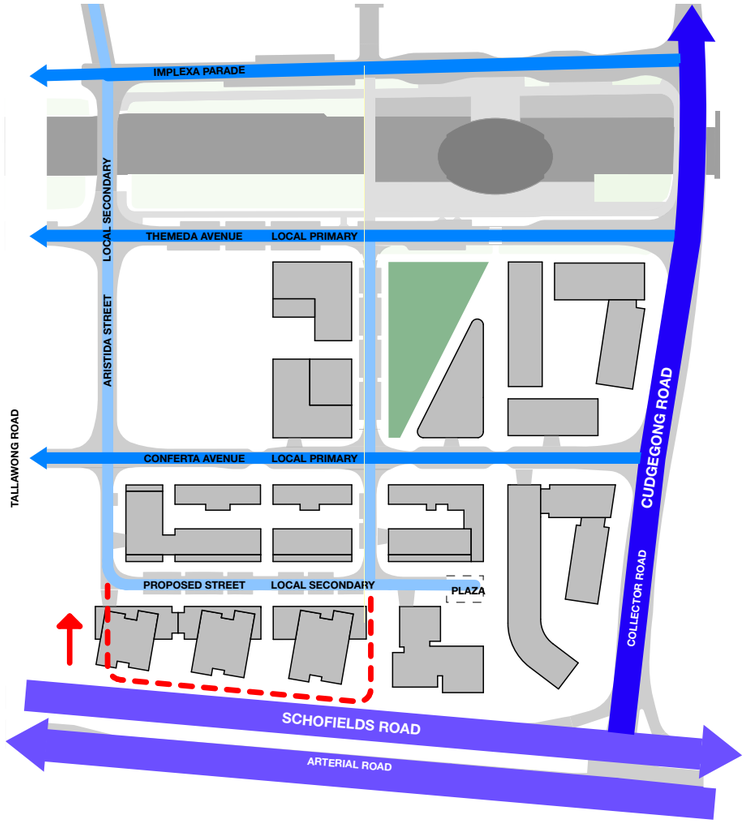
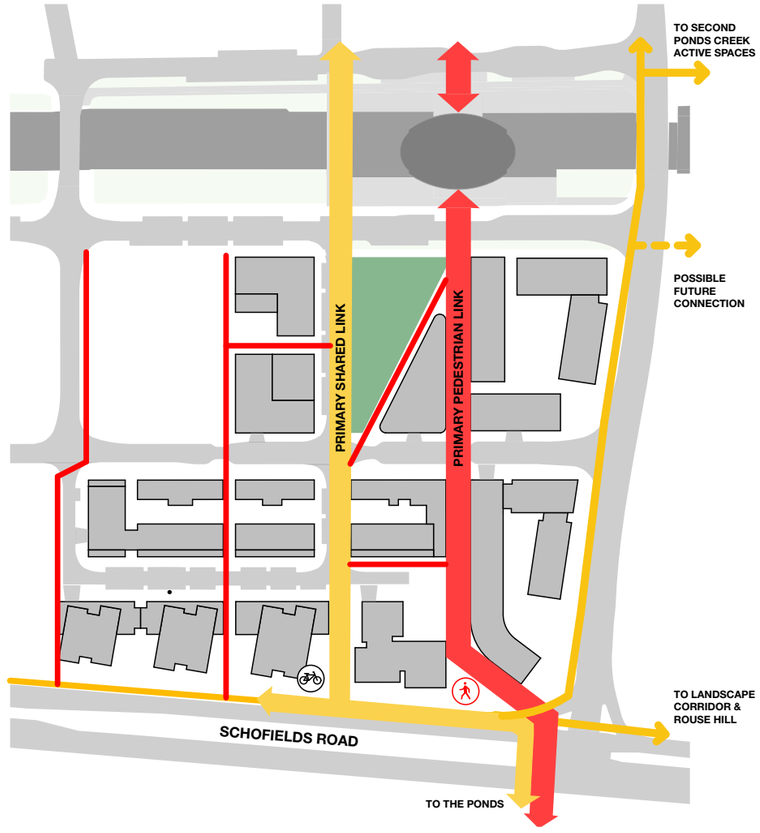
URBAN CONNECTIVITY

ESTABLISH AN INTEGRATED NETWORK OF STREETS, PEDESTRIAN CONNECTIONS AND CYCLEWAYS TO CREATE AN ACTIVE AND LEGIBLE URBAN CENTRE WITH A RATIONAL BLOCK STRUCTURE.



STREET NETWORK AND HIERARCHY

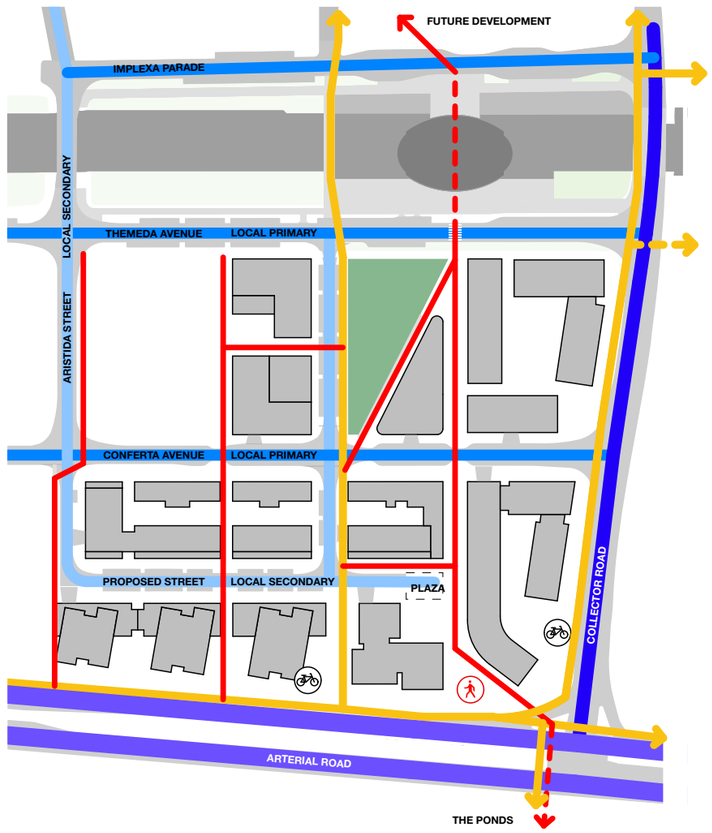
- Provide a hierarchy of streets to provide a clear and legible urban centre with a rational block structure.
- Locate 2 east-west (local primary) streets or pedestrian laneways between the collector roads (Cudgegong Road and Tallawong Road) to provide local access to the development, Metro station and the commuter carparks.
- Locate 2 north-south (local-secondary) streets or pedestrian laneways to create an urban grid and to split the site into smaller fine grain blocks.
- The southernmost street should be located within the site rather than adjacent to Schofields Road to create a finer urban grain, provide a better urban street with access, address and surveillance from both sides of the street, and to avoid locating multiple streets directly adjacent to each other on the southern edge of the site. This is described in the section "Addressing Schofields Road" in the Design Quality Guidelines.



PEDESTRIAN AND CYCLE NETWORK

- Design the pedestrian and cycle network as an integral element within the urban structure of the development.
- Establish a network of pedestrian and cycle links across the site that reinforces and extends the network of streets as well as breaks down the urban blocks into a finer grain urban structure.
- Position these pedestrian and cycle links to connect residents and commuters with key elements such as the Metro Station, public park, urban plaza and non-residential programs such as retail, childcare and work hubs.
- Locate these links strategically to also connect the Metro station and town centre development with the surrounding residential areas such as The Ponds to the south via the existing pedestrian and cycle link at the intersection of Schofields and Cudgegong Roads and future development to the north via the proposed link bridge over the excavated Metro corridor.

REFER TO DESIGN CONFIDENCE ACCESS DESIGN ASSESSMENT REPORT
REFER TO CLOUSTON ASSOCIATES PUBLIC DOMAIN AND LANDSCAPE STRATEGY FOR MORE DETAIL



INTEGRATED NETWORK

- The design of the street hierarchy, pedestrian links and cycle links should be considered as an integrated network that creates a legible and walkable town centre development with a fine grain block structure.

URBAN SCALE, LEGIBILITY AND OWNERSHIP

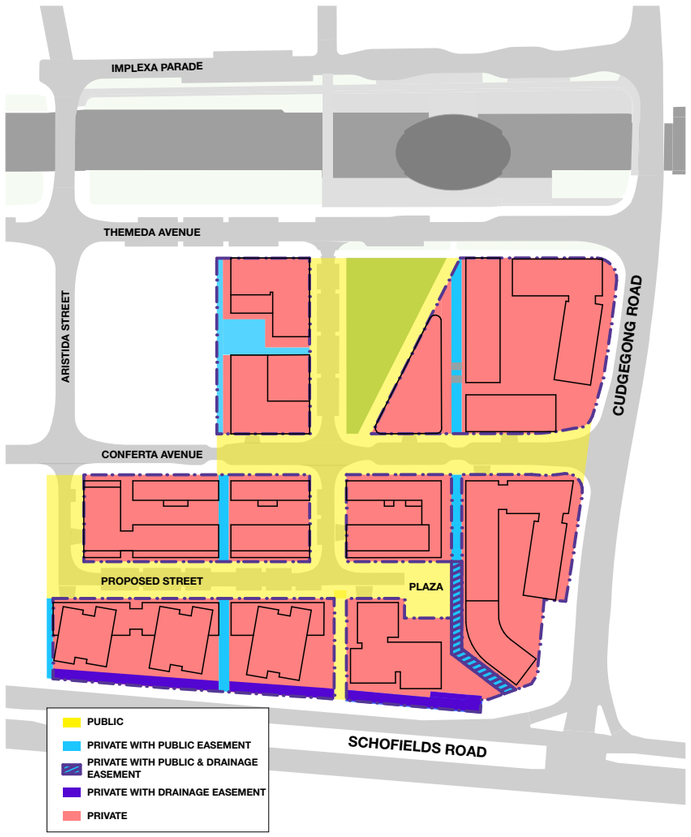
ESTABLISH A FINE GRAIN DEVELOPMENT WITH AN URBAN STRUCTURE THAT IS RATIONAL, LEGIBLE AND PERMEABLE, AND CAPTURE THIS WITH AN OWNERSHIP STRUCTURE THAT PRESERVES THE PUBLIC DOMAIN.

URBAN BLOCK STRUCTURE AND SCALE

- Establish a fine grain urban development with a structure that is rational, legible and permeable.
- Use the gridded overlay of the street, pedestrian and cycle networks to divide the site into a series of urban blocks with a scale appropriate for a walkable town centre.
- Create a series of blocks that support a variety of building massing, heights and housing typologies.
- Create a more diverse urban environment by developing different but complementary architectural responses to each site across the town centre.

URBAN LEGIBILITY AND STREET DEFINITION

- Create a legible urban structure by designing buildings that define the public domain including streets, through-site links, open spaces and parks.
- Buildings should be built to the edge of blocks or setbacks and planned to address and engage with the public domain through the careful design of lobbies, balconies, windows and gardens.
- Site and plan buildings to be outward looking to engage with their urban environment. Buildings should be planned to facilitate the passive surveillance of streets, pedestrian links and open spaces to create a safe and secure urban environment.

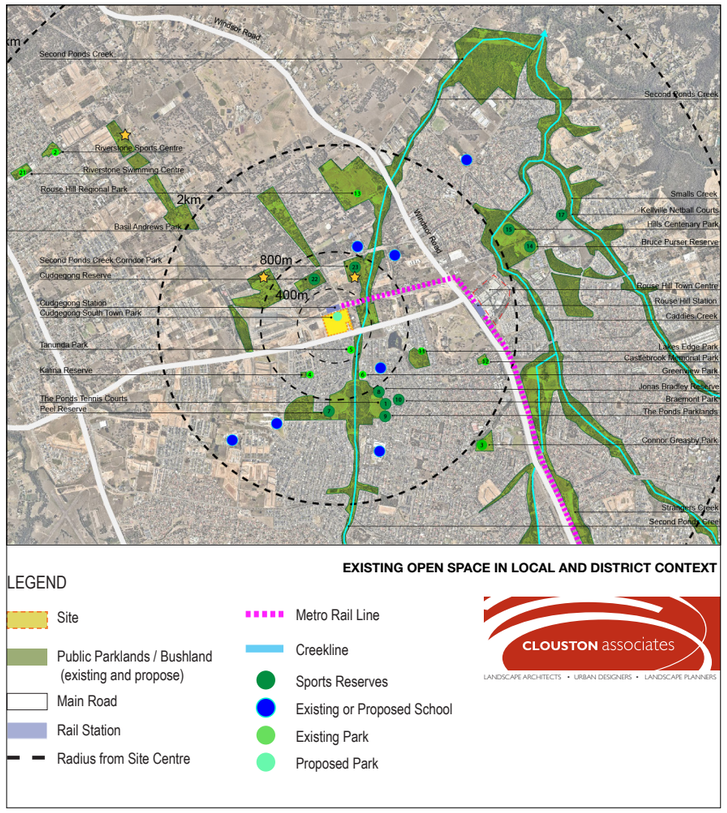


OWNERSHIP

- Establish a clear ownership structure that creates a well defined, legible and permeable urban structure and preserves the public domain.

INTEGRATED LANDSCAPE NETWORK

ESTABLISH A LOCAL OPEN SPACE NETWORK THAT IS INTEGRATED WITH AND CONNECTED TO THE WIDER GREEN INFRASTRUCTURE OF THE DISTRICT. THE PUBLIC DOMAIN SHOULD BE DESIGNED TO SUPPORT THE NEEDS OF THE LOCAL COMMUNITY AND COMPLIMENT THE EXISTING OPEN SPACE NETWORKS IN SURROUNDING AREAS.



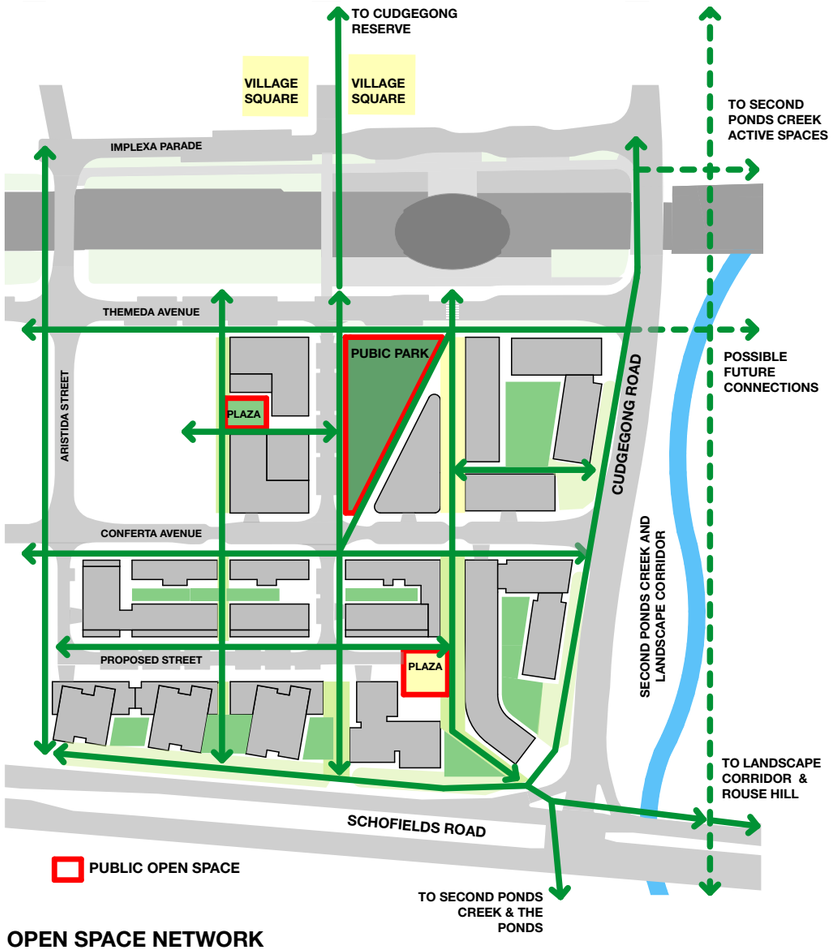
EXISTING OPEN SPACE IN LOCAL AND DISTRICT CONTEXT

WEST CENTRAL GREEN GRID

INTEGRATED GREEN INFRASTRUCTURE

- Provide an open space network that is connected to and integrated with the surrounding local, district and regional green grid and green infrastructure.
- Provide a series of public open spaces that support the needs of the precinct's community and complement the existing open spaces in surrounding areas.

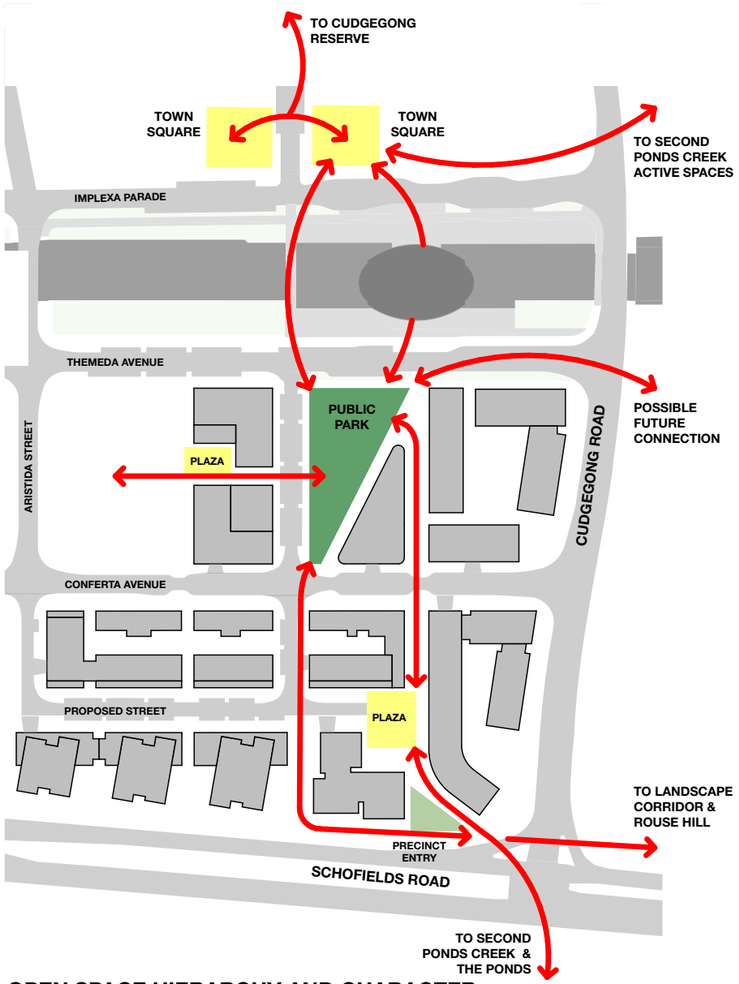
REFER TO CLOUSTON ASSOCIATES PUBLIC DOMAIN AND LANDSCAPE STRATEGY FOR MORE DETAIL
REFER TO GHD SOCIAL NEEDS AND IMPACT ASSESSMENT



OPEN SPACE NETWORK

- Distribute a range of open spaces strategically across the site including a public park, urban plaza, landscaped zones and communal open spaces.
- Locate these spaces adjacent to the pedestrian and cycle networks to form an interconnected and walkable open space network.
- Design the spaces within this network to support a wide variety of active and passive uses that can be utilised by a diverse range of residents.
- Vary the microclimates these spaces will support to increase diversity and amenity throughout the development, e.g. shaded pedestrian paths to the Metro station in summer and sunny open spaces in winter.
- Link this network to open spaces in adjacent suburbs to further increase the range of activities available and to encourage interaction with neighbouring communities.

REFER TO CLOUSTON ASSOCIATES PUBLIC DOMAIN AND LANDSCAPE STRATEGY FOR MORE DETAIL



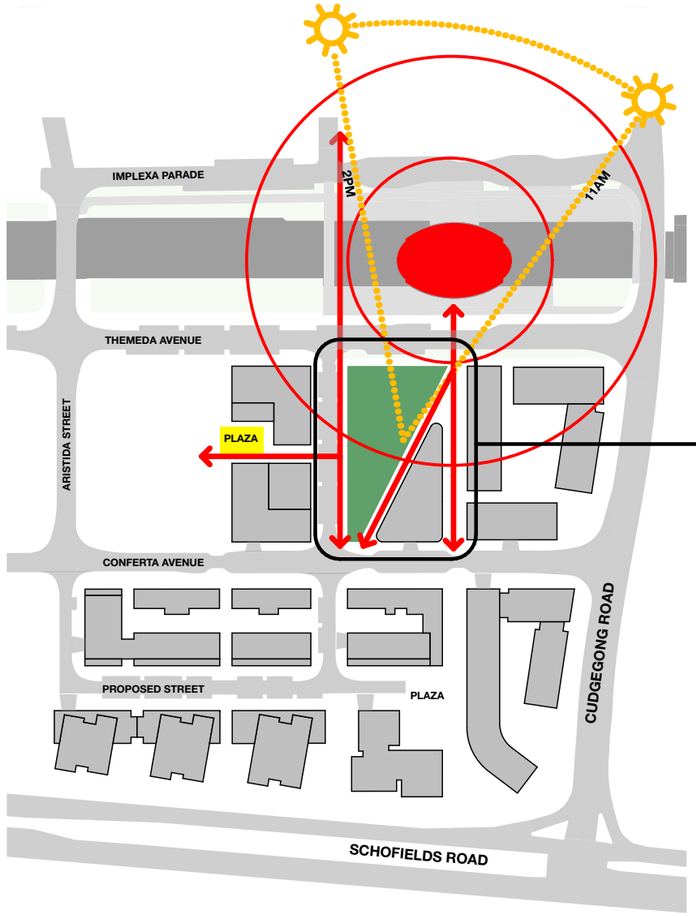
OPEN SPACE HIERARCHY AND CHARACTER

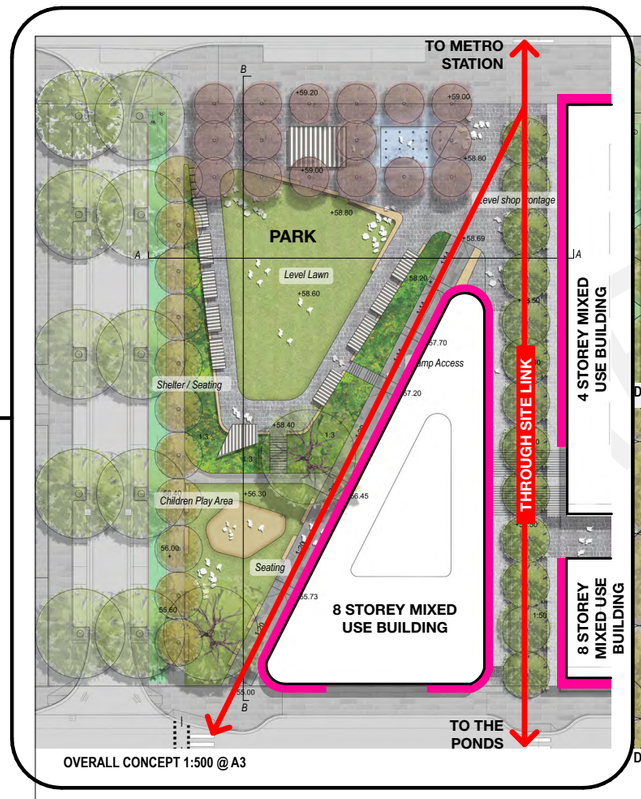
- Establish a hierarchy of fine grain open spaces with a range of characters, urban scales and landscape characteristics.
- Locate these spaces to form a sequence of open spaces and experiences within the development for residents, pedestrians, cyclists and visitors.
- Ensure the open spaces reflect and respond to surrounding context, urban character and movement patterns ensuring fine grain open spaces are strategically located to complement larger public spaces such as parks and reserves in surrounding areas.
- The major open spaces are described in more detail on the following pages.

REFER TO CLOUSTON ASSOCIATES PUBLIC DOMAIN AND LANDSCAPE STRATEGY FOR MORE DETAIL

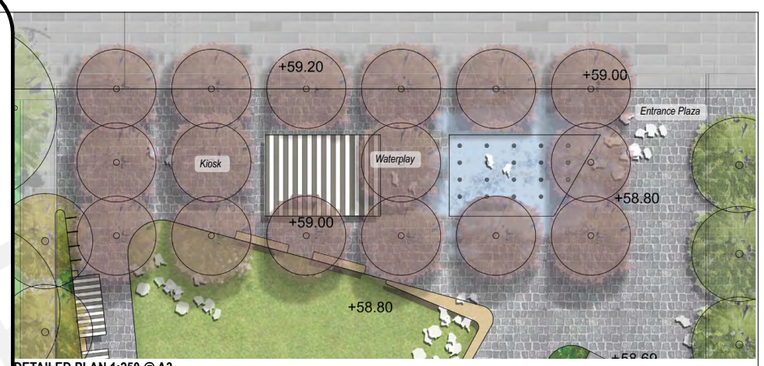
THE PUBLIC PARK

THE PUBLIC PARK SHOULD FORM A STRONG RELATIONSHIP WITH THE METRO STATION AND FOSTER THE IDEA OF A MEETING PLACE FOR THE COMMUNITY BY PROVIDING A VARIETY OF SPACES, ACTIVITIES AND OPPORTUNITIES FOR SOCIAL INTERACTION.





OVERALL CONCEPT 1:500 @ A3



DETAILED PLAN 1:250 @ A3

DETAILED PLAN 1:250 @ A3

CLOUSTON associates

LANDSCAPE ARCHITECTS • URBAN DESIGNERS • LANDSCAPE PLANNERS

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Client: Landcom

CUDGEGONG ROAD STATION PRECINCT SOUTH • CUDGEGONG

OPEN SPACE CONCEPT

S17-0100 Sk 28

23/02/2018

LOCATING THE PUBLIC PARK

- Provide a public park for the use of residents, commuters and visitors to the mixed-use facilities that surround the park.
- Design and locate the public park to maximise sun access and limit overshadowing from the neighbouring development.
- Locate the public park to form a strong relationship with the Metro station to create a town centre development with a public transport focus.
- Use the park edge to provide a gentle and accessible inclined pedestrian path linking the southern blocks of the development to the Metro station.

REFER TO CLOUSTON ASSOCIATES PUBLIC DOMAIN AND LANDSCAPE STRATEGY FOR MORE DETAIL

DESIGNING THE PUBLIC PARK

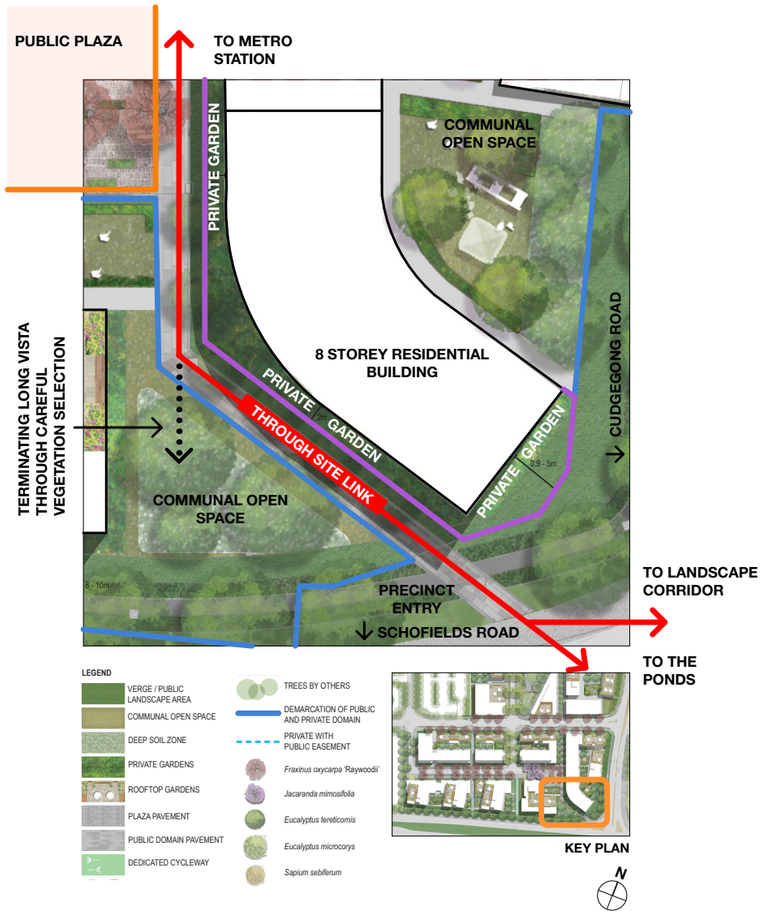
- The design of the park should aim to:
  - Maximise useful and function space,
  - Enable delight and temporary respite,
  - Enable activation,
  - Facilitate circulation and movement,
  - Provide universal access to adjacent buildings.
- The design of the park should foster the idea of a meeting place for the community by providing a variety of spaces, activities and opportunities for social interaction.
- Provide a series of level and accessible platforms across the sloping site to accommodate a range of activities and users.
- Use the diagonal eastern park edge to provide a gentle and accessible inclined pedestrian path linking spaces within the park and the southern blocks of the development to the Metro station.
- Provide a balance of hardscape and softscape depending on pedestrian and traffic use to accommodate a range of activities including market stalls, community events, water play and passive recreation.
- Provide spaces that complement the surrounding active non-residential programs located at ground floor including retail, commercial and community accommodation.

REFER TO CLOUSTON ASSOCIATES PUBLIC DOMAIN AND LANDSCAPE STRATEGY FOR MORE DETAIL

FINE GRAIN OPEN SPACES

LOCATE A SERIES OF FINE GRAIN LANDSCAPE AND OPEN SPACES WITHIN THE DEVELOPMENT WITH A RANGE OF URBAN SCALES AND LANDSCAPE CHARACTERISTICS TO SUPPORT A RANGE OF USES.

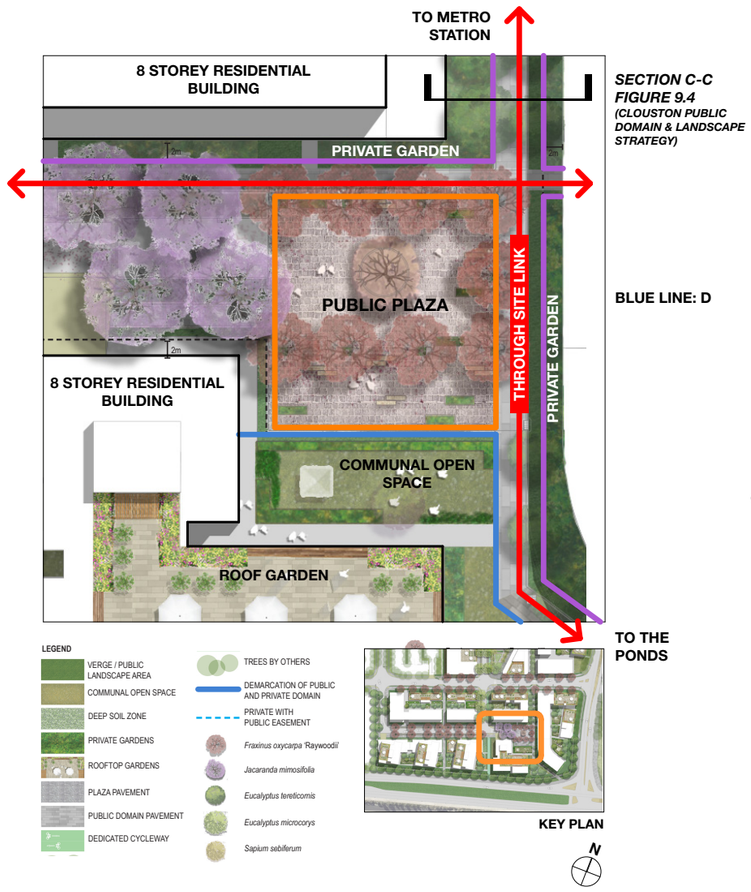
- VISUALLY PERMEABLE FENCE / THRESHOLD BETWEEN PUBLIC DOMAIN & COMMUNAL OPEN SPACE
- VISUALLY PERMEABLE FENCE / THRESHOLD BETWEEN PUBLIC DOMAIN & PRIVATE RESIDENTIAL GARDEN



PRECINCT ENTRY

- Provide a small green space marking the main southern entry into the precinct for pedestrians.
- Design of the communal open space and adjacent landscaped zone should address and create a sense of arrival from the Schofields Road and Cudgegong Road intersection whilst addressing the adjoining residential buildings.
- Through site links and landscape should reinforce a visual hierarchy and clarity of all entry points into the development and adjoining private gardens and communal open spaces.
- Utilise large native trees, shrubs and grass species to reinforce a connection to the Second Ponds Creek.
- Provide an appealing interface between Schofields Road and the development and way finding opporunities.

REFER TO CLOUSTON ASSOCIATES PUBLIC DOMAIN AND LANDSCAPE STRATEGY FOR MORE DETAIL



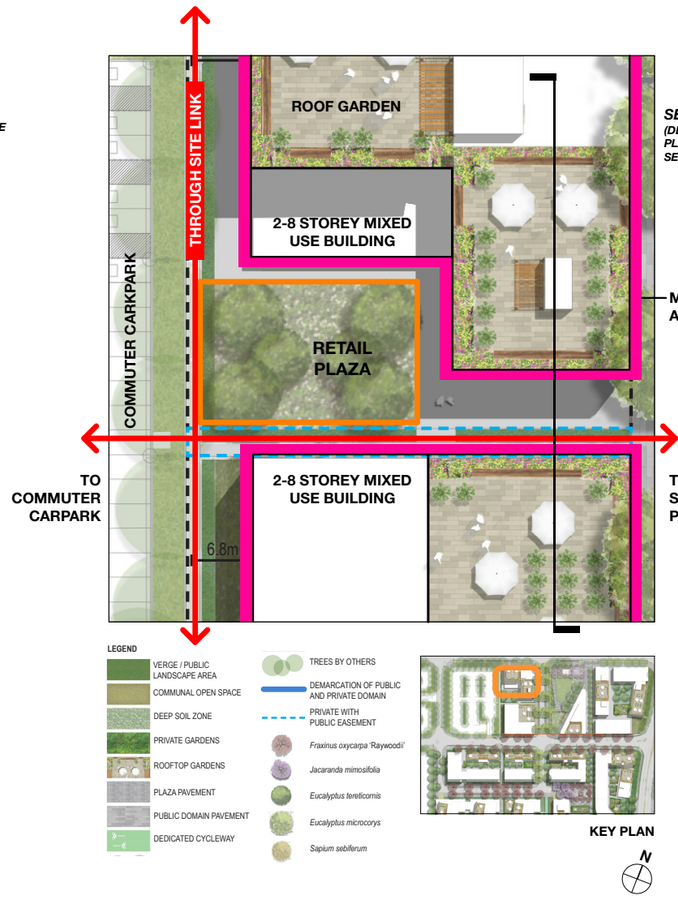
SECTION C-C FIGURE 9.4 *(CLOUSTON PUBLIC DOMAIN & LANDSCAPE STRATEGY)*

BLUE LINE: D

URBAN PLAZA

- Provide a large paved flexible plaza principally for use by adjoining residents with provision for occasional large vehicle turning and servicing.
- A feature tree should be located to define the space and provide shade.
- The tree grid should feature deciduous species to ensure sufficient shade in summer and solar access in winter.
- Permeable raised paving, speed humps and a very low vehicle speed environment should be incorporated to reinforce the plaza as a shared space.
- The plaza should provide a balance of hardscape and softscape with basement entries not located off the plaza.
- Seating is to be provided to create a 'meeting place' and provide opportunities for interaction within the local residential community.

REFER TO CLOUSTON ASSOCIATES PUBLIC DOMAIN AND LANDSCAPE STRATEGY FOR MORE DETAIL



SECTION A *(DETAILED URBAN PLAN AND SECTION A)*

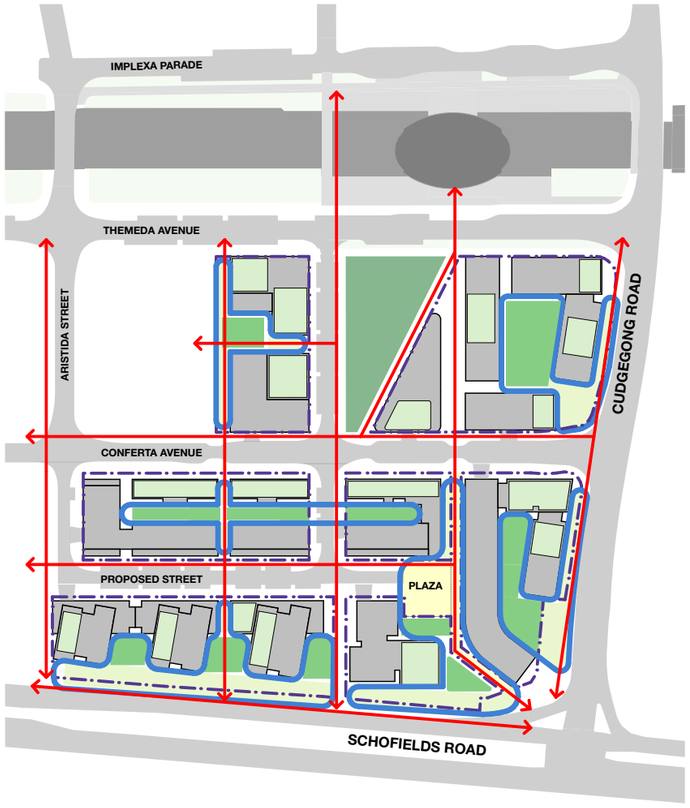
RETAIL PLAZA

- The design of the retail plaza should vary in response to the residential cul de sac plaza due to the proximity to non-residential programme.
- Overall design should provide an appealing interface between the commuter car park, non-commercial podium level tenancies and residential development above.
- The plaza should provide amenities for the immediate residents whilst responding to the pedestrian movement through the site.
- Design should provide public seating for neighbours and shoppers while also locating outdoor cafe seating for adjoining businesses.
- Provide shade for courtyard space from tree canopy, especially from westerly sun.

REFER TO CLOUSTON ASSOCIATES PUBLIC DOMAIN AND LANDSCAPE STRATEGY FOR MORE DETAIL

COMMUNAL OPEN SPACE

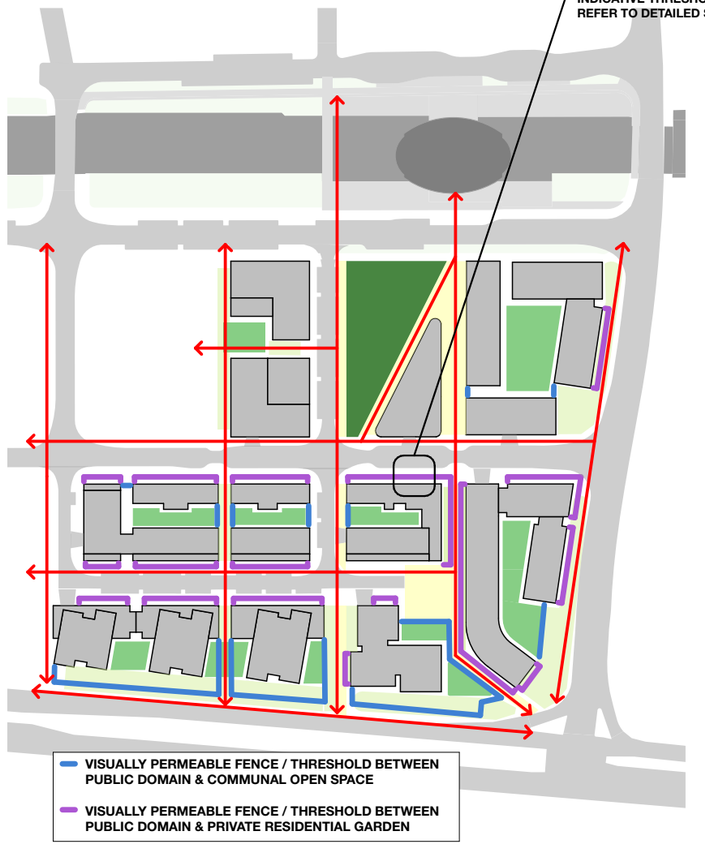
STRATEGICALLY LOCATE A SERIES OF COMMUNAL OPEN SPACES FOR RESIDENTS WITHIN DEVELOPMENTS THAT ARE VISUALLY CONNECTED WITH THE PUBLIC DOMAIN TO FORM AN INTEGRATED NETWORK OF LARGER LANDSCAPED ZONES.

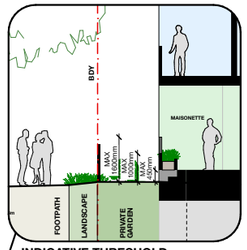


INTEGRATED COMMUNAL OPEN SPACE

- Provide a series of communal open spaces within sites that provide landscaped spaces to residents within buildings. These spaces should be co-located with deep soil zones.
- Locate these spaces to maximise amenity within sites with adequate sunlight, aspect and outlook.
- Create a broader series of landscaped spaces by locating them strategically to form larger landscape zones that sit adjacent to, or visually connected with streets, landscaped public spaces, links or other communal opens spaces.

REFER TO DETAILED URBAN PLAN AND SECTION
REFER TO CLOUSTON ASSOCIATES PUBLIC DOMAIN AND LANDSCAPE STRATEGY FOR MORE DETAIL





INDICATIVE THRESHOLD.
REFER TO DETAILED SECTIONS

PUBLIC / PRIVATE INTERFACE

- A successful public realm should clearly define boundaries between public and private space through the limited visible presence of barriers as the key delineating feature. Boundaries between communal/private open space and adjoining public open space and through site links should utilise landscape to provide an intuitive definition of ownership.
- Fences where provided are to be visually permeable and limited in height with solid elements limited to 1m. Ensure fence design permits transparency to adjoining paths and communal open spaces for safety and passive surveillance whilst retaining privacy.
- Retain privacy of residential courtyards and private gardens, whilst maintaining visual glimpses of trees, shrubs and grass from the public space to extend the sense and effect of the borrowed landscape.

REFER TO DETAILED URBAN PLAN AND SECTION
REFER TO CLOUSTON ASSOCIATES PUBLIC DOMAIN AND LANDSCAPE STRATEGY FOR MORE DETAIL

INDICATIVE ROOF TERRACE

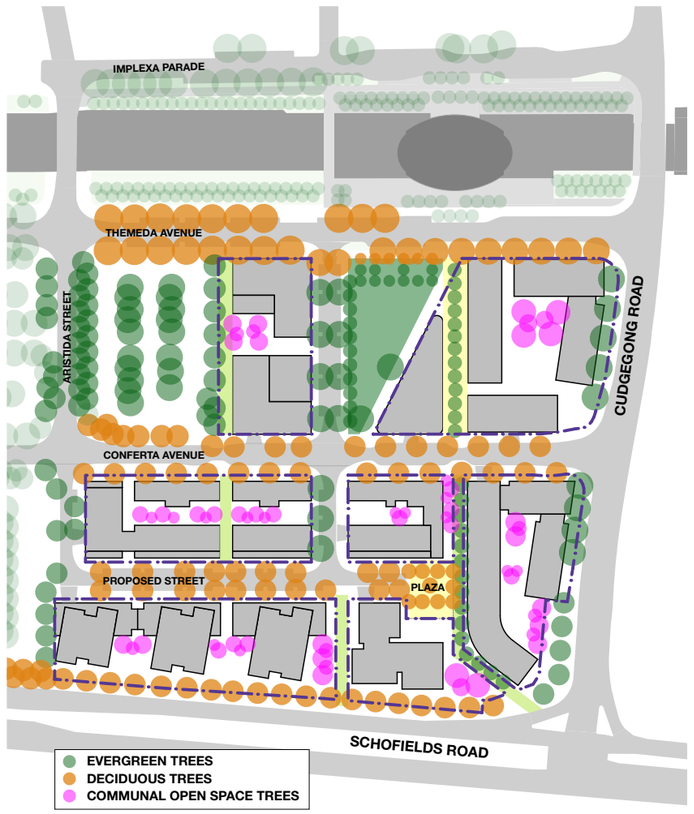
ROOFTOP GARDENS

- Provide a series of rooftop communal open spaces that provide landscaped spaces for the gathering of residents within sites.
- These spaces should take advantage of northerly aspects and panoramic views where available of the surrounding area, for example the Second Ponds Creek green corridor.
- Rooftop gardens may utilise raised planters to define smaller spaces for sitting and gathering and be located to prevent the overlooking of adjacent units.
- Planting selection should vary from the shade tolerant specifies located on ground floor communal open space to dryer, strappy or grassy species for rooftops that will cope with the greater exposure and varied environment.

REFER TO DETAILED URBAN PLAN AND SECTION
REFER TO CLOUSTON ASSOCIATES PUBLIC DOMAIN AND LANDSCAPE STRATEGY FOR MORE DETAIL

TREE CANOPY & DEEP SOIL NETWORK

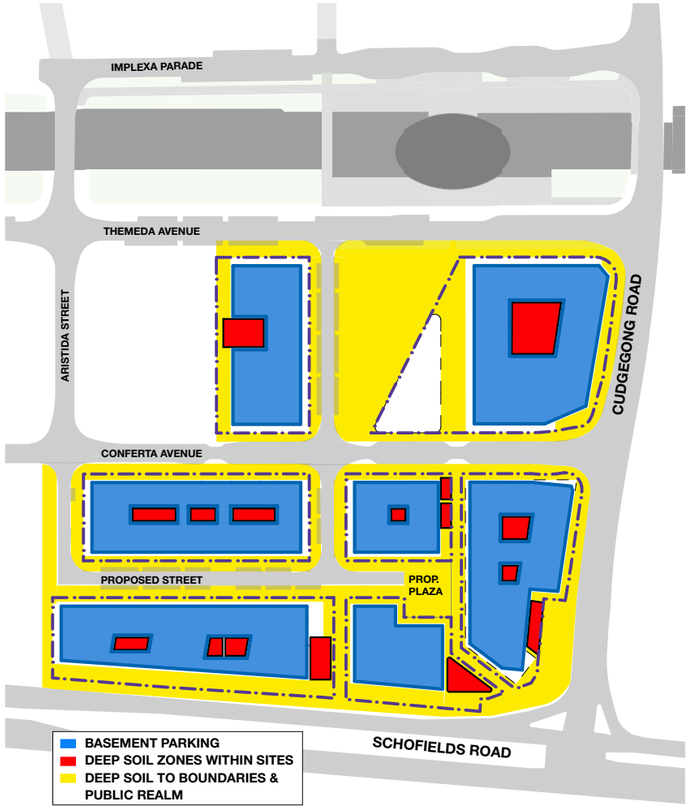
DISTRIBUTE DEEP SOIL ZONES OF SUFFICIENT SIZE THROUGHOUT THE PRECINCT AND WITHIN SITES TO PROVIDE EXTENSIVE TREE CANOPY COVERAGE FOR THE TOWN CENTRE PUBLIC DOMAIN AND COMMUNAL OPEN SPACES.



STREET PLANTING AND CANOPIES

- Design street planting to extend the green grid of the open space network, to provide shade, create local distinctiveness, seasonal variation and habitat opportunities.
- Use street trees to increase canopy coverage to the town centre and the adjacent commuter carparks to reduce the heat island effect.
- Select species strategically to provide winter sun and summer shade. Evergreen tree species should be used along north-south running streets whereas deciduous species are should be used along east-west running streets to maximise winter solar access to public and private spaces.
- The character of the planting can follow a native theme utilising, where practical, species that occur within the Cumberland Plain Vegetation Community. Utilising native species will help increase the ecological value of the park whilst also minimising the maintenance and watering requirements during establishment.
- Species should be selected that can grow large canopies relatively quickly that cast wide shade and that can bring visual and sensory delight. The landscape plan will locate various tree species in different locations to create a variety of atmospheres and microclimates - transparency or intimacy, solar access or shade, native or exotic/ European character, variety or consistency of colours and scents.

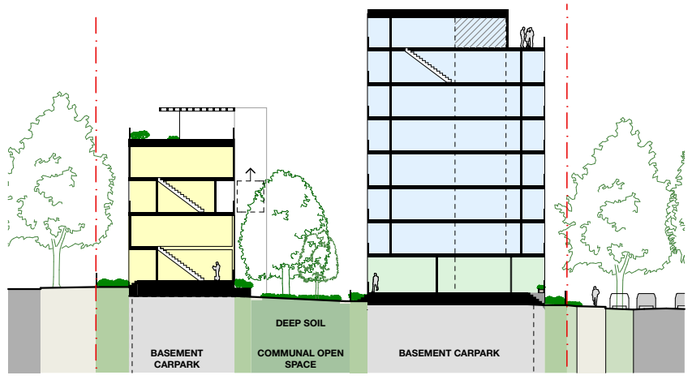
REFER TO CLOUSTON ASSOCIATES PUBLIC DOMAIN AND LANDSCAPE STRATEGY

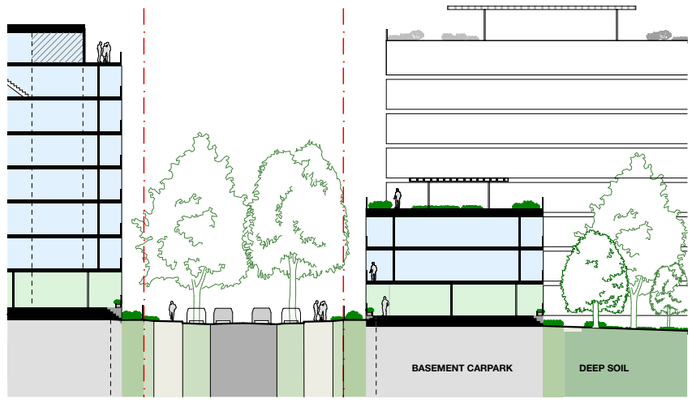


DEEP SOIL NETWORK

- Ensure deep soil zones are strategically distributed throughout the public domain and communal open spaces to ensure tree and shrub vegetation receive sufficient natural sunlight for healthy growth, provide shade for residents in adjacent buildings and encourage pedestrian permeability through the site.
- Locate native vegetation species, where practical, in deep soil zones. The selection of species within the Cumberland Plain Vegetation Community should be encouraged to increase ecological value of the site, while minimising maintenance and watering requirements.
- Ensure deep soil zones are strategically located throughout the site in accordance with basement parking design.

REFER TO DETAILED URBAN PLAN AND SECTION
REFER TO CLOUSTON ASSOCIATES PUBLIC DOMAIN AND LANDSCAPE STRATEGY FOR MORE DETAIL





DEEP SOIL NETWORK continued

- Provide a minimum 3m setback for basement parking from site boundaries to provide generous deep soil zones to facilitate boundary and street tree planting to promote healthy root growth and canopy coverage for street trees.
- Ensure basement parking is not located beneath publicly owned through site links to ensure a connected deep soil zone is present allowing for healthy tree planting to public streets and through site links.

REFER TO DETAILED URBAN PLAN AND SECTION
REFER TO CLOUSTON ASSOCIATES PUBLIC DOMAIN AND LANDSCAPE STRATEGY FOR MORE DETAIL

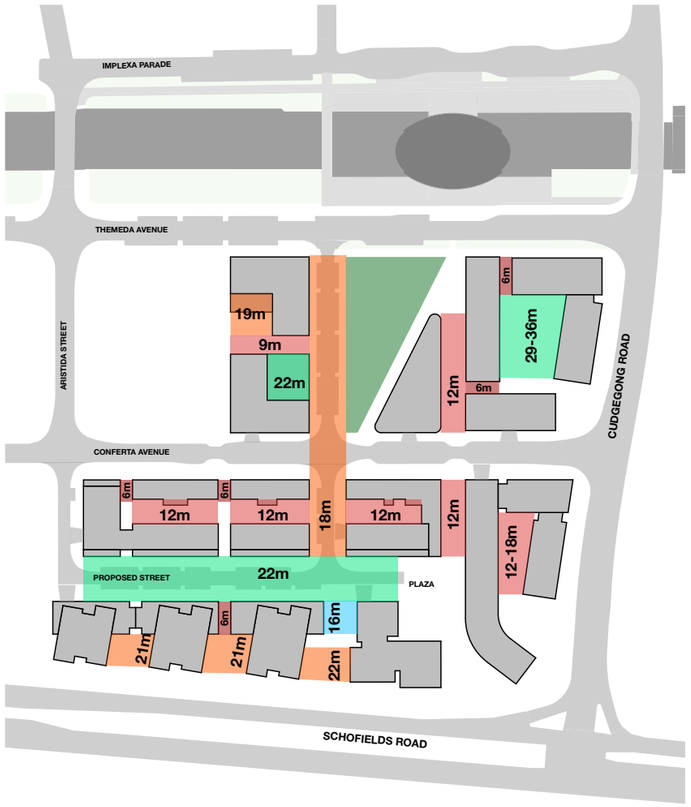
BUILDING HEIGHTS, SEPARATION & SETBACKS

PROVIDE A RANGE OF BUILDING HEIGHTS FROM 2 TO 8 STOREYS WITH SETBACKS AND SEPARATIONS TO SUPPORT THE CHARACTER OF THE PRECINCT, CREATE A VARIETY OF URBAN SCALES, AND TO MAXIMISE AMENITY FOR RESIDENTS AND PEDESTRIANS.

VARIATIONS IN HEIGHT, BULK AND SCALE

- Provide a range of building heights from 2 to 8 storeys to avoid uniformity, create a variety of urban scales across the development and to accommodate a range of housing typologies. Create a more varied and interesting skyline for the development when it is viewed from surrounding areas.
- Encourage a range of architectural solutions and building designs to create a diverse and interesting neighbourhood with careful consideration of massing, materials, fenestration and building scale.
- Position lower buildings to create an appropriate scale and character to streets and pedestrian links and to allow solar access to taller buildings within blocks.
- Locate taller buildings to take advantage of the amenity of the public park, views to the adjacent creek corridor and to increase density and activity in the town centre sites located closer to the Metro station.
- Configure the massing of buildings to the edges of the development (particularly the south and east) to avoid the perception of the development as a wall or closed enclave.

REFER TO BENNETT AND TRIMBLE URBAN DESIGN REPORT



BUILDING SEPARATION

- Provide building separations that comply or are greater than described in the ADG.
- Create separation between buildings that allows for appropriate levels of sun access, natural cross ventilation, acoustic and visual privacy to both the residents of the buildings and users of the public domain.
- Provide a range of building separations that create a series of streets, through-site links and open spaces with differing widths, scales and characters to create urban diversity.

REFER TO BENNETT AND TRIMBLE URBAN DESIGN REPORT

BUILDING SETBACKS

- Provide a range of building setbacks in response to context, typology and amenity.
- Buildings on sites adjacent to the public park and metro station where commercial and retail programs are located at lower levels require no setback to focus pedestrian activation to the street and create an energetic mixed-use town centre environment
- Setbacks are to be increased on sites not adjacent to the Metro station or the public park where residential accommodation is located on the ground floor.
- Buildings in these locations are to be setback 2 to 3 metres from the street to accommodate for terrace housing and maisonettes with private gardens accessed directly off the street and through-site links.

REFER TO BENNETT AND TRIMBLE URBAN DESIGN REPORT