

# Thornton

Canal Precinct

## Terrace Design Kit

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Peter Andrews + Associates Pty Ltd

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Peter Andrews + Associates Pty Ltd  
paa.design architecture planning urban design

PO Box 494 Terrigal NSW 2260  
Level 1 . 56 Terrigal Esplanade Terrigal  
Studio 67 Windmill Street Millers Point  
P: +61 2 4385 9126  
E: info@paadesign.com.au  
W: www.paadesign.com.au

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## Contents



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# Thornton

## Canal Precinct

Development of Thornton residential area at North Penrith is being undertaken by UrbanGrowth NSW. As part of this project, UrbanGrowth NSW is investigating the design development for the Canal Precinct to provide a framework for future development these sites. This Terrace Design Kit has been prepared to provide guidance for developers undertaking projects in this precinct. This study undertakes an analysis of Lots 3101 and 3102 (the subject site) refer to Figure 1.

Lots 3101 and 3102 adjoin the canal to the south (refer to Figure 1). Lots 3101 and 3102 have been identified to include integrated housing and medium density apartments as outlined in the North Penrith Design Guidelines 2013.

An analysis of the site has been undertaken as part of the study. This includes identification of:

- Key characteristics / site analysis.
- Preferred subdivision pattern.
- Building envelope plan.
- Indicative terrace layout / yield study.
- Indicative terrace / apartment dwellings.

It is important to add value to the work that has already been implemented at Thornton. The Canal Precinct is one of the premier locations within Thornton.

Key elements considered in the design concept for the subject site include:

- Developing architectural form that responds to the new wave of urbanisation that Sydney will need to embrace to meet its future housing requirements.
- Responding to a diverse range of housing typologies within the context of the Thornton masterplan.
- Providing a quality outcome within realistic price points relies on a practical and pragmatic approach to the design to ensure a high quality outcome that is consistent with the projected market at Thornton.
- The specific project location to the canal, overall context with the Thornton master plan, including the site's relationship to the town centre and public transport and services.
- Activation of primary street and canal frontages.
- Other design principles include optimising orientation for living and outdoor areas to maximise solar access and favourable breezes, contributing to way finding in Thornton and massing in relation to the surrounding elements of the masterplan.



Figure 1 – Subject Site - Lot 3101 and Lot 3102



Figure 2 – Aerial View

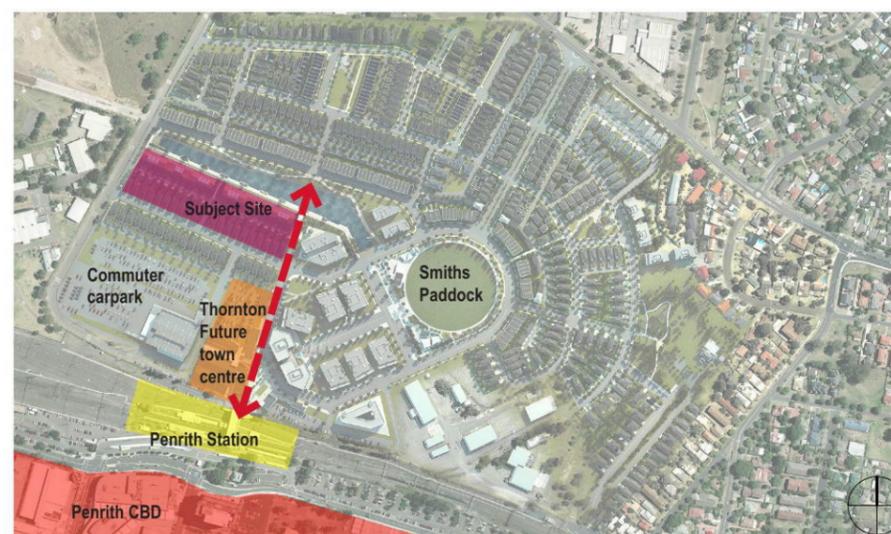


Figure 3 – Context

## Introduction



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## Canal Precinct

The following outlines key site characteristics and requirements of the design guidelines.

### 1 SOLAR ACCESS

70% of the dwellings are to have a minimum 2 hours sunlight from 9.00am to 3.00pm on 21st June to living rooms and POS.

### 2 VIEWS/CANAL VIEWS

Important views are from the site to the canal.

Other views to the canal are from:

- The Cricketers Pavilion and Smiths Paddock.
- The southern extent of Lord Sheffield Circuit adjoining the town centre.
- Kleinig Place.
- Radcliffe Place.
- The residential areas to the north of the canal along Thornton Drive.

### 3 PEDESTRIAN CONNECTION

The major pedestrian connections are:

- The canal edges linking residential dwellings to Lord Sheffield Circuit, the Cricketers Pavilion and Smiths Paddock.
- Along Lord Sheffield Drive and Kleinig Place linking the site and the canal to the town centre.
- The bridge across the canal connecting the residential areas to the north to the town centre.

### 4 ACTIVATION AND IMPORTANT FRONTAGES

The canal and Lord Sheffield Circuit are important frontages to be considered in the design.

Informal surveillance will also be required along the pedestrian access ways and the lane ways connecting to the canal.

### 5 MASSING AND RELATIONSHIP TO ADJOINING DEVELOPMENT

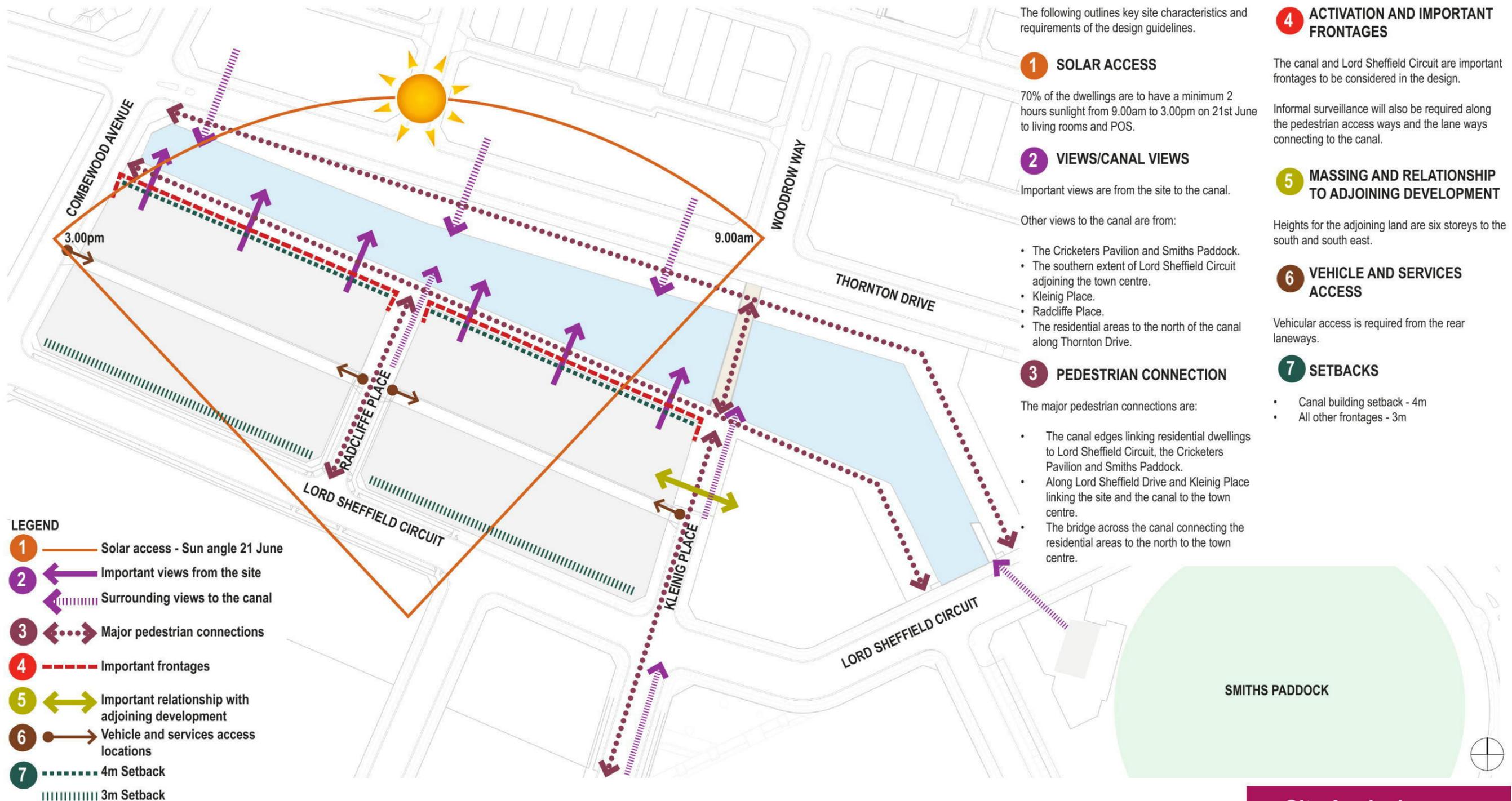
Heights for the adjoining land are six storeys to the south and south east.

### 6 VEHICLE AND SERVICES ACCESS

Vehicular access is required from the rear laneways.

### 7 SETBACKS

- Canal building setback - 4m
- All other frontages - 3m



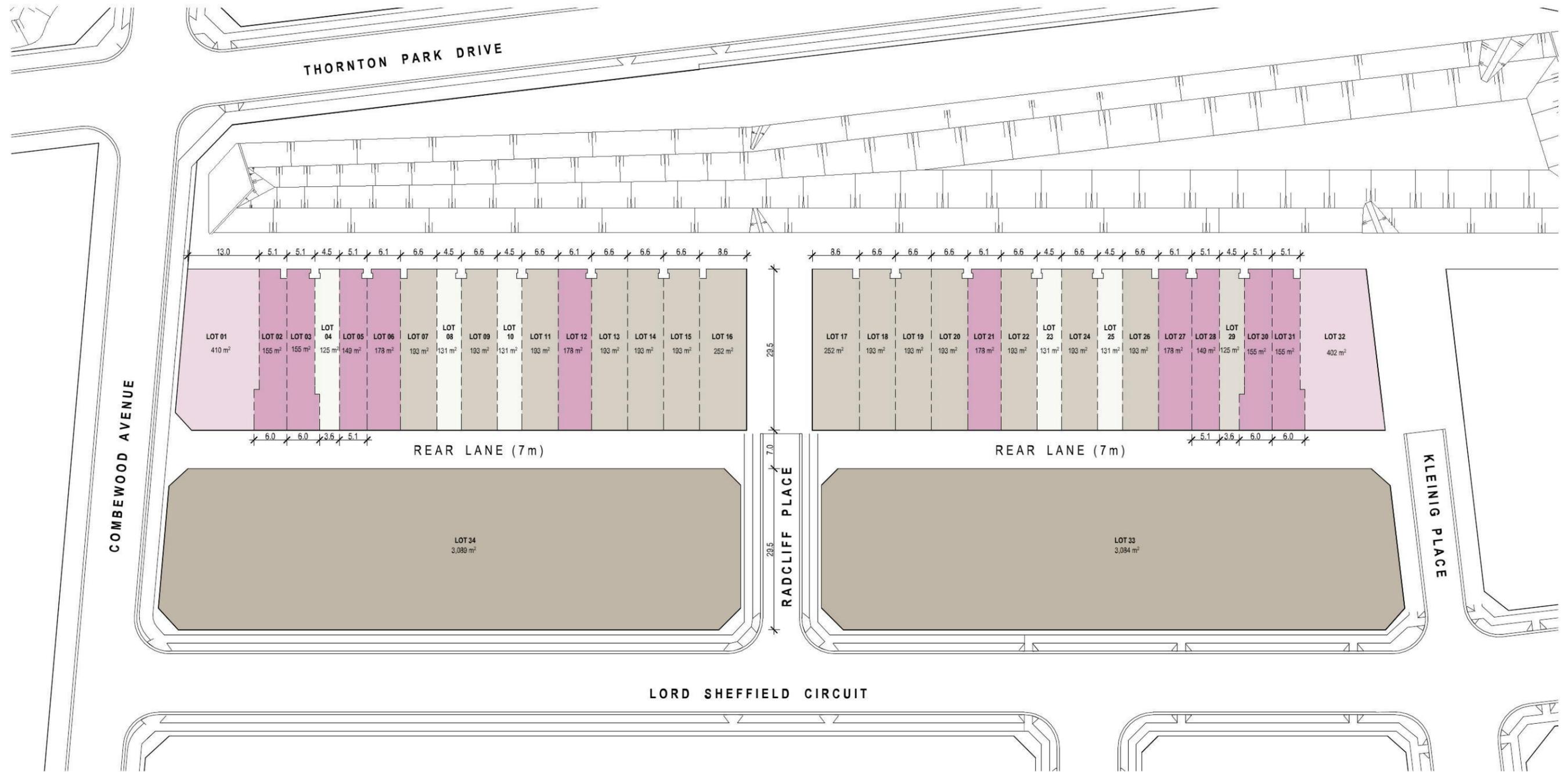
#### LEGEND

- 1 Solar access - Sun angle 21 June
- 2 Important views from the site
- Surrounding views to the canal
- 3 Major pedestrian connections
- 4 Important frontages
- 5 Important relationship with adjoining development
- 6 Vehicle and services access locations
- 7 4m Setback
- 3m Setback

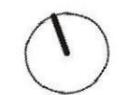
## Site Analysis



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Scale 1:750@A3



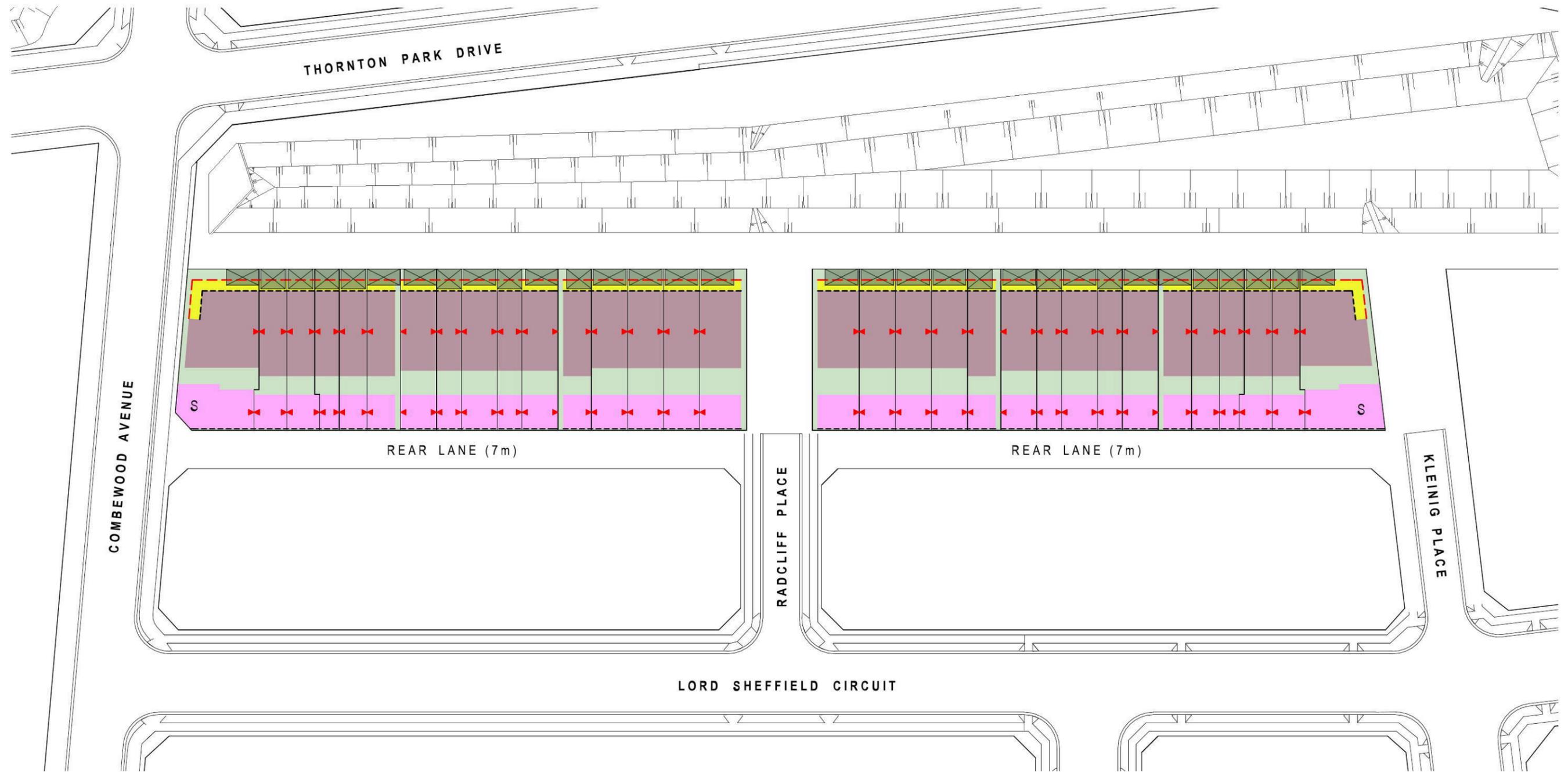
LEGEND - LOT FRONTAGES (TYPICAL)

- 4.5m WIDE LOTS
- 5.1m WIDE LOTS
- 6.6m WIDE LOTS
- END LOTS
- SUPER LOTS

## Subdivision Plan



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Scale 1:750@A3



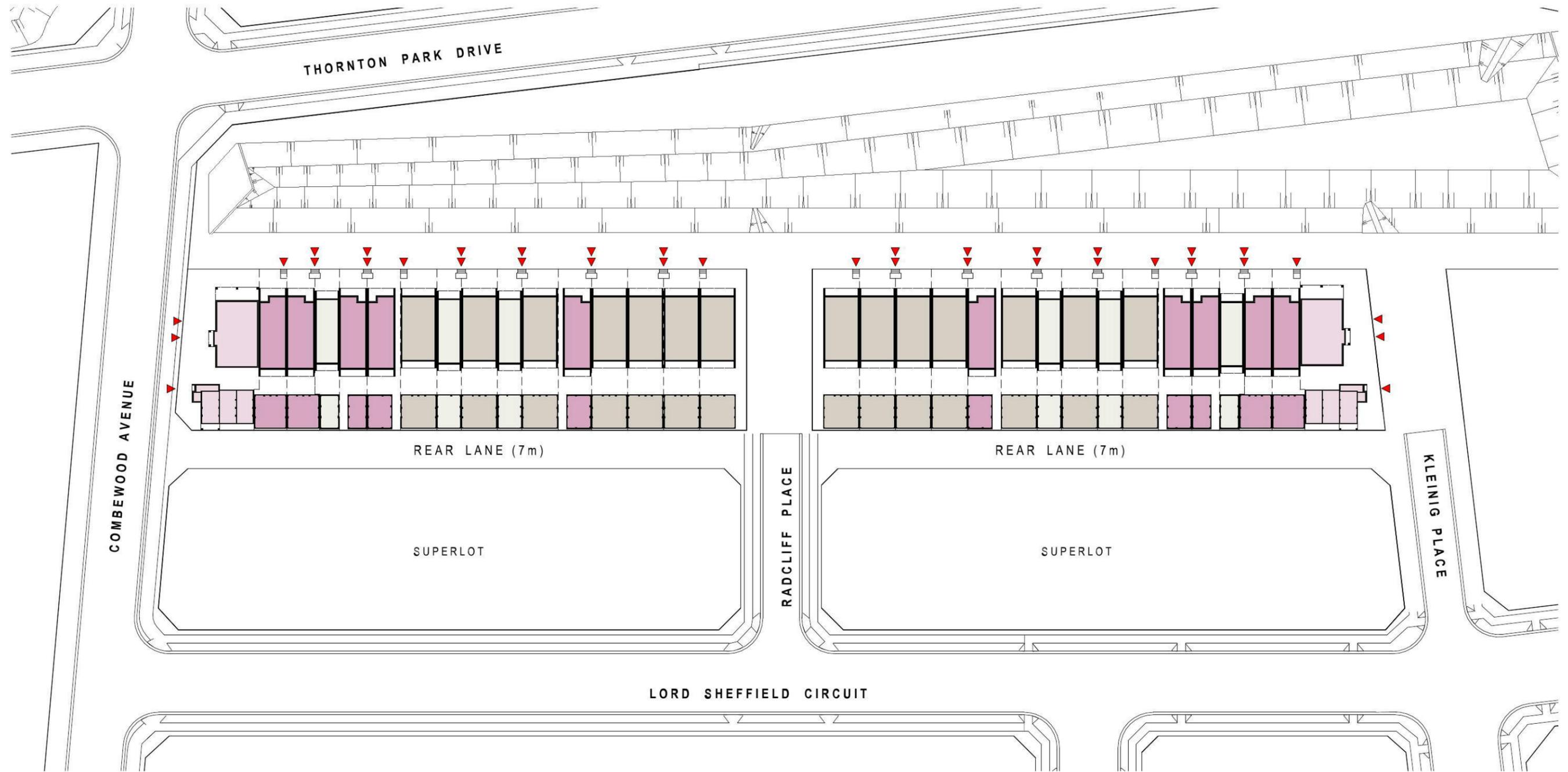
**LEGEND**

- MINIMUM BUILDING SETBACK LINE
- ARTICULATION ZONE
- X ZERO LOT BOUNDARY
- PRIMARY BUILDING
- PREFERRED PRIVATE OPEN SPACE
- PRINCIPAL PRIVATE OPEN SPACE
- PREFERRED GARAGE LOCATION
- S ANCILLARY DWELLING (PREFERRED LOCATION)

## Building Envelope



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Scale 1:750@A3



**LEGEND - CANAL LOTS**

4.5m TERRACE DWELLINGS	6 (15%)
5.1m TERRACE DWELLINGS	10 (30%)
6.6m TERRACE DWELLINGS	14 (40%)
APARTMENT / STUDIO DWELLINGS	6 (15%)
<b>TOTAL</b>	<b>36 DWELLINGS</b>

**LEGEND - ACCESS**

- PROPOSED SHARED STAIR ACCESS TO DWELLING
- PROPOSED SINGLE STAIR ACCESS TO DWELLING

**Indicative Layout**



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## KEY DESIGN ELEMENTS

### Walls:

- Minimum 2 storey 'street wall' with simple repeating articulation.
- Third storey element encouraged particularly as end / corner features.
- Predominantly painted or rendered masonry.
- No large areas of face brick or weatherboard.
- Strong framed elements.
- Using a limited palette of materials and colours to create a composition of primary and secondary elements that incorporate extrusions, recesses, solids and voids.

### Balconies, verandahs and entries:

- Raised ground floor level and entry where possible.
- Covered entries or porches to dwellings to create deep shadows to recessed front doors.
- Recessed balconies behind solid 'street wall'. Avoid clip-on light weight balconies.
- Balustrade to be powder coated metal (similar simple style to fence panels).
- No glass, cable or decorative metal balustrades.

### Windows and doors:

- Strong vertical proportions.
- Deep reveals. Face brick sills and header courses acceptable (no extruded bricks). If lightweight walls on the upper storey, use external architrave to create a reveal.

### Roof:

- Parapet or mansard roof.
- No suburban, pitched roof style terraces.

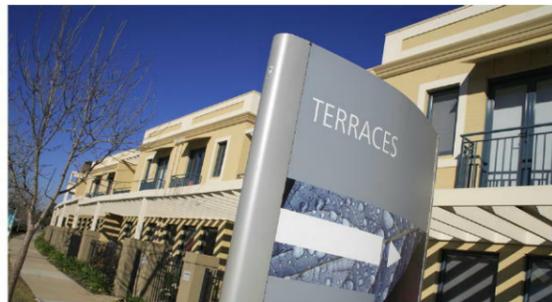
## Elevation Study



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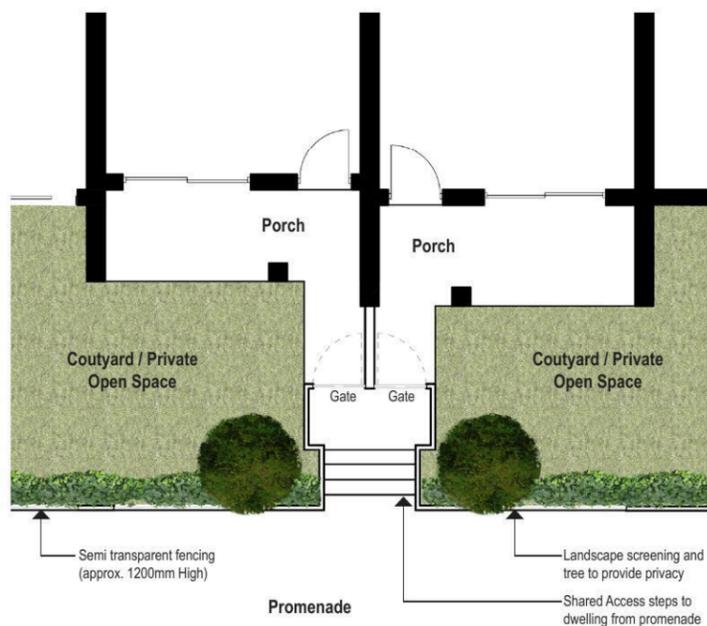
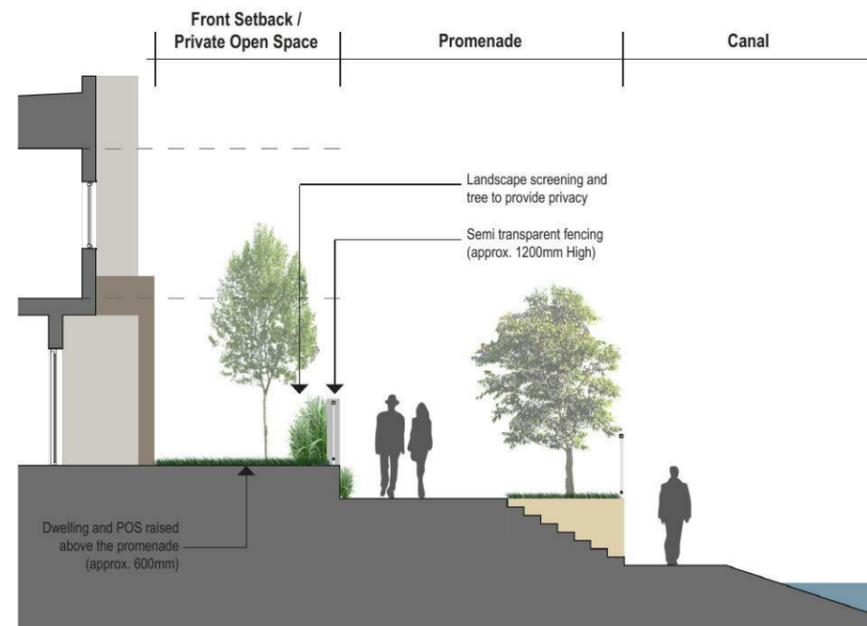
## KEY DESIGN ELEMENTS

- Use of a basic geometry for articulation of the facade using key elements such as entry zones, floor to floor heights and parapet heights.
- A rhythm of vertical and horizontal elements to break up the streetscape.
- A balance of solid surfaces and openings (eg balconies and windows).
- Articulation of the facades to secondary streets.
- Appropriate landscape treatments to front and side setbacks.

## Precedent Images



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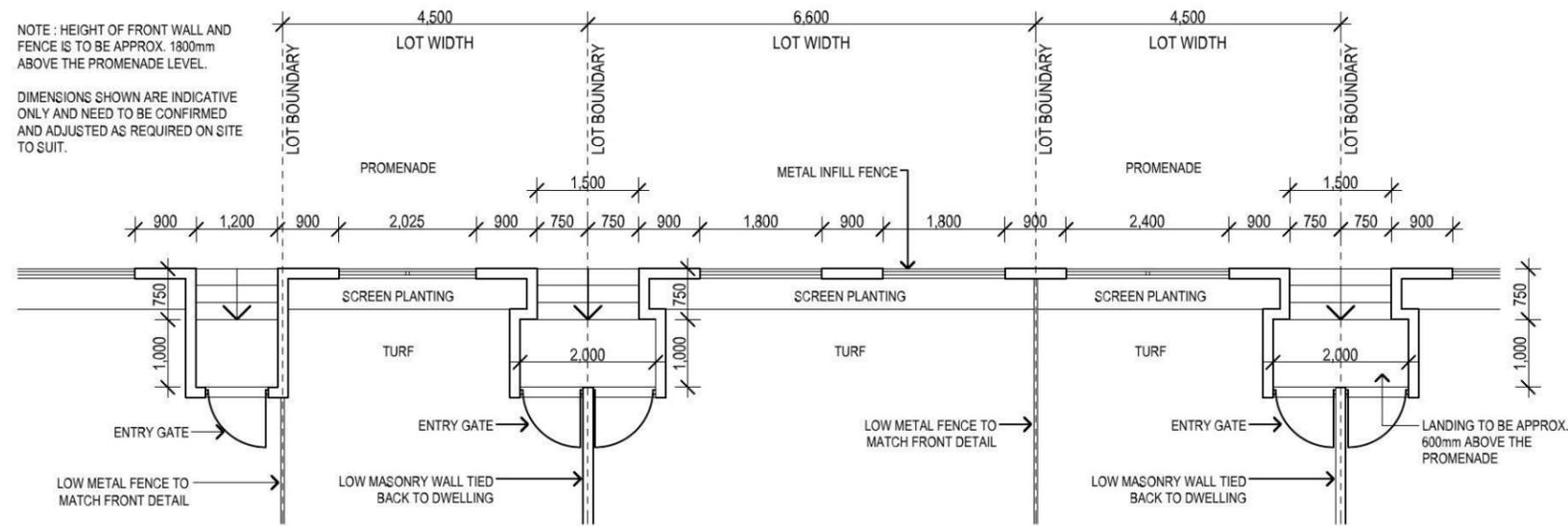
### KEY DESIGN ELEMENTS

- Entries should be readily identifiable from the promenade.
- Terrace dwelling and private open space raised above the promenade level.
- Fences and the treatment of the front courtyards are important in creating a transition zone between public spaces and private spaces within the home. The preferred height of these fences is 1.2m.
- Planting and screen fences to create privacy for the private open space but maintain solar access and views where possible.
- Provide an appropriate balance of solid and transparent fences.
- Encourage the use of semi-transparent fences and landscape solutions to provide the required privacy and surveillance.
- Use of a limited range of materials and colours will provide the required level of continuity in the streetscape.
- Landscape should be proportional to the size of the front courtyard.
- Windows to be located to ensure informal surveillance over the promenade.
- Encourage the use of shared access steps from the promenade level up to the dwelling providing separate entry gates.
- Discretely integrate utility requirements, such as electrical meter boxes, water and gas connections into the design of the fences and porch areas where they cannot be located at the rear of the lot.

### Canal Promenade



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Indicative Front Fence Detail



Indicative Front Fence Examples

## Canal Promenade



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