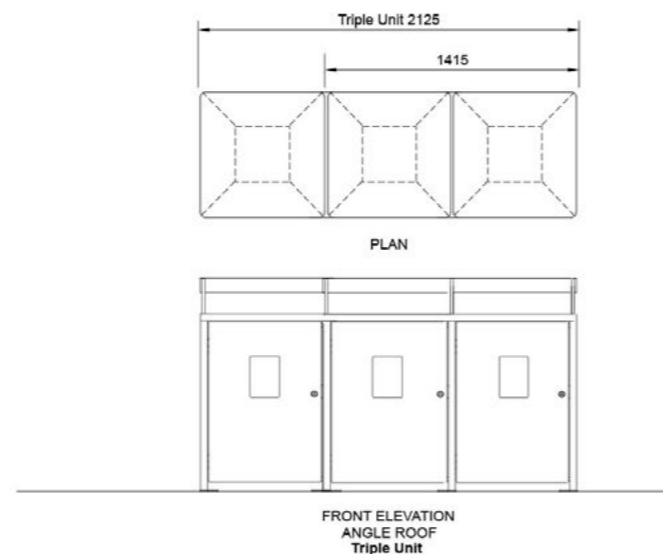
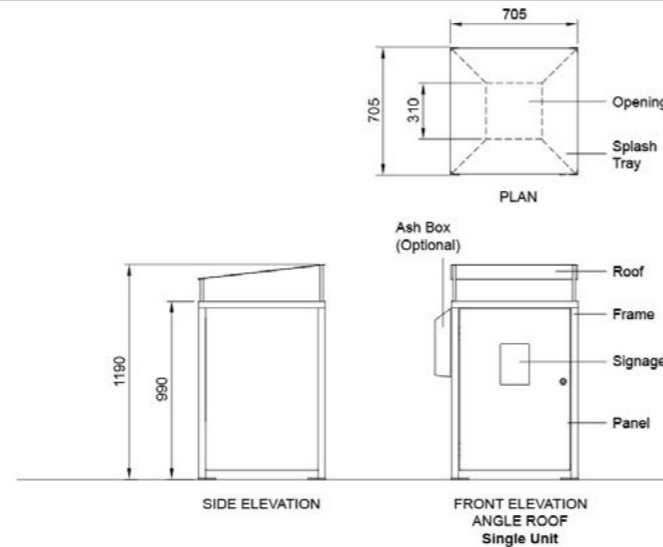
#### EXTRAS:

- Anti-graffiti coating
- Ash box
- Adjustable feet

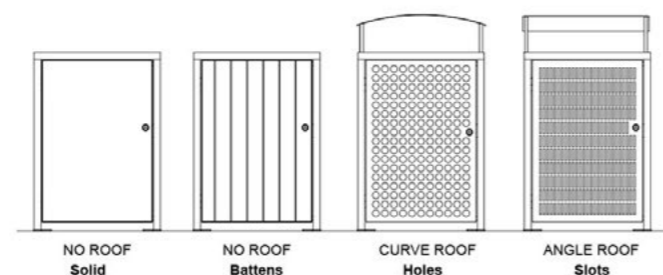
Please contact your sales representative for tailored options.  
Additional charges and lead times may apply.



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#### Roof and Body Options



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## blade bike stand

B12

July 2011

### General Description

A bicycle and bollard in one, this slim U-shaped pipe fits securely and stylishly in a cast aluminium base.

### Dimensions (mm)

38W x 875H

### Specifications

BIKE STAND TYPE:  
B12

#### ø42 PIPE:

- Galvanised Mild Steel
- Stainless Steel

#### BASE:

Cast Aluminium Powder Coated\*  
\*Refer to Colour Chart

#### MOUNTING:

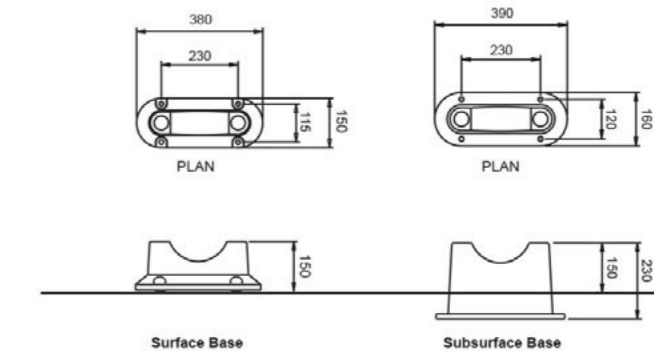
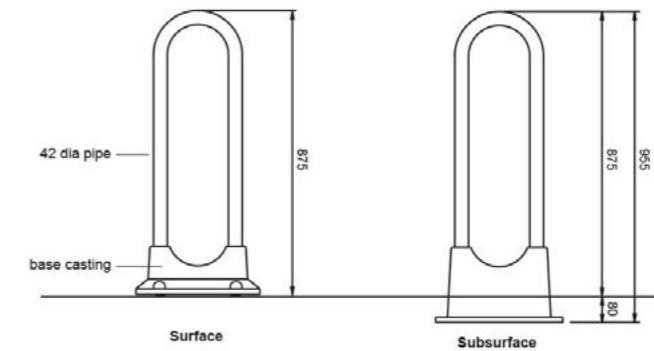
- Surface
- Subsurface

### Related Products

Blade Ash Receptacle, Blade Ash Bollard, Blade Bollard

The above specifications are for Street Furniture standard products. For customisation requirements, please contact a sales representative.

Some options incur a fee and longer lead time.



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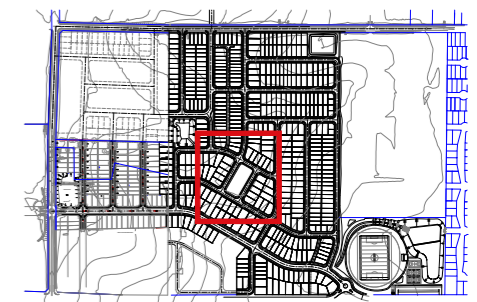
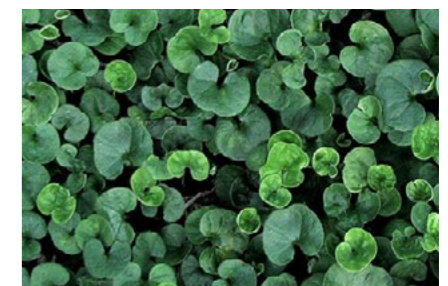
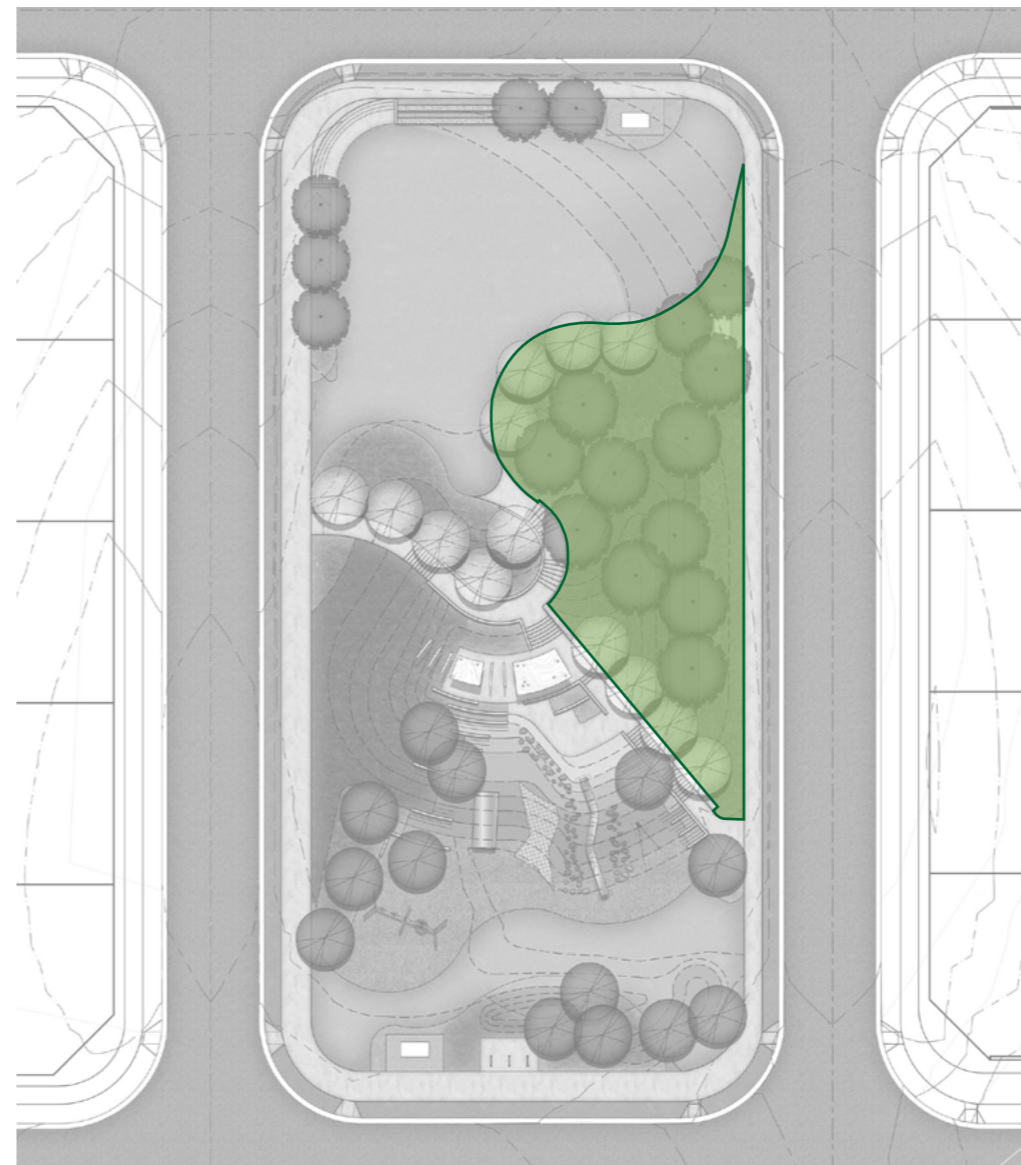
# HILL TOP PARK - REVEGETATION STRATEGY



The diagram shows the intended area of re-vegetation. In order to meet the requirements of the DCP the design incorporates an area of endemic native species, understory and canopy that includes provenance stock (subject to availability and construction timeframes) Planting will include *Eucalyptus Moluccana*, *Eucalyptus tereticornis*, *Eucalyptus crebra* and *maculata*. The understory will comprise *Acacia decurrens*, *falcata*, *parramattensis*, *bursaria spinosa*, *dianella longifolia*, *Commelina cyanea*, *Hardenbergia violacea* and *Themeda australis*.

There are a number of existing native and introduced species existing on site, but will be removed for reasons outlined in this report. The majority of planting will be native but a number of hybrid natives and introduced species will be introduced to provide additional colour and variety to the softscape palette. *Araucaria*'s will be introduced as a marker now common to the hill top parks in the area and continuing on from the UGNSW Caddens Site.

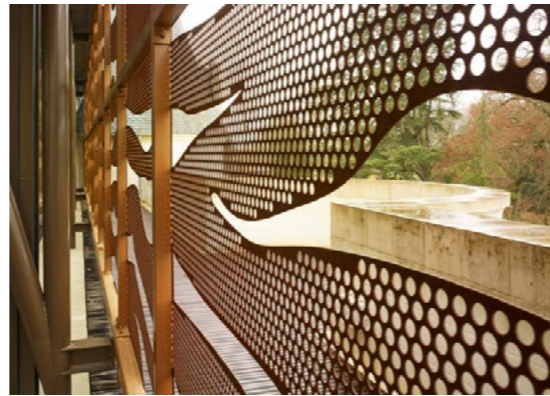
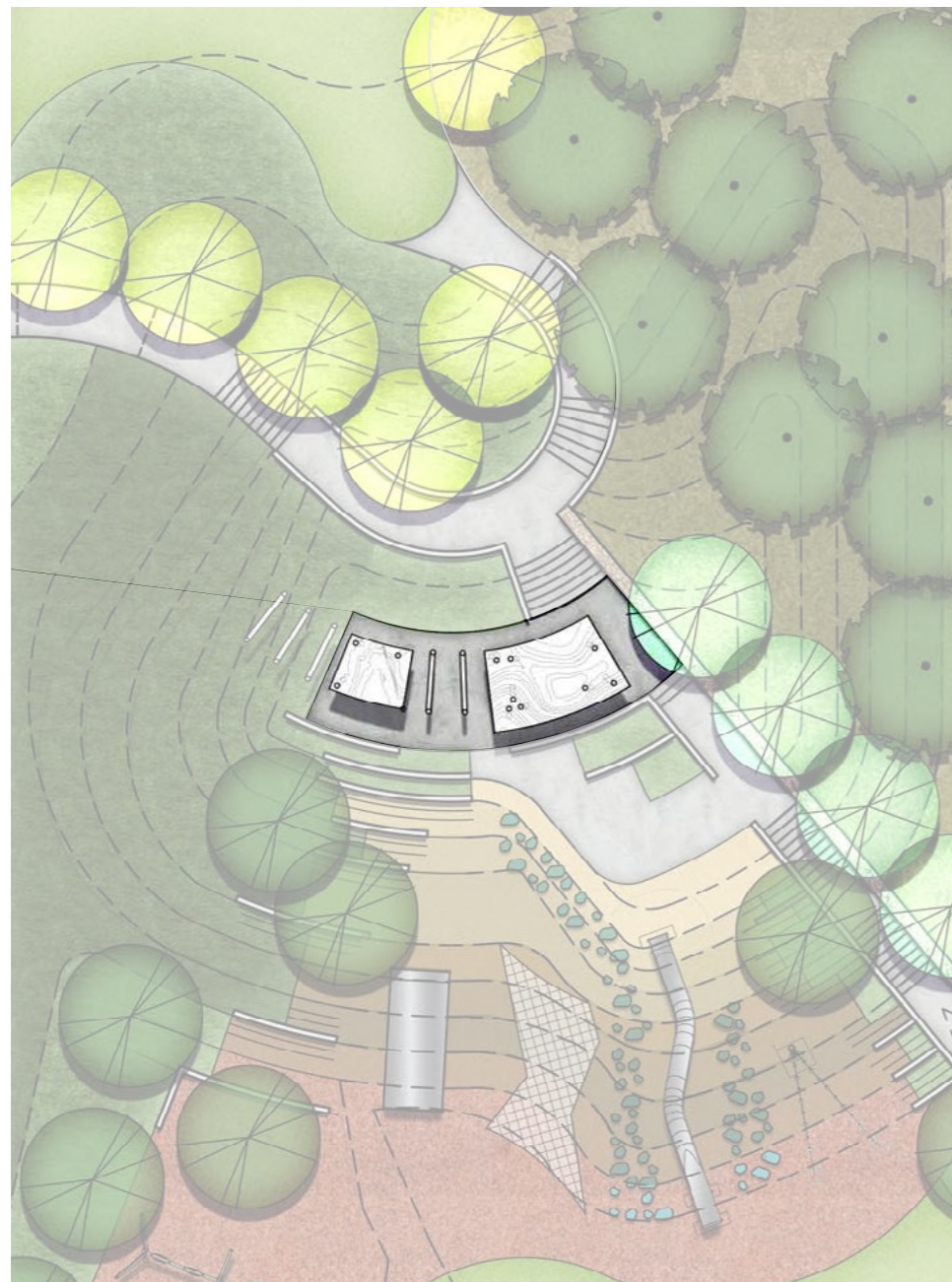
Site lines and views both into the park and to the district / mountains are extremely important and will be considered in the planting of any vegetation on site.



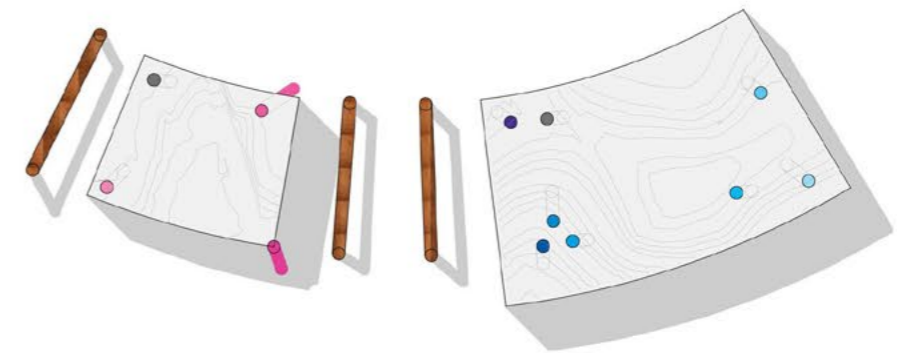
# HILL TOP PARK - PERGOLA STRUCTURE

The Hill Top Park Pergola Structure will emulate the colours of the Caddens Hill logo and natural environment via the combination of hardwood timber and steel support posts. The roof will be sheet steel perforated with contour lines obtained from the site and text referring to the original homestead that once stood in its place.

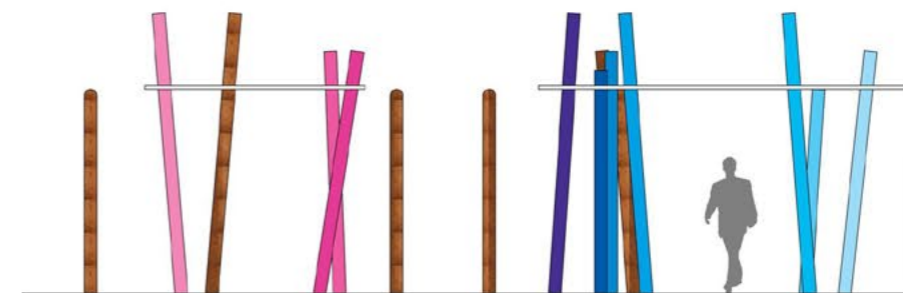
The structure will provide an element that aims to frame the district views of the Blue Mountains to the south. The fine lines and varying angles of the structure will create a sculptural/ interpretive feature at the top of the hill, helping to produce a point of interest or destination within the park.



- 01 Sheet steel roof with perforated contour pattern
- 02 Powdercoated coloured steel posts
- 03 Natural Australian Hardwood timber posts



Pergola Structure  
Plan View - 1:100 @ A3



Pergola Structure  
Elevation View - 1:100 @ A3

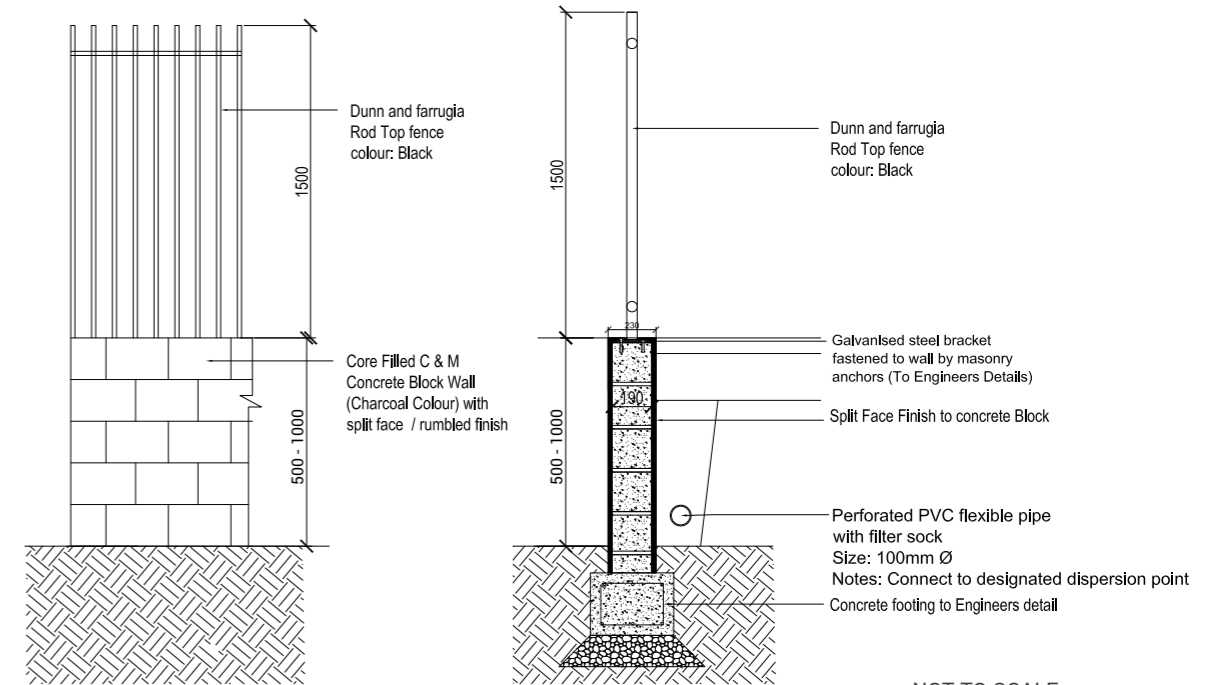


# DETENTION BASIN B



## LEGEND

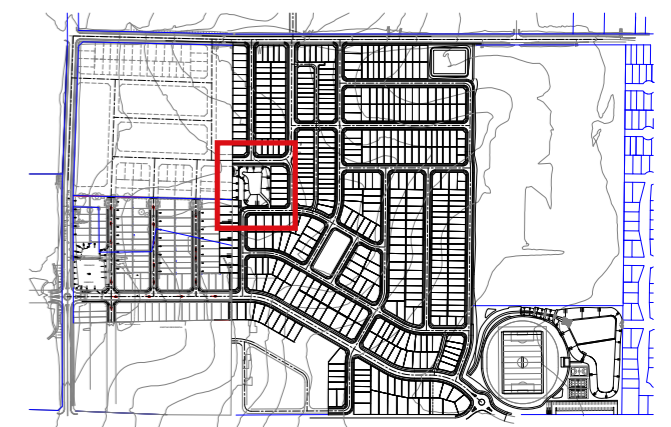
- 01 Rain Garden Bed
- 02 Basin Planting on Batter
- 03 Proposed Basin Inlets
- 04 Proposed Basin Outlets
- 05 Proposed Asphalt Maintenance Access
- 06 Proposed Access Road to Future Lots
- 07 Proposed Grass Spill Way
- 08 Concrete Blocked Retaining Wall & 1.5m High Open Railing Fence on Top
- 09 Grass Batter
- 10 Proposed substation location



NOT TO SCALE



08 Basin Fence Indicative Details & Image  
(Charcoal Concrete Block Retaining Wall & 1.5m High Open Railing Fence on Top)

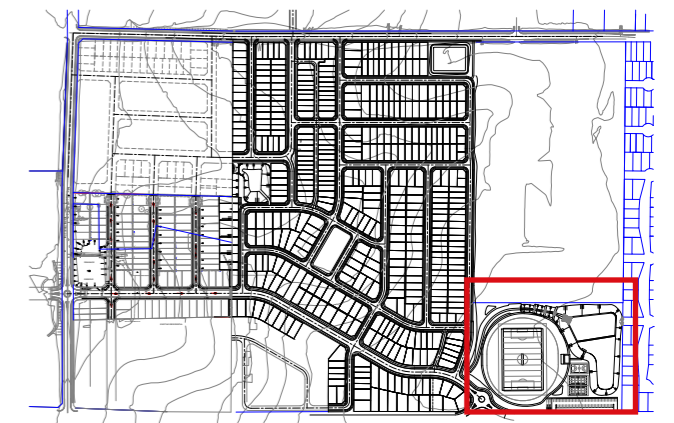


# DETENTION BASIN D

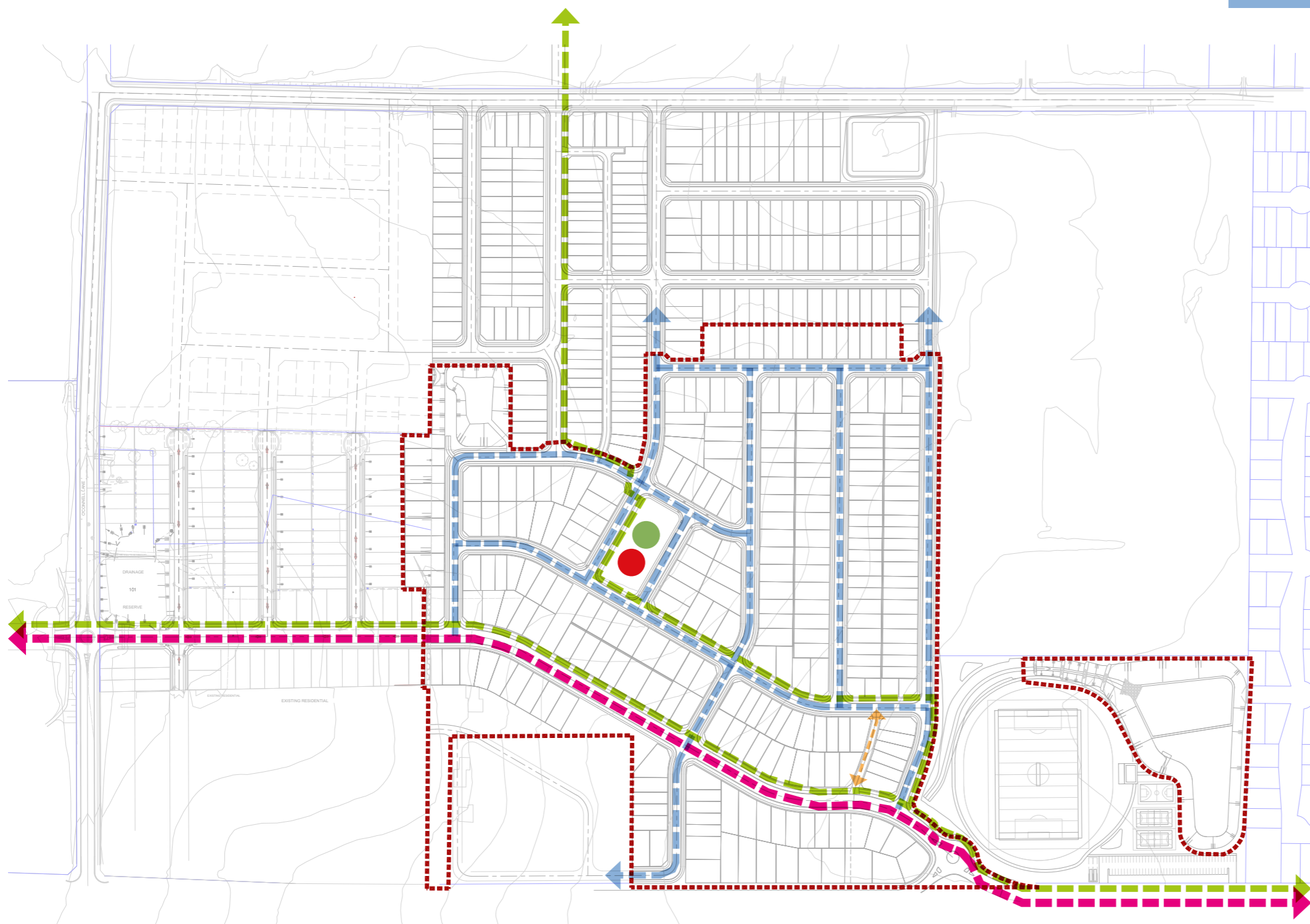


## LEGEND

- 01 Rain Garden Bed
- 02 Basin Planting on Batter
- 03 Proposed Basin Inlets
- 04 Proposed Basin Outlets
- 05 Proposed Asphalt Maintenance Access
- 06 Existing Concrete Edge Strip
- 07 Emergency Spillway
- 08 Grass Basin & Batters



# CIRCULATION DIAGRAM



## LEGEND

- Scope of Work
- 2.5m wide Shared Path (Cycleway / Pedestrian)
- Primary Vehicle Circulation
- Secondary Vehicle Circulation
- Laneway
- Playground
- Picnic / Recreation Areas

SCALE 1:2000@A3  
0 20m 100m



# PRECEDENT IMAGES

## FURNITURE & STRUCTURES



## PAVEMENT



## PARK PRECINCT



## BASIN PRECINCT

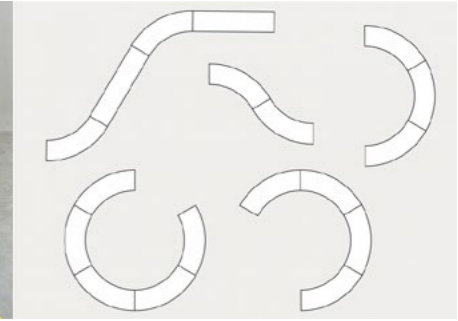
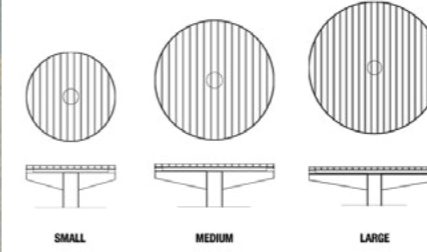




# FURNITURE & PLAY EQUIPMENT



SEATING



BICYCLE RACKS



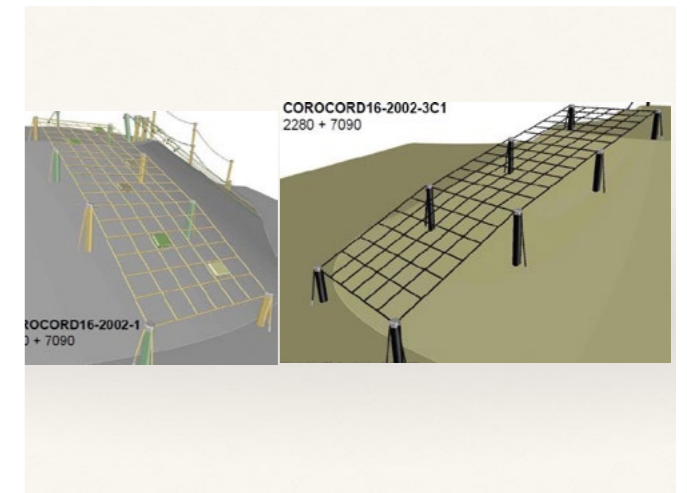
SLIDES



SWINGS



CLIMBING SOFTFALL



CLIMBING NET

# TYPICAL PLANT SCHEDULE & INDICATIVE IMAGES

CADDENS HILL PLANT SCHEDULE				
STAGE 2, 3 & 4				
Botanical Name	Common Name	Mature Height	Pot Size	Spacing /m2
<b>TREES TO STREETSAPES</b>				
<i>Backhousia citriodora</i>	Lemon Myrtle	8m	200L	As Shown
<i>Cupaniopsis anacardioides</i>	Tuckeroo	8m	200L	As Shown
<i>Fraxinus pennsylvanica 'Cimmzam'</i>	Ash	13m	400L	As Shown
<i>Lagerstroemia indica 'Biloxi'</i>	Crepe Mytle	7m	100L	As Shown
<i>Lagerstroemia indica x L. fauriei 'Natchez'</i>	Crepe Mytle	8m	100L	As Shown
<i>Pistacia chinensis</i>	Chinese Pistache	8m	100L	As Shown
<i>Pyrus calleryana</i>	Callery Pear	10m	100L	As Shown
<i>Tristaniopsis laurina 'Luscious'</i>	Watergum	8m	200L	As Shown
<i>Waterhousia floribunda</i>	Weeping Lilly Pilly	10m	200L	As Shown
<b>TREES TO BASIN AREA</b>				
<i>Acacia decurrens</i>	Black Wattle	8m	45L	As Shown
<i>Callistemon 'Kings Park Special'</i>	Bottlebrush	5m	45L	As Shown
<i>Casuarina glauca</i>	Swamp Oak	10m	45L	As Shown
<i>Elaeocarpus grandis</i>	Blue Quandong	10m	45L	As Shown
<i>Eucalyptus moluccana</i>	Grey Gum	20m	45L	As Shown
<i>Eucalyptus tereticornis</i>	Forest Red Gum	20m	45L	As Shown
<i>Eucalyptus sideroxylon 'Rosea'</i>	Pink Ironbark	20m	45L	As Shown
<i>Ficus hillii</i>	Fig	25m	100L	As Shown
<i>Melaleuca styphelioides</i>	Prickly Leafed Paperbark	8m	45L	As Shown
<i>Tristaniopsis laurina 'Luscious'</i>	Watergum	8m	45L	As Shown
<i>Syzygium australe</i>	Brush Cherry	8m	45L	As Shown
<i>Waterhousia floribunda</i>	Weeping Lilly Pilly	10m	45L	As Shown
<b>SHRUBS</b>				
<i>Callistemon 'Captain Cook'</i>	Captain Cook Bottlebrush	1.5m	200mm	1
<i>Callistemon 'Slim'</i>	Slim Bottlebrush	3m	200mm	1
<i>Grevillea 'Honey Gem'</i>	Grevillea Honey Gem	5m	200mm	1
<i>Leptospermum scoparium</i>	New Zealand Teatree	2m	200mm	1
<i>Melaleuca 'Claret Tops'</i>	Honey Myrtle	1m	200mm	3
<i>Nandina 'Obsession'</i>	Sacred Bamboo	0.6m	200mm	3
<i>Westringia 'Aussie Box'</i>	Coastal Rosemary	0.9m	200mm	3
<i>Westringia 'Mundi'</i>	Coastal Rosemary	0.5m	200mm	3
<b>GRASSES TO BASIN / RAIN GARDEN PRECINCT</b>				
<b>BANKS</b>				
<i>Baloskion tetraphyllum 'Feather Top'</i>	Feather Rush	0.5m	75mm	4
<i>Lomandra 'Katie Belles'</i>	Lomandra Katie Belles	1.5m	75mm	3
<i>Lomandra 'Tropic Belle'</i>	Lomandra Tropic Belle	0.8m	75mm	2
<i>Poa eskdale</i>	Poa	0.6m	75mm	5
<i>Juncus usitatus</i>	Common Rush	0.9m	75mm	5
<i>Pennisetum 'Nafray'</i>	Swamp Foxtail Grass	0.6m	75mm	3
<i>Themeda australis</i>	Kangaroo Grass	0.5m	75mm	4
<b>GROWING MEDIUM</b>				
<i>Ficinia nodosa</i>	Knobby Club Rush	0.8m	75mm	3
<i>Juncus flavidus</i>	Mat Rush	1.0m	75mm	6
<i>Juncus usitatus</i>	Mat Rush	1.0m	75mm	6
<i>Carex appressa</i>	Sedge	1.3m	75mm	4
<i>Lepironia articulata</i>	Grey rush	0.9m	75mm	5
<i>Lomandra 'Shara'</i>	Lomandra Shara	0.5m	75mm	4
<i>Lomandra 'Katie Belles'</i>	Lomandra Katie Belles	1.5m	75mm	3
<b>Turf</b>				
<i>Kikuyu Grass</i>	<i>Pennisetum clandestinum</i>			



*Cupaniopsis anacardioides*



*Fraxinus 'Cimmzam'*



*Lagerstroemia 'Natchez'*



*Backhousia citriodora*



*Waterhousia floribunda*



*Pistacia chinensis*



*Pyrus calleryana*



*Tristaniopsis laurina 'Luscious'*



*Eucalyptus tereticornis*



*Melaleuca styphelioides*



*Callistemon 'Slim'*



*Imperata cylindrica*



*Poa labillardieri*



*Stypantra glauca*



*Wahlenbergia communis*

# MAINTENANCE PROGRAM

## Caddens Hill DEVELOPER MAINTENANCE PROGRAM - HARDSCAPE

**Client:** Legacy Property  
**Project Name:** Caddens Hill  
**Precinct Name:** STAGE 2,3,4 and Basin  
**Works Description:** Maintenance of hard landscape areas  
**Maintenance Period:** 12 months

TASK DESCRIPTION:	0-9 MONTHS FREQUENCY	9-12 MONTHS FREQUENCY
<b>Concrete pavements to Park and Streetscapes</b>		
Visual inspection of all pavements for damage and cracks	Fortnightly	Monthly
Visual inspection of all pavements for efflorescence (salt deposits)	Fortnightly	Monthly
Visual inspection of all pavements for colour consistency and stains	Fortnightly	Monthly
Clean in accordance with manufacturers recommendations	As required	As required
Leaf and debris clearance with blower	Monthly	2 Months
<b>Concrete steps to Hill Top Park</b>		
Visual inspection of step treads and risers for damage, chips and cracks	Fortnightly	Monthly
Visual inspection of all landings, treads and risers for efflorescence (salt deposits)	Fortnightly	Monthly
Visual inspection of all pavement surfaces for colour consistency and stains	Fortnightly	Monthly
Check all joints and fixing on steel handrail and clean surfaces as required	Fortnightly	Monthly
Check all tactile pavers are secure and replace if required	Fortnightly	Monthly
Clean all surfaces as required	As required	As required
Leaf and debris clearance with blower	Monthly	2 Months
<b>Shelter Structure to Hill Top Park</b>		
Visual inspection of all posts, perforated sheet roofing and blades	Fortnightly	Monthly
Check all fixtures, screws and bolts and replace as required	Fortnightly	Monthly
Visual inspection of all surfaces for colour consistency and stains	Fortnightly	Monthly
Clean roof sheeting and posts as required	Fortnightly	Monthly
Visual inspection for graffiti and removal if required	As required	As required
<b>Walls to Hill Top Park</b>		
Visual inspection of all gabion, sandstone log / concrete walls for damage and cracks	Fortnightly	Monthly
Check / Repair all mortar joints as required if failure / damage has occurred	Fortnightly	Monthly
Remove any weed growth in between sandstone logs	Fortnightly	Monthly
Visual inspection for staining and removal of all stains	As required	As required
Visual inspection for graffiti and removal if required	As required	As required
Visual Inspection of all anti skate studs and replace as required	As required	As required
<b>Adventure Play Area to Hill Top Park</b>		
Visual inspection of all slides, swings and ropes - To manufacturers instructions	Fortnightly	Monthly
Visual inspection of all softfall and mounded softfall - To manufacturers instructions	Fortnightly	Monthly
Visual inspection of all timber step walling and terraced stone walling to periphery	Fortnightly	Monthly
Cleaning of all play equipment as required	As required	As required
Visual inspection for graffiti and removal if required	As required	As required
Visual Inspection of all anti skate studs and replace as required	As required	As required
<b>Mulch to all Garden Bed Areas to Hill Top Park</b>		
Remove litter & debris from mulch areas	Fortnightly	Monthly
Remove weed growth in mulch areas	Fortnightly	Monthly
Rake over surface to re-level	3 Months	6 Months
Top up mulch levels	Annually	Annually
<b>Urgent works</b>		
Report any theft damage or vandalism	Weekly	Fortnightly

ADDITIONAL WORKS / COMMENTS:

## Caddens Hill DEVELOPER MAINTENANCE PROGRAM - SOFTSCAPE

**Client:** Legacy Property  
**Project Name:** Caddens Hill  
**Precinct Name:** STAGE 2,3,4 and Basin  
**Works Description:** Maintenance of soft landscape areas  
**Maintenance Period:** 12 months

SOFTSCAPE AREAS:

TASK DESCRIPTION:	0-9 MONTHS FREQUENCY:	9-12 MONTHS FREQUENCY:
<b>Trees to Hill Top Park and Streetscapes</b>		
Visual inspection of all street, park and basin trees	Fortnightly in summer/Monthly in Winter	Monthly in summer/Once in Winter
Manually inspect water levels to trees	Fortnightly in summer/Monthly in Winter	Monthly in summer/Once in Winter
Inspect damage to trees	Fortnightly in summer/Monthly in Winter	Monthly in summer/Once in Winter
Replace any taping to trees	Fortnightly in summer/Monthly in Winter	Monthly in summer/Once in Winter
Prune dead or damaged branches	Fortnightly in summer/Monthly in Winter	Monthly in summer/Once in Winter
Check for and report pests & diseases	Fortnightly	Monthly
Replace failed or damaged trees	Fortnightly/As required	Monthly/As required
Spray in accordance with manufacturers recommendations	As required	As required
Adjust &/or replace stakes & ties where necessary	As required	As required
Monitor and apply fertiliser to turf areas	6 month intervals - Autumn/Spring	Yearly
<b>Turf to Verges and the Hill Top Park</b>		
Mow all turf areas to maintain height between 30-40mm	Weekly in Summer/Monthly in Winter	Fortnightly in Summer/2 months in Winter
Trim edges of all turf areas	Weekly in Summer/Monthly in Winter	Fortnightly in Summer/2 months in Winter
Remove clippings from site	Weekly in Summer/Monthly in Winter	Fortnightly in Summer/2 months in Winter
Remove litter & debris from turf areas	Weekly in Summer/Monthly in Winter	Fortnightly in Summer/2 months in Winter
Check for and report pests & diseases	Fortnightly	Monthly
Spray in accordance with manufacturers recommendations	As required	As required
Monitor and apply fertiliser to turf areas	6 month intervals - Autumn/Spring	Yearly
<b>Mulch</b>		
Remove litter & debris from mulch	Fortnightly	Monthly
Remove weed growth in mulch areas	Fortnightly	Monthly
Top up mulch as required	Annually	Annually
<b>Plants to Basin B, and D, Park and Streetscapes</b>		
Check for and report pests & diseases	Fortnightly	Monthly
Spray in accordance with manufacturers recommendations	Fortnightly	Monthly
Prune damaged or dead branches	Fortnightly	Monthly
Remove weed growth in plant areas	Fortnightly	Monthly
Replace failed or damaged plants	Fortnightly/As required	Monthly/As required
Adjust &/or replace stakes & ties where necessary	Fortnightly/As required	Monthly/As required
<b>General watering</b>		
Irrigation by hydrant or water cart as required to maintain health	Weekly first 6 months/Fortnightly there after	Monthly

ADDITIONAL WORKS / COMMENTS:

Site Foreman

place  
design  
group.

Australia  
China  
South East Asia

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