



## 6.0 ISSUES AND OPPORTUNITIES

### EXISTING ISSUES AND SITE CONSTRAINTS

The following issues and constraints pertain to the current site and its context.

- Sloping land form throughout the site - will create universal access and level space challenges in streets and parks
- Heavy traffic flow along Schofields Road - safety and amenity issues
- Noise along Schofields Road - landscape buffer to minimises the impact
- Poor pedestrian and cycle connections from the surrounding area to the site - consistent, safe and well connected paths will be critical
- Poor connection between the site and adjacent public open spaces - linking into the green network of surrounding public open space eg Second Ponds Creek
- Potential for inadequate head clearance under Schofields Rd bridge for flood free walk/cycle connection along Second Ponds Creek Corridor
- Lack of entry statement and identity of the site - improvement for wayfinding.
- Complete absence of existing vegetation on the site (cleared for rail yard development works) - importance of new planting and sense of place.

### POTENTIAL ISSUES IN THE FUTURE

The following issues relate to the site once developed:

- Volume of visitors from the surrounding areas travelling across the site to the train station - materials selection in terms of durability and maintenance
- Volume of residents visiting the town park - spatial arrangement and facilities
- Traffic flow in the town centre - slowing traffic speeds
- Safety of pedestrians and cyclists in the town centre - separation and definition of pedestrian and cyclist travel
- Safety and amenity throughout the town centre - applying Crime Prevention Through Environmental Design principles to create safe and secure street access.

### OPPORTUNITIES

A broad spectrum of opportunities should be explored in the design of the town park and the streetscapes including:

#### Town Park

- Activation of space - paved plaza for community use and activities such as pop-up markets
- Kiosk and water element - key features of the town park, providing a comfortable and amenable 'meeting place'
- Deciduous tree grid - to provide shade in summer and solar access in winter
- Open lawn with seating walls and shelters - to maximise usable and functional space and promote social interaction
- Activated shop front eg cafe facing the paved plaza - opportunities for local businesses
- Childrens playground - a play area is proposed for small children for short visits to the park
- A walkway and ramp (without stairs) connecting the southern and northern side of the town park - to provide universal access
- Interaction between the town park and adjacent buildings - maximising social engagement and encouraging people watching.

#### Streetscape

- Continuous dedicated cycle way, pedestrian link and shared path along north-south running street - promoting walkability and creating a walkable and cycle friendly neighbourhood
- Proposed street trees on the road in between on-street parking spaces - increasing canopy coverage to reduce urban heat island effect
- Avenue tree planting - providing shade, local distinctiveness, seasonal variation and habitat opportunities
- East-west running street utilising deciduous species - providing increased solar access during winter months.

#### Communal and Private Space

- Functional and attractive courtyard garden areas for resident use
- Private gardens fronting communal courtyard with clear views to the courtyard to enhance passive surveillance.



7.0 DESIGN PRINCIPLES AND STRATEGY



Artist impression of Cudgong Road Station Precinct South - 3D view (Source: Virtualideas)



## 7.0 DESIGN PRINCIPLES AND STRATEGY

### DESIGN PRINCIPLES

The public realm and landscape design illustrated in the following pages has addressed the five project objectives outlined in the introduction as follows;

#### 1. Prioritising accessibility and active mobility (walking & cycling)

- Extensive path systems on and off street
- Short block lengths increasing access and permeability
- Accessible grades on all paths (meeting AS 1426)
- Dedicated as well as shared cycle paths
- Direct access to and from the rail station for walking and cycling
- Level green spaces within the town park.

#### 2. Enhancing social engagement and enabling activation

- Town park offering a meeting place for all users
- Ample shade and social seating at crossing points
- Clear lines of sight encouraging incidental meetings
- Activities that foster community engagement (plaza, stalls, play etc.)
- 'Offline' spaces for people watching
- Vibrant and active building frontages including cafes
- Communal spaces within courtyards
- Strong passive surveillance "eyes on the street"
- Well lit, safe spaces and streets.

#### 3. Offering diversity of experience and fostering a sense of place

- A diversity of private, communal and public spaces
- A combination of safe, open and more enclosed spaces
- Recreation and leisure facilities for all ages and backgrounds (play, seating, plaza, gardens, roof gardens etc.)
- Materials and planting that reflect local identity
- Public art that reflects local heritage.

#### 4. Optimising functionality, amenity and quality of open space

- Extensive tree canopy offering shade and heat mitigation
- Irrigated lawns reducing temperature through evapo-transpiration
- Ample and frequent access to seats
- Comfortable and accessible grades on all paths

- Strong presence of planting with seasonal variety of colour and texture
- Balanced summer shade and winter sun
- Public art focused on local heritage and character
- Safe spaces with high levels of visibility and permeability.

#### 5. Integrating environmental and cultural heritage values

- Integrating green infrastructure (see below)
- Connecting to Sydney's Green Grid
- Incorporating WSUD into streets and landscapes
- Cooling buildings through green roofs.

### GREENER PLACES APPLICATION

The application of the Greener Places policy to this project results in the following responses

#### Integration

The design integrates green and grey infrastructure in a number of ways including:

- Trees in streets
- Recycled water use
- Green open swale on Schofield Road frontage
- Balance of recreation and green for canopy cover.

#### Connectivity

The site performs a core role as a hub in a network of connecting open spaces including through:

- Shared paths and cyclepaths
- Ready links to the Second Ponds Creek
- Ease of pedestrian access North / South and East / West

#### Multifunctionality

- The ecosystem services within and beyond the site are served by a variety of design responses including:
  - North/south and east/west canopy species connectivity, providing habitat, refuge and connection for native fauna and avifauna both within the site and to the Second Ponds Creek corridor
  - Ecological, socio-cultural and economic benefits
  - User demands and needs
  - Connectedness, interaction and stewardship

- Contribute to understanding of place
- Integrate public art

#### Participation

Landcom has adopted a highly participatory approach to the development of the site design through:

- Engagement with various State government agencies (TfNSW, DP+E, Sydney Water etc)
- Consultation and design iteration with Blacktown City Council
- Government and community
- Balance interests
- Equity of access through engagement
- Under-utilised open space and corridors
- Inclusive playgrounds

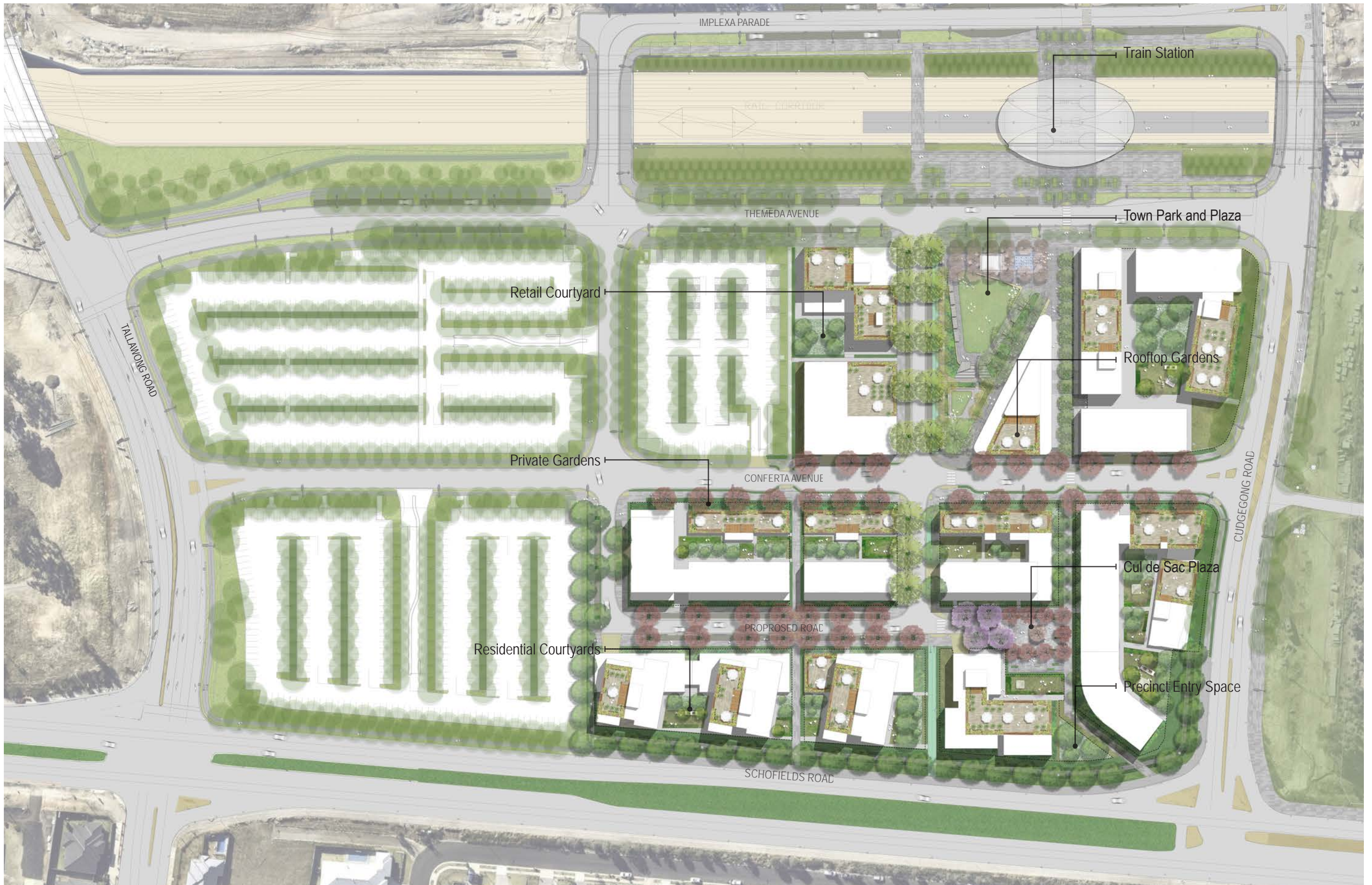
### DESIGN GUIDELINES

The Design Quality Guidelines prepared by Bennett and Trimble integrate a series of urban design, public domain and landscape guidelines. Of particular note in relationship to public domain and landscape are the following guidelines that the document illustrates:

- Pedestrian and cycle network
- Integrated network – combining paths, streets and parks
- Open Space network
- Street planting and canopies
- Integrated communal open space
- Landscape to Schofields Road
- Location of the public park (Town Park)
- Wind mitigation
- Passive surveillance
- Basement parking and deep soil planting

For details of these guidelines see the Design Quality Guidelines report.







## 8.0 CONCEPT PLAN

### OVERVIEW

The Concept Plan in Figure 8.1 illustrates the Public Domain and Landscape Concept for the site. The following is a brief description of the major elements:

### PUBLIC OPEN SPACE

#### Town Park and Plaza

- Large irrigated lawn and play space suitable for children aged 2-8 years
- Plaza space with water feature capable of hosting community events and markets
- Connected network of pathways, steps and ramps providing all abilities access throughout
- Amenities including shelters, BBQ's, seats and optional exercise station
- Planting for improved micro-climate and seasonal interest
- Public artwork within the park.

#### Retail Courtyard

- Courtyard space provides areas to sit under the shade of trees and shelters
- Public Artworks.

#### Cul de Sac Plaza

- Shared space reinforced by feature paving with rumble surface encouraging low vehicle speeds
- Design allows for full turning circle of large vehicles as well as short term loading areas
- Trees and shrubs provide shade, seasonal colour and define areas around social seating.

#### Precinct Entry Space

- Entry sign and wayfinding signage mark the main southern entry and helps to direct pedestrians and cyclist
- Native vegetation species reinforces connection to Second Ponds Creek Corridor.

### STREETS AND PATHS

- Dedicated cycle paths
- Wide pedestrian pathways (including shared use)
- Tree lined streets with parking.

### COMMUNAL OPEN SPACE

#### Residential Courtyards

- Deep soil tree plantings allowing for shade and increased tree resilience
- Irrigated turf lawn and social seating in areas of shade and sun
- Nature based play for small children ie. branches, logs, stone etc.

#### Rooftop Gardens

- Raised planters allowing for shrubs and small trees, as well as safeguarding against falls at the building edge
- Amenities include shelters or pergolas, decking and paving, seating, tables and BBQ's for the residents use
- Opportunity for areas of play for small children.

### PRIVATE OPEN SPACE

#### Private Gardens

- Small paved terrace spaces for some ground floor residences suitable for outdoor eating and seating
- Narrow raised planter integrated with fence allows for planting of small shrubs and herbs while also facilitating passive surveillance and neighbour interaction.

Further details on the desired use, function and character of the open spaces is provided in Table 9.1 in Open Space Hierarchy and Function.

### DETAIL AREAS AND SECTIONS

In the following pages detailed plans expand on the concept and are supported by selected site cross-sections to illustrate spatial relationships, critical dimensions and land ownership.



Artist impression of Cudgegong Road Station Precinct South - Aerial View (Source: Virtualideas)





KEY PLAN



LEGEND

- VERGE / PUBLIC LANDSCAPE AREA
- COMMUNAL OPEN SPACE
- DEEP SOIL ZONE
- PRIVATE GARDENS
- ROOFTOP GARDENS
- PLAZA PAVEMENT
- PUBLIC DOMAIN PAVEMENT
- DEDICATED CYCLEWAY
- TREES BY OTHERS
- PROPOSED FENCE / GATES WHERE REQUIRED
- PRIVATE WITH PUBLIC EASEMENT
- Fraxinus oxycarpa* 'Raywoodii'
- Jacaranda mimosifolia*
- Eucalyptus tereticornis*
- Eucalyptus microcorys*
- Sapium sebiferum*



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CUDGONG ROAD STATION PRECINCT SOUTH

DETAILED MASTERPLAN AREA 1

Figure 8.2

31/05/2018





#### KEY PLAN



#### LEGEND

- VERGE / PUBLIC LANDSCAPE AREA
- COMMUNAL OPEN SPACE
- DEEP SOIL ZONE
- PRIVATE GARDENS
- ROOFTOP GARDENS
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- Sapium sebiferum*



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**CUDGONG ROAD STATION PRECINCT SOUTH**

DETAILED CONCEPT PLAN AREA 2

Figure 8.3

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KEY PLAN



LEGEND

- VERGE / PUBLIC LANDSCAPE AREA
- COMMUNAL OPEN SPACE
- DEEP SOIL ZONE
- PRIVATE GARDENS
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- PLAZA PAVEMENT
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- Eucalyptus microcorys*
- Sapium sebiferum*



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CUDGONG ROAD STATION PRECINCT SOUTH

DETAILED CONCEPT PLAN AREA 3

Figure 8.4

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# KEY PLAN



## LEGEND

- VERGE / PUBLIC LANDSCAPE AREA
- COMMUNAL OPEN SPACE
- DEEP SOIL ZONE
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CUDGONG ROAD STATION PRECINCT SOUTH

DETAILED CONCEPT PLAN AREA 4

Figure 8.5

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#### KEY PLAN



#### LEGEND

-  VERGE / PUBLIC LANDSCAPE AREA
-  COMMUNAL OPEN SPACE
-  DEEP SOIL ZONE
-  PRIVATE GARDENS
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-  *Eucalyptus microcorys*
-  *Sapium sebiferum*



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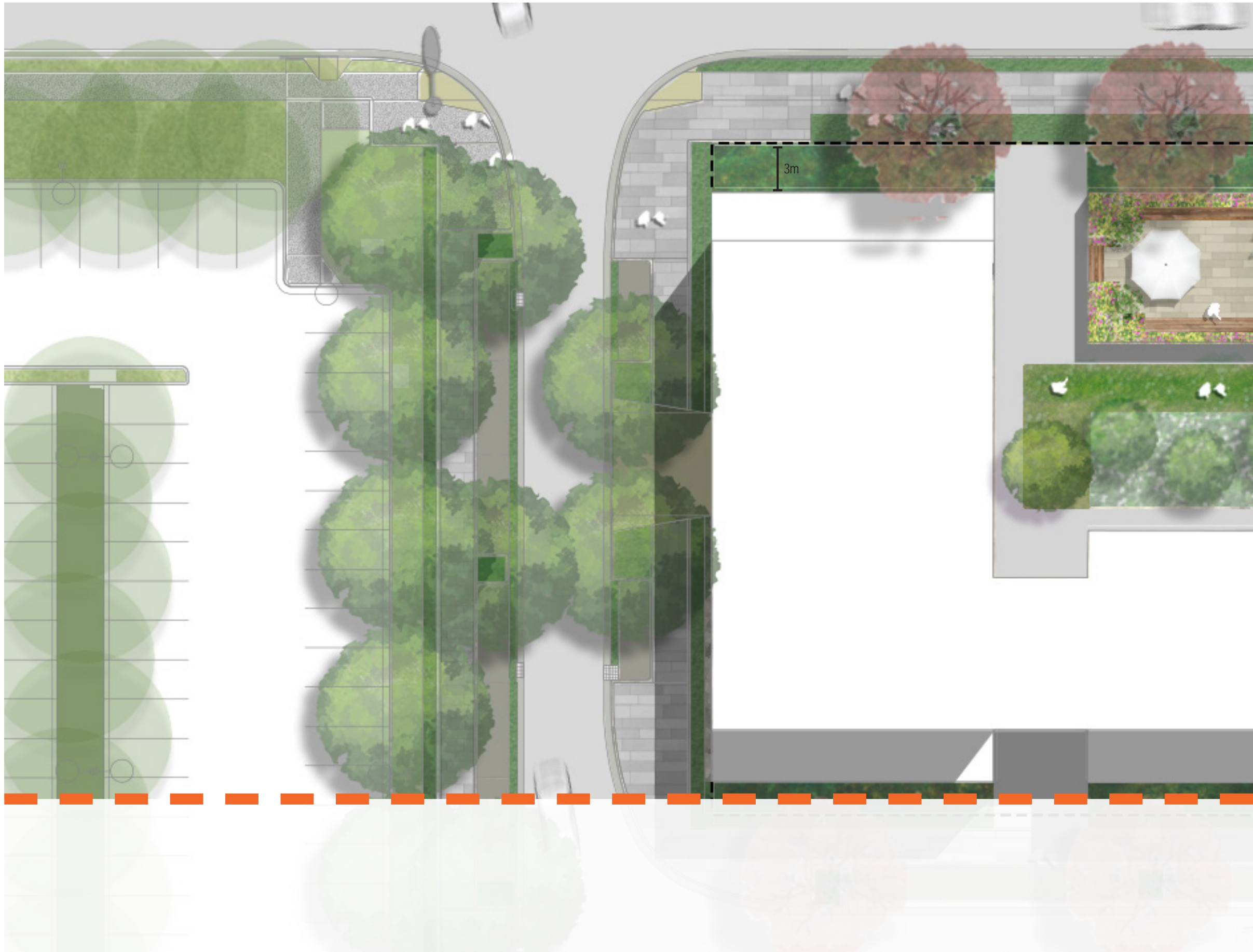
CUDGONG ROAD STATION PRECINCT SOUTH

DETAILED CONCEPT PLAN AREA 5

Figure 8.6

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KEY PLAN



LEGEND

- VERGE / PUBLIC LANDSCAPE AREA
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CUDGONG ROAD STATION PRECINCT SOUTH

DETAILED CONCEPT PLAN AREA 6

Figure 8.7

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KEY PLAN



LEGEND

-  VERGE / PUBLIC LANDSCAPE AREA
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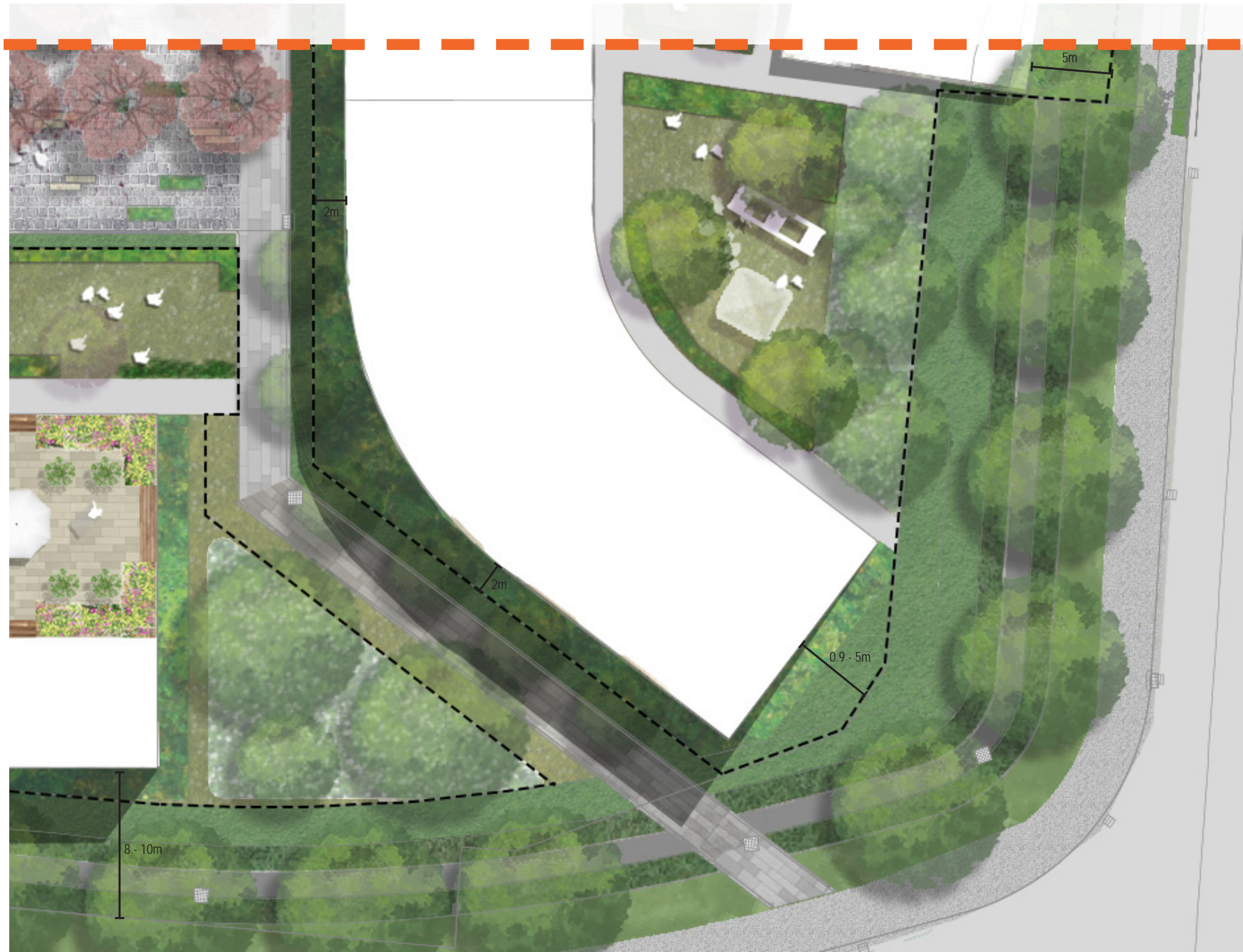
CUDGONG ROAD STATION PRECINCT SOUTH

DETAILED CONCEPT PLAN AREA 7

Figure 8.8

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KEY PLAN



LEGEND

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CUDGEGONG ROAD STATION PRECINCT SOUTH

DETAILED CONCEPT PLAN AREA 8

Figure 8.9

31/05/2018





KEY PLAN



LEGEND

-  VERGE / PUBLIC LANDSCAPE AREA
-  COMMUNAL OPEN SPACE
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CUDGONG ROAD STATION PRECINCT SOUTH

DETAILED CONCEPT PLAN AREA 9

Figure 8.10

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