architectus™

Kellyville Station Precinct Proposal

Supplementary submission on behalf of the landowners of 2-18 Macquarie Avenue, 4-26 Bridget Place, Kellyville

Architectus Group Pty Ltd
ABN 90 131 245 684

Nominated Architect
Managing Director Sydney
Ray Brown
NSWARB 6359

Architectus Sydney
Level 18 MLC Centre
19 Martin Place
Sydney NSW 2000
Australia
T +61 2 8252 8400
F +61 2 8252 8600
sydney@architectus.com.au

Architectus Melbourne
Level 7 250 Victoria Parade
East Melbourne VIC 3002
Australia
T +61 3 9429 5733
F +61 3 9429 8480
melbourne@architectus.com.au
Managing Director Melbourne
Mark Wilde

www.architectus.com.au

architectus™

The concept presented in this report is indicative only, and subject to detailed design and approvals by the relevant authorities. Interested parties must form their own opinions in relation to the matters in this report. Architectus assume no responsibility for loss suffered by any person arising from any reliance placed upon this report.

Architectus Sydney
Level 18 MLC Centre 19 Martin Place Sydney
NSW 2000

T +61 2 8252 8400
F +61 2 8252 8600

www.architectus.com.au

Content

architectus™

1.0 Introduction

1.1 Purpose of this report

Purpose of this report

Architectus has been engaged by the landowners of 21 residential lots in 2-18 Macquarie Avenue & 4-26 Bridget Place, Kellyville, to investigate the development potential of this site, and provide a submission on the Kellyville Station Precinct report.

The combined site is over 11,600sqm and located 250m from the new Kellyville Train Station, scheduled for opening in 2019. The landowners have come to agreement about the coordinated sale of the land, creating an opportunity for a significant, master planned development on this key site opposite the station and the parklands. The coordinated development of this site results in a number of public domain, built form and density opportunities, which are presented later in this submission.

The detailed submission presents our analysis, detailed testing and draft alternative controls for the site, should the NSW Department of Planning and Environment support an increase in built form for the consolidated site.

Report objectives

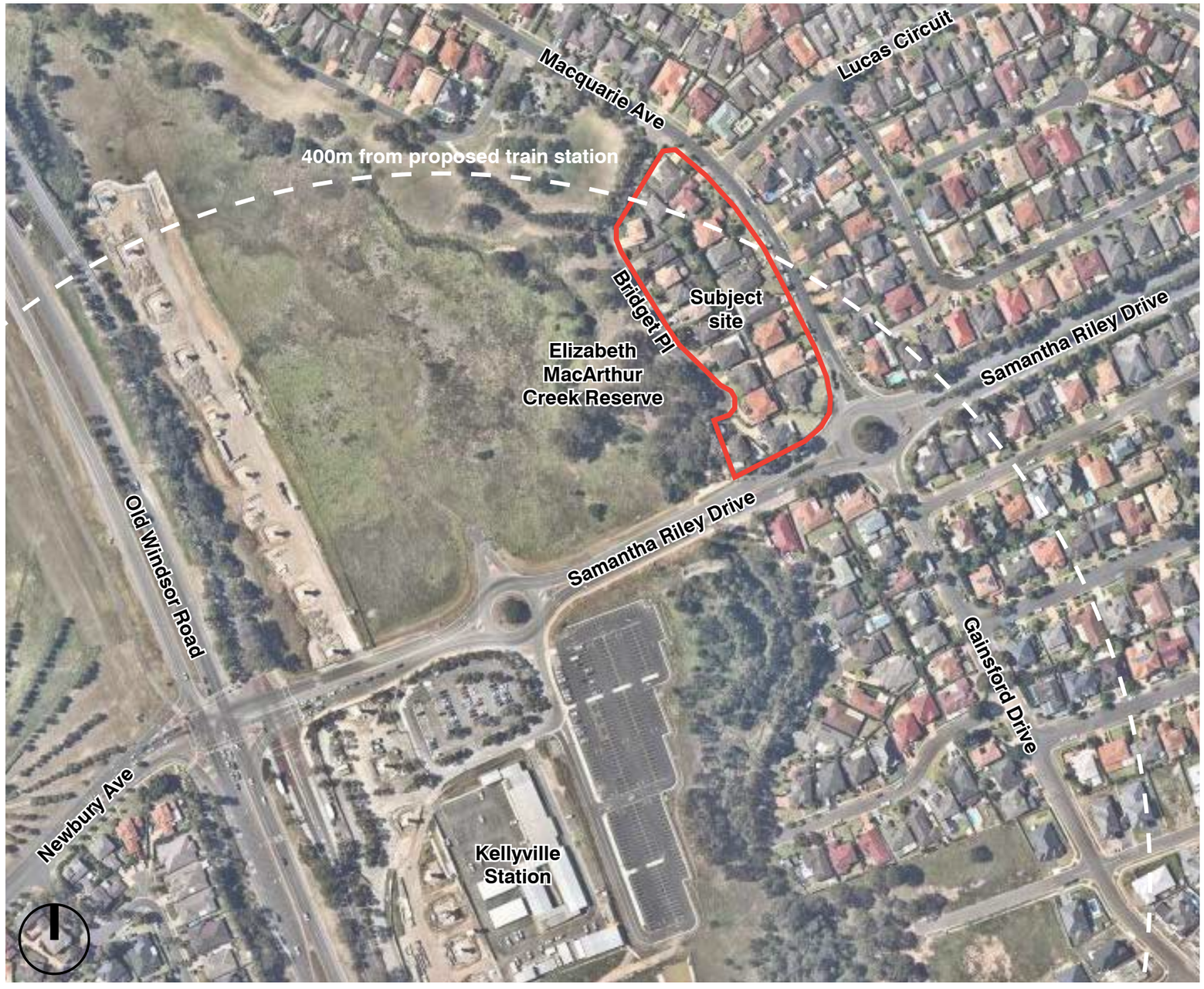
The objectives for this report are to:

– Understand the site's strategic planning context, local character and existing planning controls;

– Demonstrate the potential of the site to consolidate the future role of Kellyville as a Station Precinct and focus for urban renewal;

– Identify appropriate urban design principles for the site; and

– Prepare a master plan and indicative built form concept for the site that demonstrates the development potential of the site and the most appropriate built form and public domain.



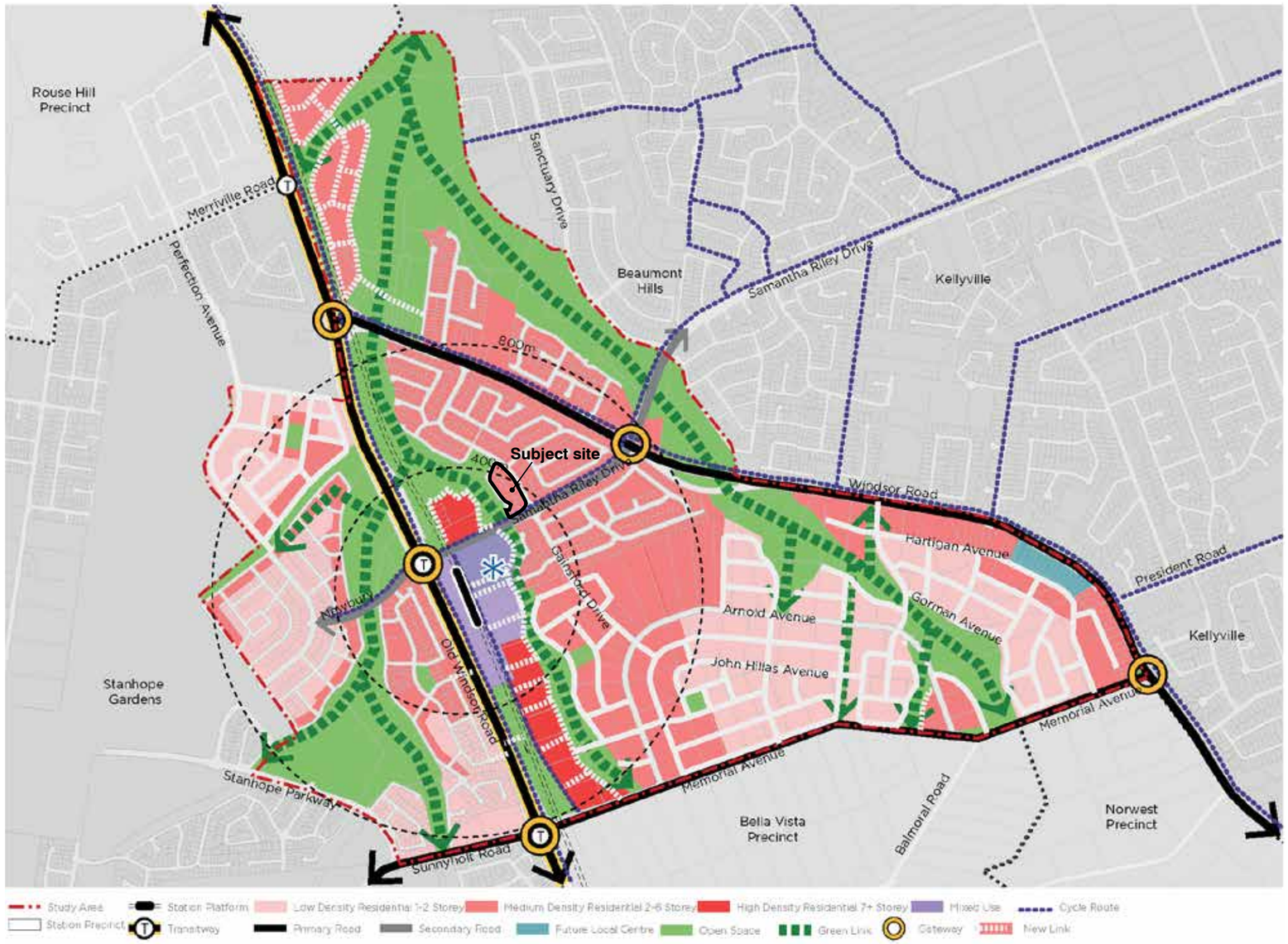
1.2 The opportunity

The 2013 NSW Government Structure Plan for the Kellyville Station set an expectation for the urban renewal of the Kellyville area for a high density, mixed use centre focussed around a new train station and local centre. The strategy is consistent with the underlying principle of the State Government's 'A Plan for Growing Sydney' - large sites in well-connected and serviced centres should be investigated for their potential to accommodate higher densities and provide diverse housing opportunities.

Kellyville's role in the corridor is as a primarily residential centre, with a landscaped character and quality public domain that balances the impacts of increased densities. The subject consolidated site is a pivotal part of this strategy – the site is highly visible from the station precinct and has the critical role of providing the edge to the existing linear open space that will form the spine of the new precinct.

The analysis presented in both the 2013 Structure Report, and in the 2015 Kellyville Station Precinct Report demonstrates that many sites within 800m of the station are constrained and development potential is limited. The key challenge for the renewal of the Kellyville centre is fragmented ownership. Apart from the several large lots near the rail line, the vast majority of land near the station is developed for single dwellings.

The Kellyville Station Structure Plan prepared by the NSW Department of Planning and Environment anticipates that much of this subdivided area will develop for residential flat buildings up to 2-6 storeys, on single lots or consolidated two-lot parcels. This represents a potential under-development for sites in close proximity to heavy rail, and the resulting built form does not present much potential for the creation of quality open spaces and streetscapes.



Kellyville Station Structure Plan (NSW Department of Planning & Environment).

1.3 The potential

On larger sites near the station, the Kellyville Station Precinct Proposal envisages master-planned mixed use development with good communal and public open space, low street wall heights and tall slender towers up to 15 storeys. This typology, that is only achievable on larger sites, is a far superior outcome for the neighbourhood and the amenity of individual apartments.

Because the landowners have agreed to sell their land as one consolidated parcel (a Memorandum of Understanding to this effect will be provided as part of the detailed submission) it can be planned for as one large site, where this same typology can be achieved.

The treatment of the subject site as one lot, and increased height and density controls provide the opportunity for the following outcomes:

1. High quality built form: pedestrian scaled street walls with slender, well-spaced towers
2. Large, consolidated common open spaces that allow for active and passive recreation
3. Coordinated public domain – landscaped setbacks
4. Coordinated public domain – through site links
5. More homes near the station and the local centre
6. Design excellence

Preferred building typology for this context – 6 storey street walls and a slender tower in Pyrmont.

The development of the sites as one lot presents the opportunity to deliver a large consolidated common open space.

Because Victoria Park, Zetland was carefully master planned on large sites, 10m vegetated setbacks could be achieved and provide fantastic streetscape character.

With such a large development site, laneways, or through site links can be provided to improve permeability and views and connections to the park from the surrounding streets.

Ultimately, more people in the Kellyville centre means more retail trade for business, and active, busy urban spaces in the local centre.

A site this large is more likely to be developed by a larger developer who can be pushed to achieve a high quality of architectural design and amenity.

1.4 The site

The site's location

The site location is strategically position adjacent to a green corridor;

– To the north-west of the site is Elizabeth MacArthur Park, a 6,731sqm public park.

– To the west of the site is approx. 9.8 hectares of the Elizabeth MacArthur Creek Reserve green corridor.

Access to open space

The site has approximately 250m of open space frontage to the Elizabeth MacArthur Creek reserve and park.

Access to public transport

The proposed Kellyville Station, as part of the Northwest Metro, is within 400m of the station (the nearest point within 250m) and the Riley T-way with the following bus routes: 602X (to North Sydney), 607X & 617X (city bound), 612X (to Milsons Point), and 619 (to Macquarie Park via Castle Hill) is within 350m from the site.

Access to road networks

Samantha Riley Drive is a key major road within the regional area connecting Old Windsor Road in Kellyville to Glenhaven Road in Glenhaven. The site is also located close to Old Windsor Road and Sunnyholt Drive, two major arterial roads. The M7 Westlink and M2 Motorway is approx 4km from the site.

Adjoining built form

The site is surrounded by residential 1 to 2 storey single detached dwellings that is planned to change to medium density residential (3-6 storeys) in the Kellyville Station Precinct proposal. 301 Samantha Riley Drive, a 4.0:1 FSR DA approved development is located west of the site. The development has 7 buildings varying in heights between 12m-46m (4-15 storeys) with 660 apartments, 1,900sqm of retail & 100 space childcare.

View looking south-east to the subject site from Elizabeth MacArthur Park.

View looking south-east towards to the cul-de-sac with the subject site on the left and Elizabeth MacArthur Park on the right.

View looking north-east with the subject site on the right and Elizabeth MacArthur Park on the left.

View looking south at the intersection of Bridget Place and Macquarie Ave.

architectus™

2.0 The Station Precinct

2.1 Vision for the Kellyville Station Precinct

The subject site is located in a key strategic position within 250m of the Kellyville Station Precinct.

The following are the key visions from the Kellyville Station Precinct Proposal report:

– *The Sydney Metro Northwest and new station at Kellyville* ***is the catalyst for providing a new local centre with homes, jobs, shops, cafes and restaurants, and local services close to transport connections****, in an attractive and convenient place where people enjoy living, working and visiting.*

– *The principles of* ***transit-oriented development*** *have underpinned the planning for the precinct, to encourage access to, and use of this significant piece of transport infrastructure.*

– *One of the key features of attractive, vibrant centres is* ***high quality and well-located public spaces****, and is an important component of the precinct proposal. Public spaces proposed include a new town square adjoining the station, new and expanded sports fields, neighbourhood parks and more accessible natural open space areas adjoining the creek corridors. Street design, including tree planting and paths, is also part of this strategy. Landscaping and vegetation will be supported to help manage the microclimate, help clean the air and soften the appearance of buildings.*

– *The precinct is also being planned so that* ***getting around on foot, bicycle and public transport will be realistic and viable modes of travel****, such as getting to the station, going to work, shops and cafes, or even just for exercise and health. The improved paths and connections will not just benefit those living closest to the station, but also residents elsewhere in the precinct.*

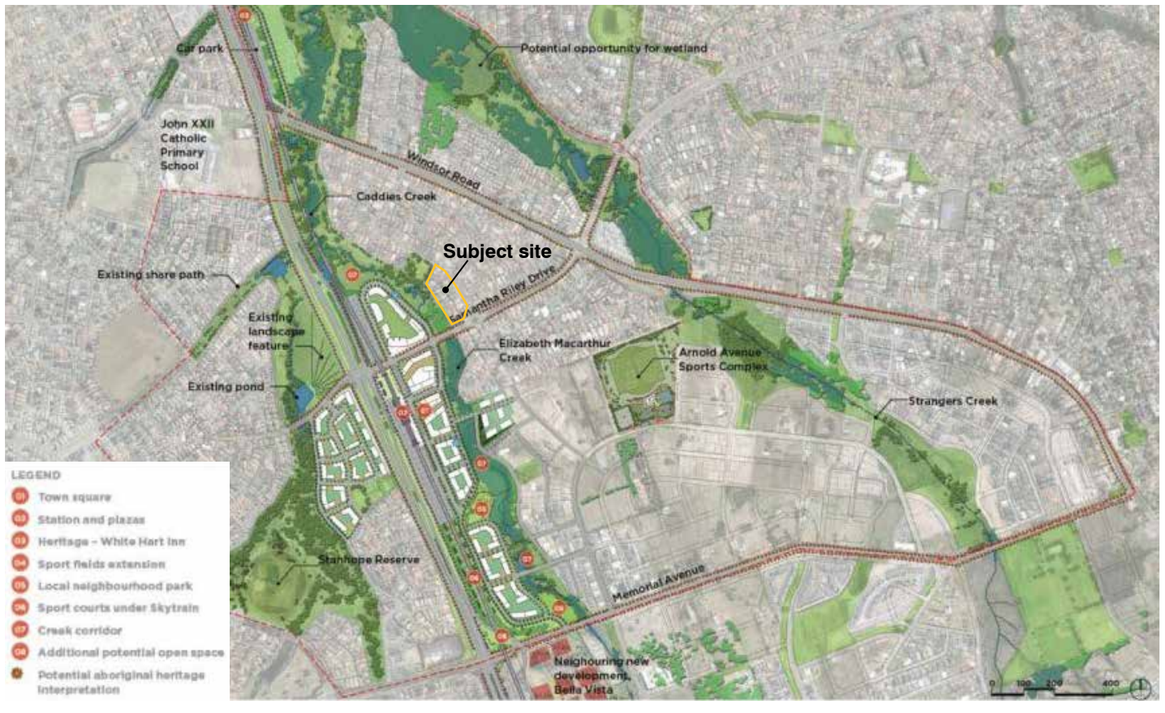
– ***Focusing the supply of new homes closest to station*** *means that more residents will be able to benefit from the convenience of being so close to the railway station as well as local shops, cafes and other services. A range of housing types are proposed in the residential areas of the precinct, to provide increased housing choice in the precinct, and provide a transition in heights down to the detached, single and two storey housing elsewhere in the precinct. It is estimated that the precinct could provide for around 4,200 new dwellings over the next 20 years.*

– ***Providing for a range of apartment style living*** *options provides more housing choice for those residents who still want to stay in the same area but would prefer a smaller, more convenient housing type. This also recognises the increase in single and couple only households in Sydney who don't want a large house to maintain. This enables the more established areas with large stand alone homes to retain their character, and this important housing choice.*

– ***Having more people in the new local centre also increases the viability of local business*** *and services, and can also increase the feeling of safety and liveliness by having more activity and "eyes on the street", especially after dark.*

– *To achieve this vision, controls are proposed for The Hills Local Environmental Plan 2012 and the Blacktown Local Environmental Plan 2015. In addition, recommended controls have been prepared for the Councils to consider adopting into their relevant Development Control Plans.*

Vision for the Kellyville Station Precinct Plan (NSW Department of Planning & Environment)



2.2 Kellyville Station Precinct Structure Plan

– The Kellyville Station Precinct is centred on the new Kellyville Station which will provide excellent transport access to employment centres, retail hubs and educational facilities across Sydney.

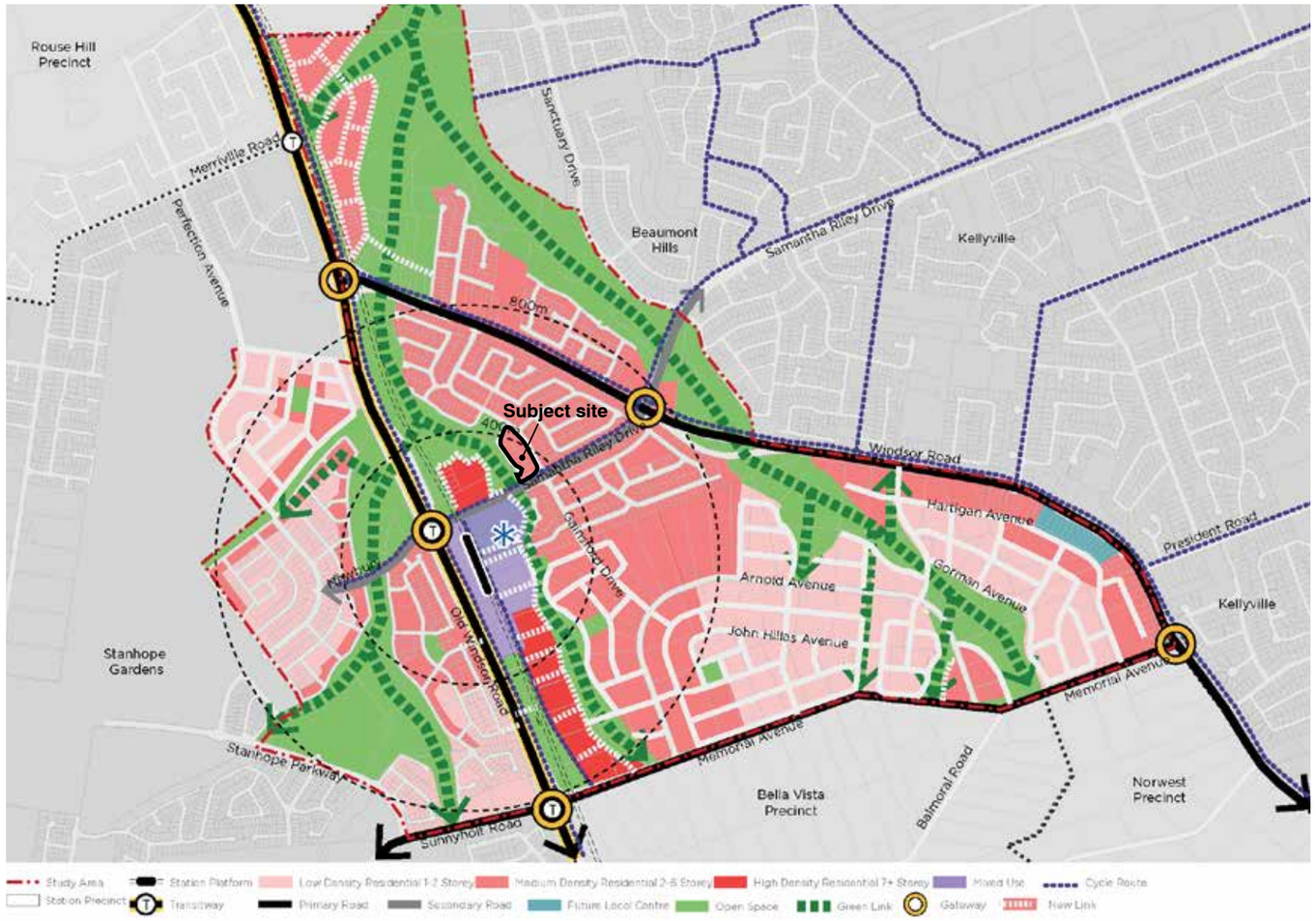
– The precinct will provide for a greater supply of homes, more housing choice, and more jobs and services closer to home.

– The Kellyville Precinct will be transformed into a vibrant, connected and walkable centre which is attractive to live, work and spend time in.

– The station precinct includes land within an 800m radius, or roughly a 10 minute walk, of the new Kellyville station. The boundary has also taken into account the surrounding road network, natural features, and the development pattern of the area.

Impression of the streetview overlooking the town square

Impression of the pedestrian link from Kellyville Station to the Elizabeth Macarthur Creek corridor.



Kellyville Station Structure Plan (NSW Department of Planning & Environment).
The site is located within 400m of Kellyville Station, the nearest point in site is less than 250m.

2.3 Kellyville Station Precinct - built form vision

Given the subject site's large size and proximity to the train station and local centre, it is considered an ideal opportunity site for increasing densities consistent with the principles from the Kellyville Station Precinct Planning Report.

The Kellyville Station Precinct built form vision provides the following principles and rationale for heights and distribution of tall buildings within the precinct:

The built form strategy for the precinct has considered the 2013 Structure Plan and the technical studies prepared for the precinct proposal. The different character areas in the Kellyville Station precinct will each have different built form characters, which are discussed below.

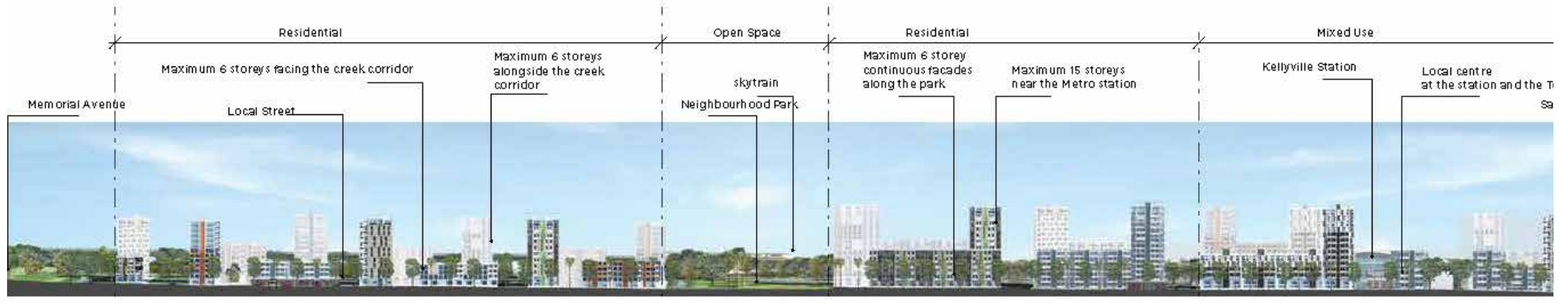
Local Centre

The area directly adjoining the new station will see the focus of activity in the precinct, with a new centre featuring a town square, which will also link the station to the creek corridor and residential areas beyond. Shops, cafes and restaurants and other business premises are planned to face the streets and plaza that will be used throughout the day and evening. Residential apartments will be located above these premises. There is also provision for a new community centre located in the plaza.

The recommended controls for built form include:

- *identifying locations for 'active street frontages', where shops and services are to face the street, **to promote a lively and safe environment**, as well as promoting outdoor seating at cafes and restaurants;*
- *minimal setbacks to promote activity in the street, with a frontage (address) to the street; and*
- *the maximum building heights will be 15 storeys. These will only be in limited locations as taller buildings require greater separation distances between each other, and need to minimise overshadowing. It is expected there will be a range of different heights in the local centre.*

Station sub-precinct view north east - indicative built form (NSW Department of Planning & Environment)



Indicative elevation of the built form (NSW Department of Planning & Environment)

Residential – Apartments

Land between Memorial Avenue and Samantha Riley Drive will feature most of the new housing planned for the precinct. It is also proposed that land on the southern side of Newbury Avenue in Stanhope Gardens be provided for apartments. Locating more housing in these locations is important because as identified in the transport study, ***public transport use is higher within 400 metres of a station with good frequency.*** *These apartments will also provide a housing choice not currently available in Kellyville, to benefit from the proximity to transport, shops and services, but also limited in its extent to reduce the impacts on established residential areas.*

The height and floor space ratio controls, along with the recommended Development Control Plan controls, also provide for large areas within apartment sites to function as private open space, providing improved amenity for residents. This open space can provide a range of functions including landscaped gardens, small play areas and paved areas. These will also improve the appearance of the developments from the street and other public areas.

Recommended controls include:

- *building heights up to 12 storeys, although the floor space ratio and recommended Development Control Plan controls encourage a range of heights;*
- *street, side and rear setbacks controls to provide suitable distances between buildings; and*
- *private open space and landscaping provisions for improved residential amenity and appearance of the buildings.*

Residential – Low to mid-rise apartments

There are three main areas within the precinct to provide for low to mid-rise apartment buildings, up to 6 storeys. An area in the northern-most part of the precinct, on the southern side of Sanctuary Drive, will feature low rise apartments to benefit from the proximity to the T-way stop near Picket Place.

A second area is located on the eastern side of Elizabeth Macarthur Creek, still within 400m of the station, with heights to transition down to the two-storey houses nearby.

A third area is in Stanhope Gardens further south of Newbury Avenue and north of Darcy Street, which has the potential to provide for low to mid rise apartments still within walking distance of the station.

Recommended controls include:

- *maximum building heights to range from 3 to 6 storeys;*
- *street, side and rear setbacks; and*
- *private open space and landscaping provisions for improved residential amenity and appearance of the buildings.*

Scale and transition

Example of low to mid-rise apartments adjacent to high density on the same street.

Example of 6-12 storey apartments fronting large public open space areas.

2.4 Kellyville Station Precinct - traffic and transport

Proposed street network and public transport

– New Sydney Metro Kellyville Station with bus, taxi,cycle and kiss-and-ride interchange facilities;

– Customer car park for 1200 spaces, along with 160 existing spaces at the T-way car park;

– Memorial Avenue upgrade between Old Windsor and Windsor Road; and

– A new T-intersection on the northern side of Memorial Avenue between Windsor Road and Elizabeth Macarthur Creek providing access to the southern end of the precinct.

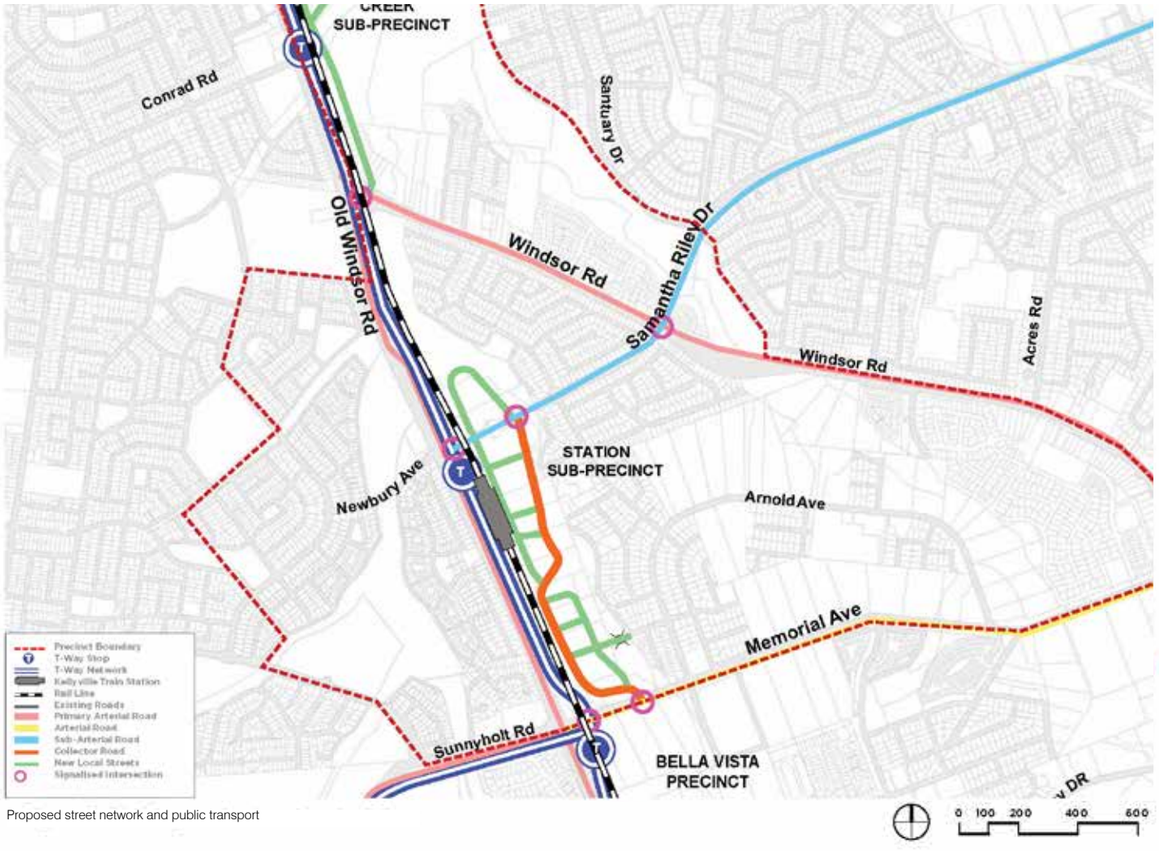
Existing street networks and Public transport

– Old Windsor Road, Windsor Road, Memorial Avenue and Samantha Riley Drive are the main roads through the precinct;

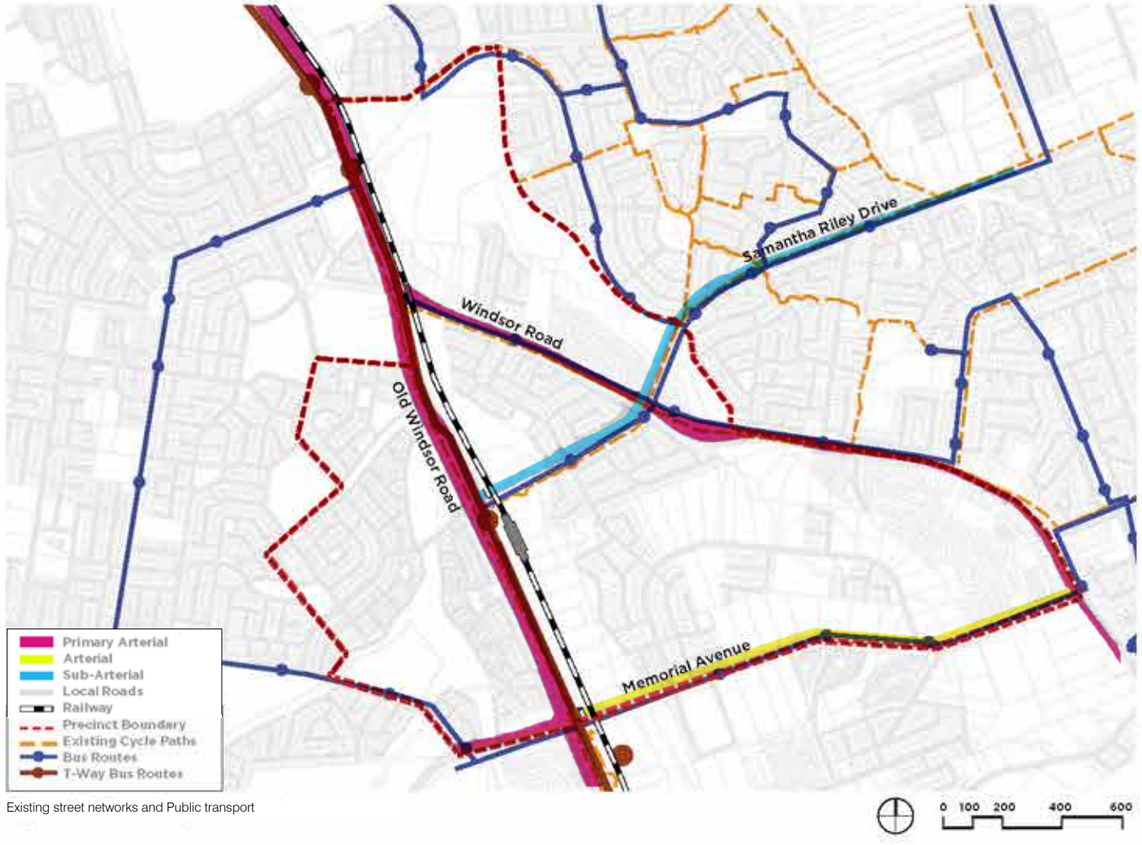
– Bus routes run along the North West Bus Transitway (T-way) to major destinations such as Rouse Hill, Parramatta and the Sydney Central Business District. Other bus services connect residents in Kellyville to areas such as North Sydney, Castle Hill and Macquarie Park;

– Within the precinct, cycle routes are generally limited to Old Windsor and Windsor Road;

– There are no separate pedestrian or bicycle crossings over Caddies Creek or Elizabeth Macarthur Creek.



Proposed street network and public transport



Existing street networks and Public transport

2.5 Kellyville Station Precinct planning controls summary

Land Use

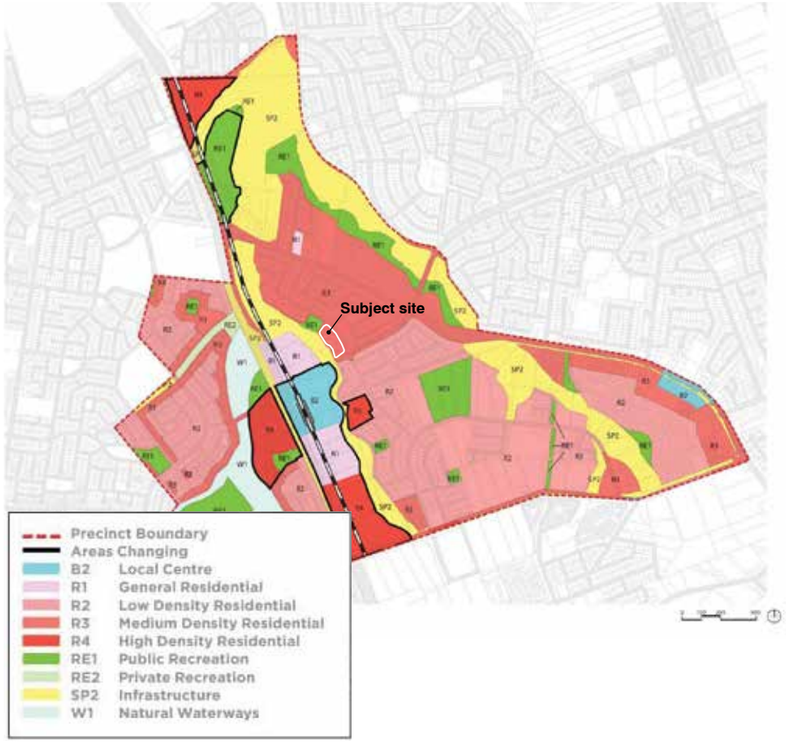
The site is currently zoned R3 - Medium Density under the Hills LEP 2012. The Kellyville Station Precinct Proposal recommends that the zoning remain unchanged. It is noted that this zone does not permit residential flat buildings - only dual occupancy development and multi-dwelling housing (town housing style development on one lot). This is generally inconsistent with the directions of the 2013 Structure Plan, which seek to promote residential flat buildings up to 6 storeys on the subject site, and therefore inconsistent with Local Planning Direction 5.9 - North West Rail Link.

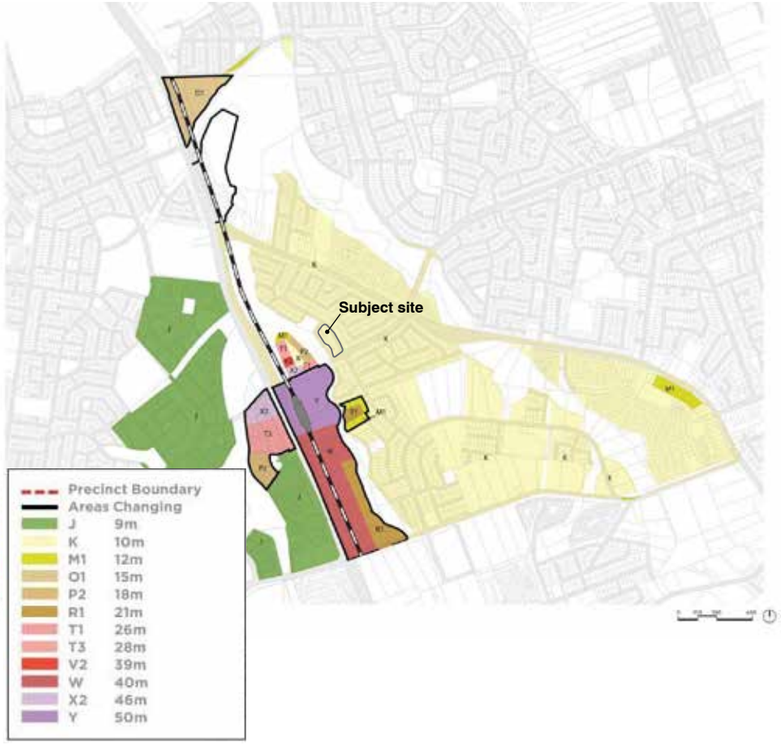
Height of Building (HOB)

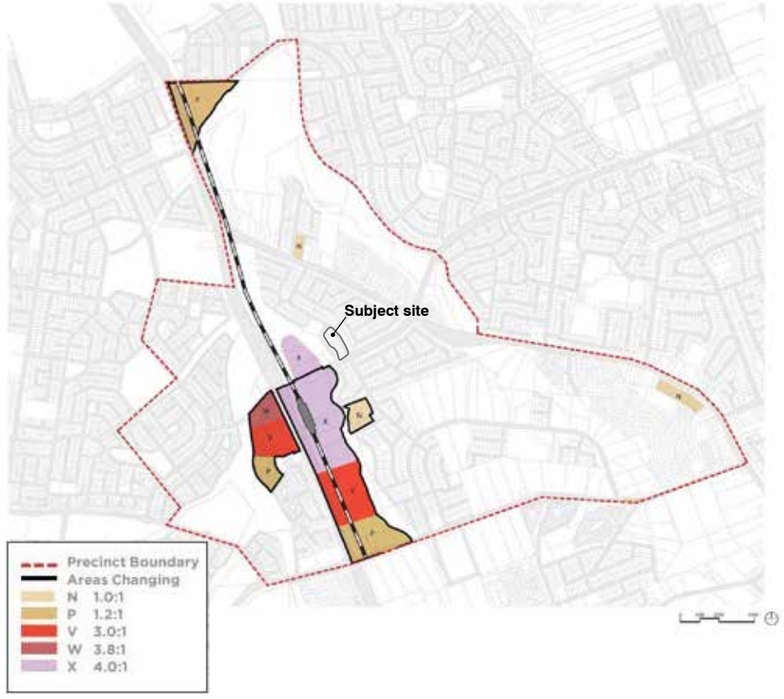
The Hills LEP 2012 allows for development with a maximum building height of 10m on the subject site. The Kellyville Station Precinct Proposal recommends that the maximum building height remains unchanged. It is noted that this is generally inconsistent with the directions of the 2013 Structure Plan, which seek to promote residential flat buildings up to 6 storeys on the subject site.

Floor Space Ratio (FSR)

The Hills LEP 2012 does not identify a maximum FSR for the site. The Kellyville Station Precinct Proposal does not propose to introduce an FSR control. If higher densities are supported on the site, it is recommended that an FSR control be introduced, to manage the density, performance and design quality of any development of the site.







3.0 The master plan

3.1 Urban Design principles for development of the site

The following urban design principles are considered essential for the best planning and urban design outcome for the subject site:

Public domain

– Encourage activation of Elizabeth Macarthur Creek Reserve by increasing densities on both sides of the creek corridor within 400m of the train station.

– Create new activated street edges and public laneways. The laneways should have a more intimate, urban character.

– Public and communal open space areas should have good solar access.

– Provide strong visual connection and passive surveillance of Elizabeth MacArthur Creek Reserve and take advantage of the northerly aspect and views to the Elizabeth MacArthur Creek Park.

– Break up the large lot with through site pedestrian connections.

– Consider the opportunities for open space uses on the rooftops of the planned buildings.

– Consider the adjoining sites, which are likely to be redeveloped in the future. The public domain strategy should be in the context of a co-ordinated approach for the broader precinct.

Built form

– Ensure that the master plan allows for the retention of view corridors through the site for existing and future tall buildings in the surrounding precinct.

– Any towers must be slender so as to minimise overshadowing and visual impacts. Tall, slender towers and low street walls are a superior built form outcome compared to a consistent 12-storey building, which would achieve a similar density with the same footprint.

– A street wall height of 4-6 storeys will provide for an urban, but pedestrian building scale and allow sun into the laneways. The upper level should be setback to reduce the scale of these buildings further.

– Towers should have a minimum separation distance of 24m between habitable rooms. 50-60m separation between towers reduces overall bulk and scale.

– Built form should minimise overshadowing and therefore the slender side of towers should generally face in a northerly direction. For blocks with two towers it can be advantageous to provide two orientations to reduce overall visual bulk - ensuring the towers are never both viewed on the long side from the same vantage point.

– Car parking should be located in basements where possible to minimise the impact on the public domain.

Land use

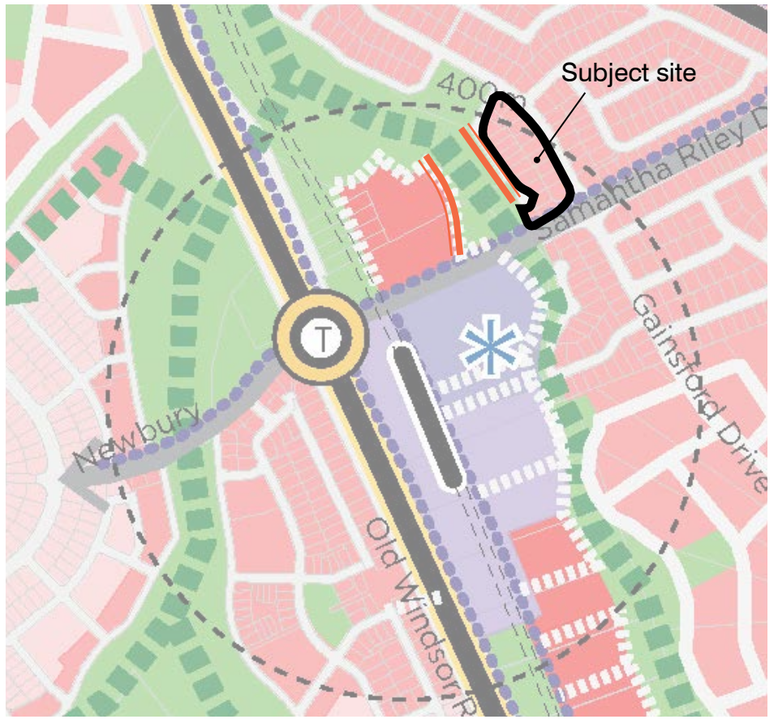
– Retail frontages should logically connect to and interact with the existing pedestrian desire lines and street frontages.

– Residential tower lobby entrances should be appropriately separated from retail uses on the ground levels.

– Large format retail and associated parking and loading should be located in the basement to minimise the impact on the public domain.

– The master plan should create public laneways to facilitate access, natural light and a welcoming space for visitors to enjoy restaurants and cafés.

– Demonstrate that the master plan is achievable within existing land ownership boundaries. Opportunity to discuss with Council options to reconfigure Bridget Place cul-de-sac to provide an improved frontage to Elizabeth MacArthur Creek Reserve.



Activation of Elizabeth MacArthur Creek Reserve within 400m of the station. The creek reserve broadens in width north of Samantha Riley Drive and has good northerly aspect, is close to the station is on a main pedestrian desire line for a large portion of the Station Precinct to the north-east. This is an ideal place to activate the open space edges and increase residential densities to create a vibrant urban park accessible to the town centre.

3.2 Built form: desired future character

8 storey street wall and 20 storey tower at Victoria Park, Zetland.

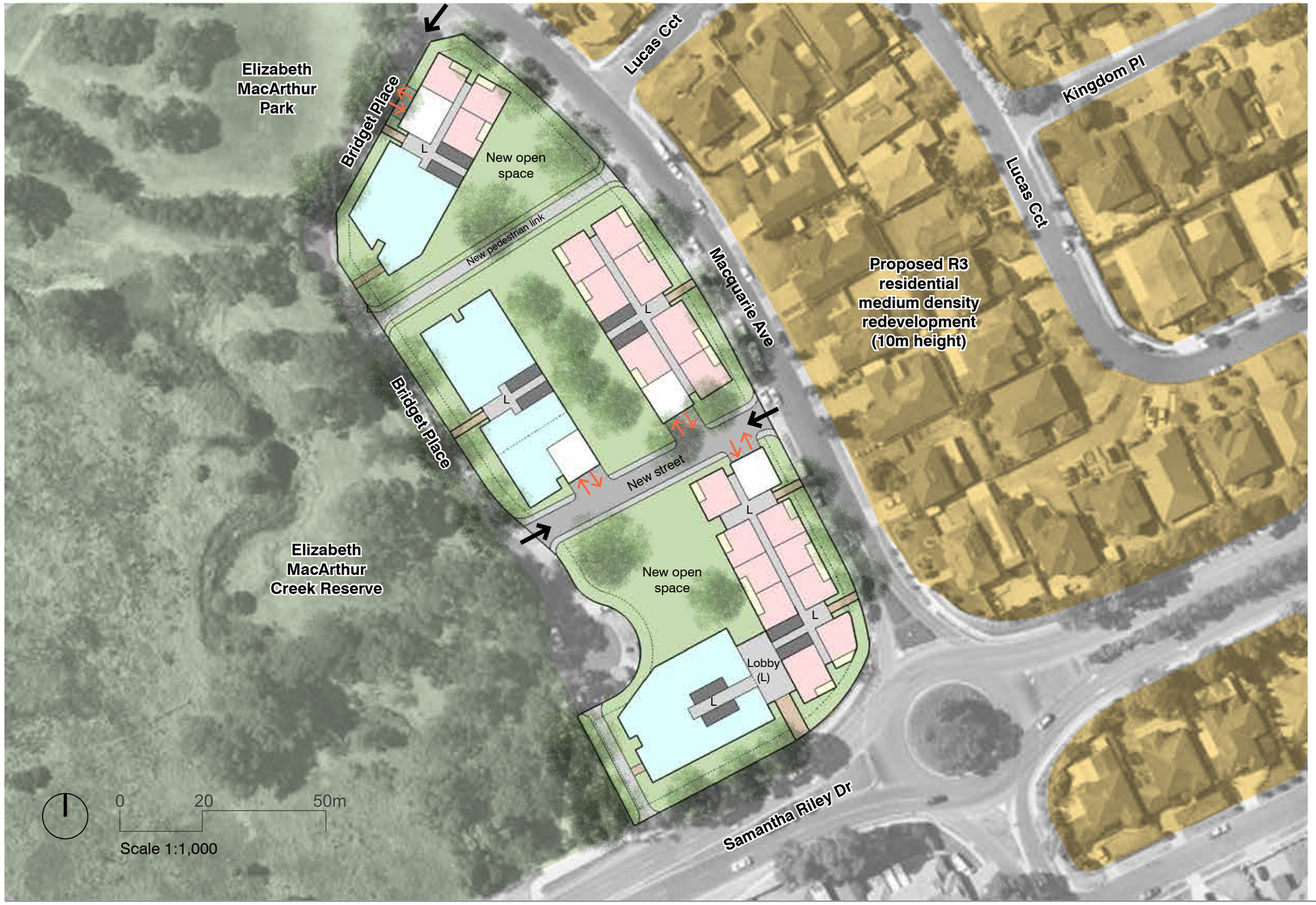
6 storey residential complex on Yaousa River, Moscow.

Example of a 3 storey residential complex.

3.3 Preferred option - perspective

View from the direction of Kellyville Station at Samantha Riley Drive to the proposed development and open space. In the foreground is the adjoining Elizabeth MacArthur Creek Reserve and 301 Samantha Riley Drive (left). This proposal envisages a more active creek corridor and increased densities within 400m of the station.

3.4 Illustrative master plan



Legend

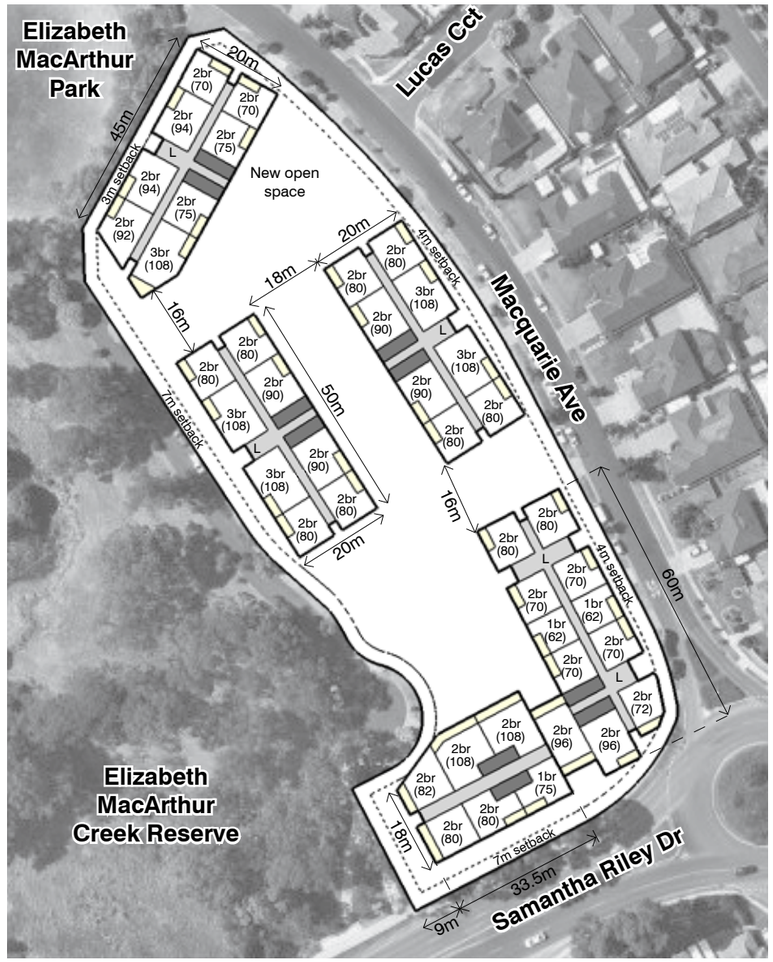
- New open space
- Residential and/or Non residential uses
- Residential
- Lift core / Corridor
- Basement carpark entry
- Street entry
- Pedestrian entry
- New shared laneway
- Pedestrian link

3.5 Typical layout plans

Ground floor

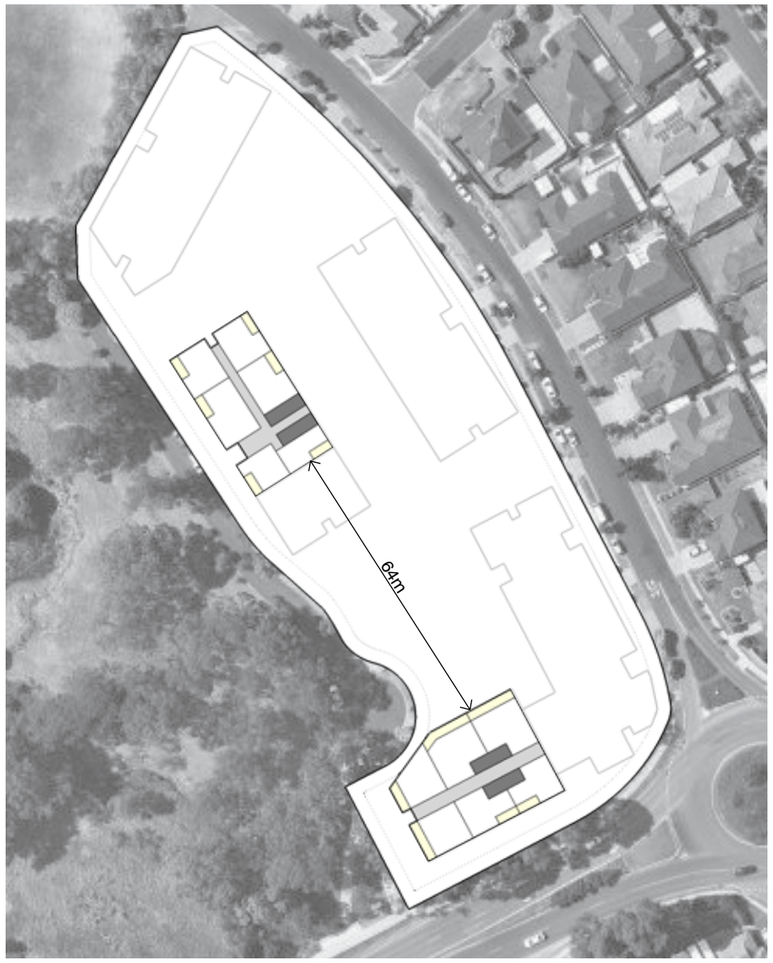
Potential for public accessible laneway with multiple entries into the basement car park. There is the opportunity to create a non-residential ground level frontage to the park.

Podium



Note: indicative bedroom sizes, to be refined in subsequent stages.

Tower

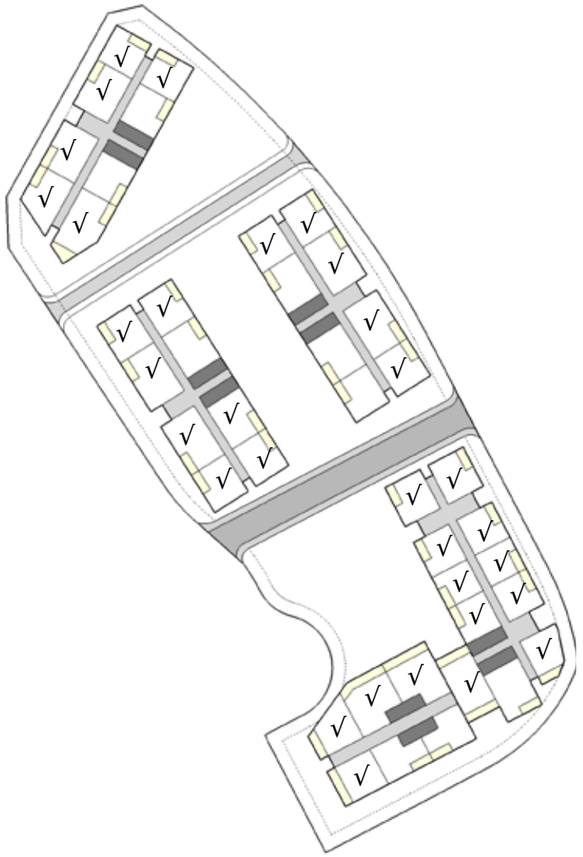


Legend:

- New open space
- Retail
- Residential / Balcony
- Lift / Corridor
- Vehicle access
- New shared laneway
- Pedestrian link / footpath

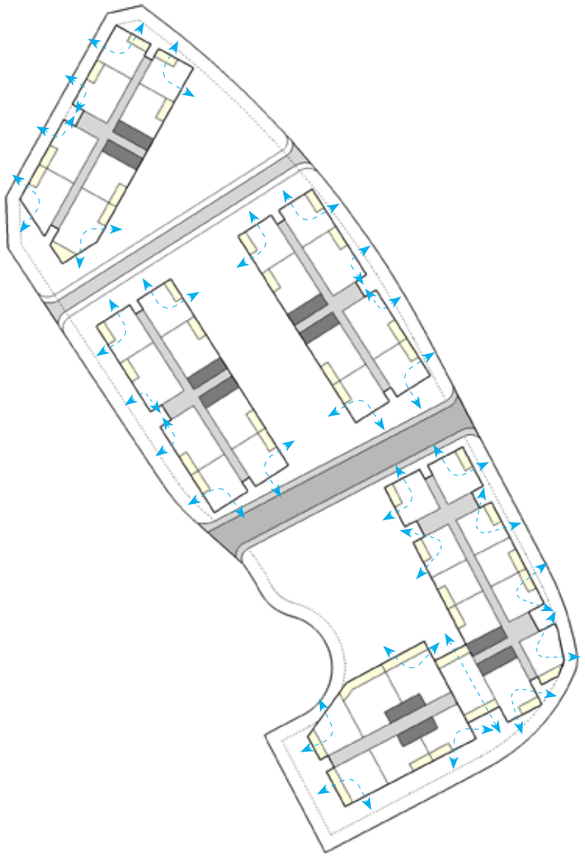
3.6 Solar access and cross ventilation

Solar access



Solar access 78%

Cross ventilation



Cross ventilation 73%

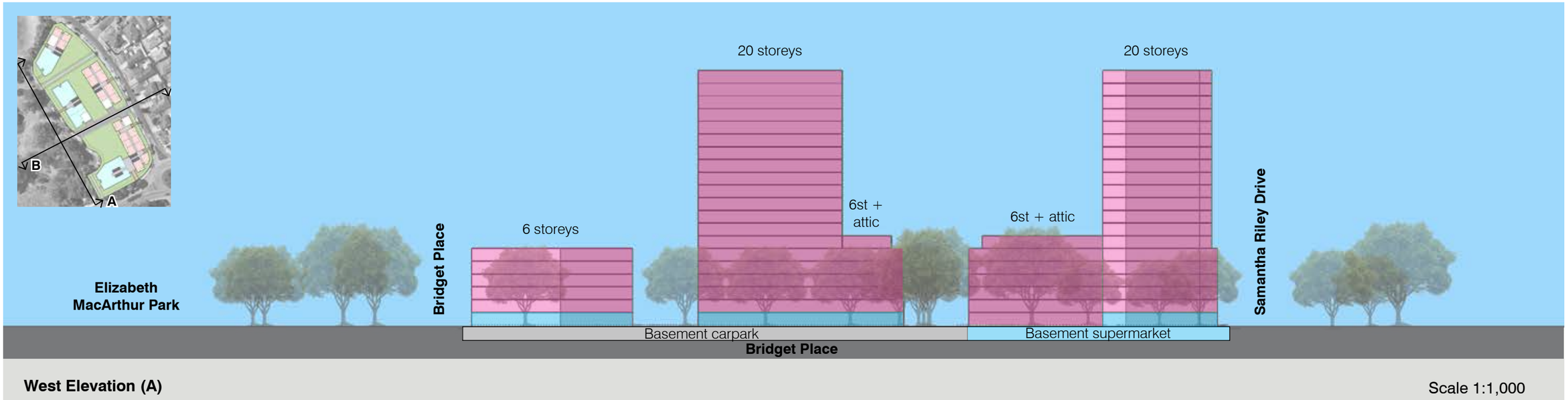
Tower solar access & cross ventilation

Cross ventilation 75%

Solar access 83%

3.7 Typical elevations

Cross sections showing scale transition



West Elevation (A) Scale 1:1,000

North Elevation (B) Scale 1:1,000

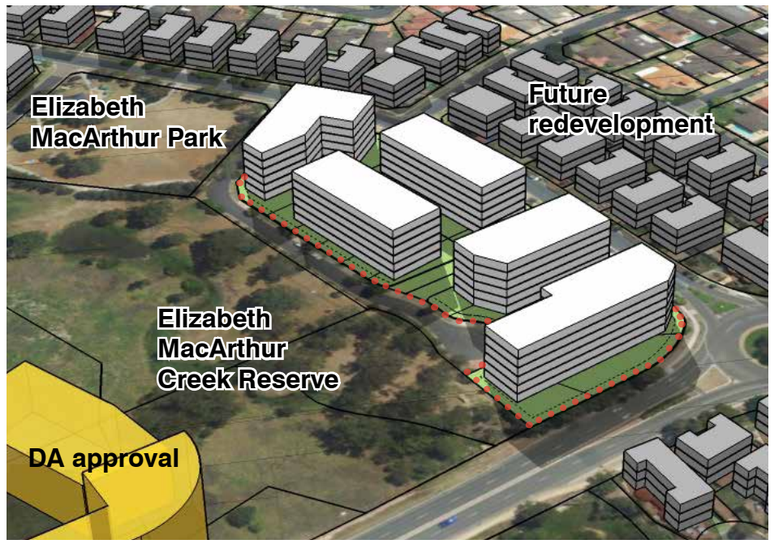
3.8 Options tested

Three options were tested for the subject site.

Each option is summarised in the table to the right and shown below.

The following section of this report presents each of the three options in more detail.

Option	Yield	Key controls	Public domain	Strengths	Weaknesses
Option 3: preferred scheme **3.8:1 FSR (mixed use)** **3.6:1 FSR (residential only)**	Mixed use: 44,392 sqm GFA 376 apartments 37,572 sqm residential GFA 6,819 sqm non-residential GFA Residential only: 41,380 sqm GFA 414 apartments	FSR 3.8:1 (mixed use) FSR 3.6:1 (residential only) 6.5 & 20 storeys	Public open space and through site links provided	Preferred, tested, appropriate building typology and open space in preferred location & configuration. Well-spaced towers and activation of existing open space areas. Additional yield provided without adverse environmental or visual impacts.	Challenges the proposed 15 storey height limit in the Station Precinct. Would likely require review of town centre heights to be justifiable.
Option 2: **3.2:1 FSR**	37,350 sqm GFA 305 apartments 30,531 sqm residential GFA 6,819 sqm non-residential GFA	FSR 3.2:1 6.5 & 15 storeys	Public open space and through site links provided	Preferred, tested, appropriate building typology and open space in preferred location & configuration. Well-spaced towers and activation of existing open space areas.	Challenges 6 storeys adjacent creek corridor however consistent with proposed Town Centre heights.
Option 1: **2.0:1 FSR**	22,973 sqm GFA 230 apartments 22,973 sqm residential GFA	FSR 2.0:1 6 storeys	No publicly accessible open space provided	Consistent with the proposed controls of 6 storeys besides the creek corridor.	Additional building increases site coverage and reduces the open space area. There is no pedestrian access or laneway connection through the site.



Option 1 (6 storeys)

Option 2 (6.5 + 15 storeys)

Option 3 (6.5 + 20 storeys)

4.0 Detailed site testing

4.1 Complying scheme 1.0:1 FSR (3 storeys)

The building footprints in plan are the same for the three options presented in this study.

– Key Features

– Group consists of 21 lots, total area 11,600 sqm.

– 3 storey street wall throughout the whole development in line with the Kellyville Priority Precinct development controls.

– 18-20m maximum building depth and building separation in accordance with SEPP 65

– 13 buildings over 21 lots with mixture of 1 lot development and 2 lot amalgamation.

– Average FSR: 0.96:1

- Average site coverage: 43%

An example of the preferred building typology

Envelope massing

Yield Calculations

Building ID	GBA	Storeys	Total GBA	Efficiency	GFA
A	408	3	1,224	75%	918
B	408	3	1,224	75%	918
C	530	3	1,590	75%	1,193
D	450	3	1,350	75%	1,013
E	252	3	756	75%	567
F	252	3	756	75%	567
G	252	3	756	75%	567
H	252	3	756	75%	567
I	225	3	675	75%	506
J	545	3	1,635	75%	1,226
K	450	3	1,350	75%	1,013
L	375	3	1,125	75%	844
M	574	3	1,722	75%	1,292
Total			14,919		11,189

Residential Total	11,189
Total units	112
Residential carpark	112
Visitors carpark (1 space per 5 units)	22
Total car spaces required	134
Total area for carpark (35sqm/vehicle)	4,699
Total GFA	11,189
Site Area	11,600
Total FSR	1.0

4.2 Option 1 - 2.0:1 FSR scheme (6 storey street wall)

The building footprints allow for a new street to create a better street connection and views to open space.

Key Features

– Group consists of 21 lots, total area 11,600 sqm.

– 6 storey street wall along residential fringe and along Samantha Riley Drive.

– New pedestrian through site link.

– Improved connection through a new street.

– Good transition scale from high density around Kellyville Station to low density residential surrounding area.

– Building floorplates less than 1,100 sqm BEA maximum.

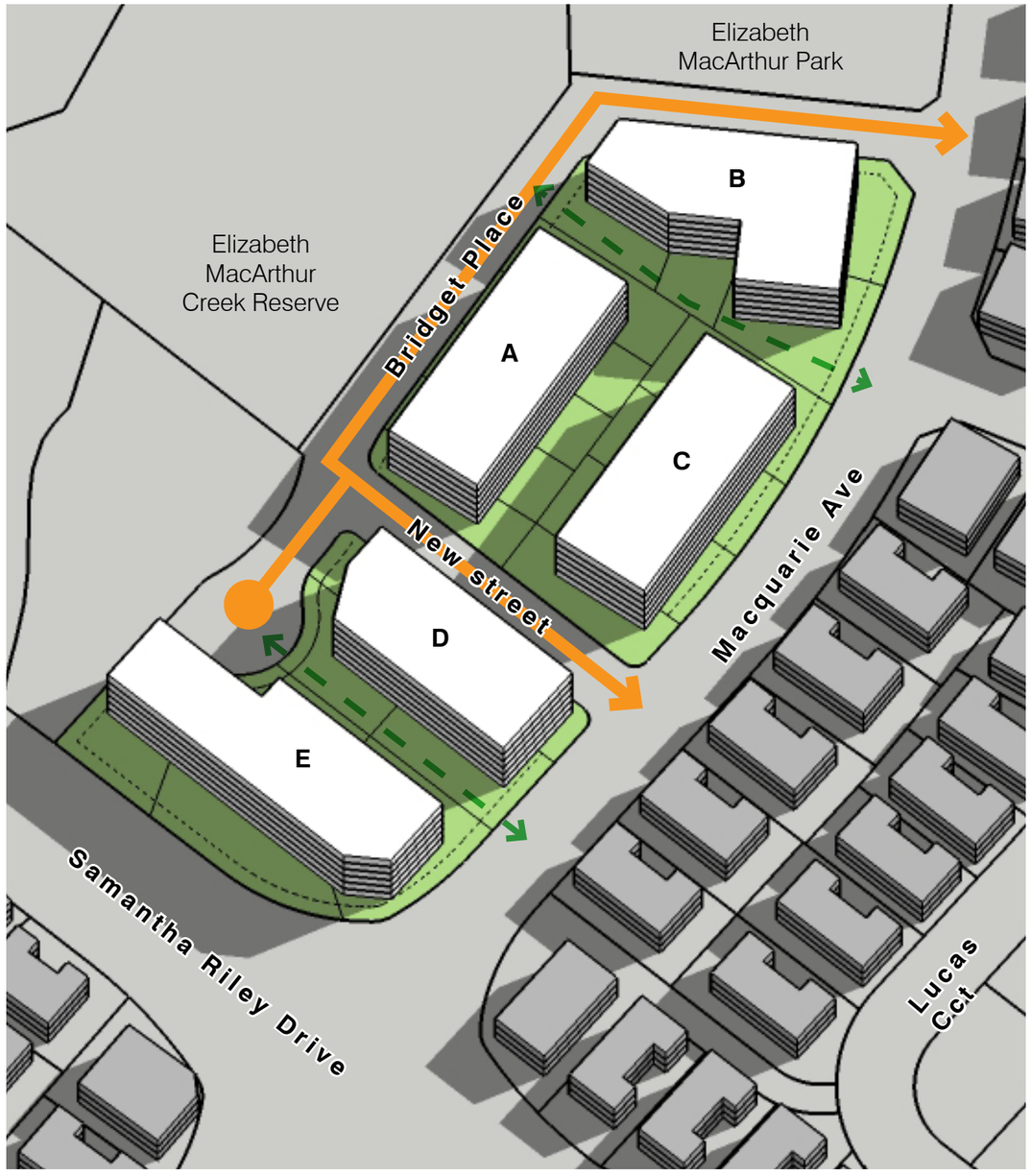
– 18-20m maximum building depth and building separation in accordance with SEPP 65

Built Form

Buildings comprising street wall heights of 6 storeys and tall, slender towers is a superior design and amenity outcome for high density residential sites. It provides for pedestrian scale streets with good solar access, and slender towers that are attractive and cast narrow shadows.

Residential Complex on Yaousa River, Moscow: An example of the preferred building typology

Envelope massing



Yield Calculations

Building ID	GBA	Storeys	Total GBA	Efficiency	GFA
A	1,000	6	6,000	75%	4,500
B	1,045	6	6,270	75%	4,703
C	1,000	6	6,000	75%	4,500
D	905	6	5,430	75%	4,073
E	1,155	6	6,930	75%	5,198
Total			**30,630**		**22,973**

Residential Total	**22,973**
Total units	230
Residential carpark	230
Visitors carpark (1 space per 5 units)	46
Total car spaces required	276
Total area for carpark (35sqm/vehicle)	9,648
Total GFA	22,973
Site Area	11,600
Total FSR	2.0

4.3 Option 2 - 3.2:1 FSR scheme (2 x 15 storey tower)

The building footprints allow for a new street to create better connections, views to the open space and a new open space. Ground floor retail potential for local shopping centre to cater for the proposed development and the surround area.

Key Features

– Group consists of 21 lots, total area 11,600 sqm.

– 2 x 15 storey towers located in the lot group, with views to the creek & public open space & 6 storey street wall.

– Heights are transitioned from high density towards Kellyville Station to low density dwellings.

– Tower location and orientation to minimise overshadowing (narrow side to the north)

– 18-20m building depth and building separation in accordance with SEPP 65 and 785 sqm BEA maximum tower floorplate.

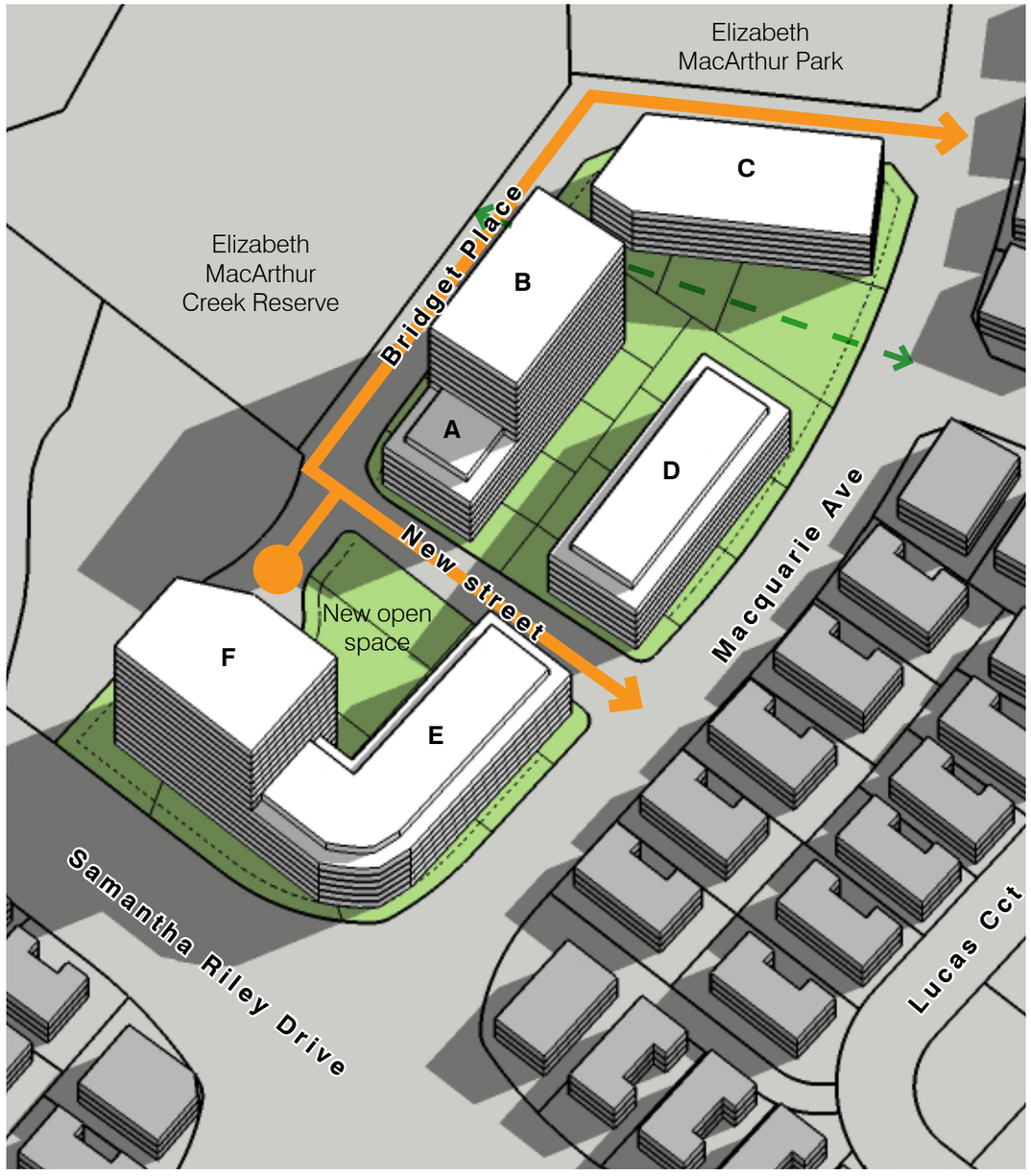
– Improved connection through a new street and new pedestrian through site link with potential to connect to train station. Also new open space within development.

Built Form

Buildings comprising street wall heights of 6 storeys and tall, slender 15 storey towers is a superior design and amenity outcome for high density residential sites. It provides for pedestrian scale streets with good solar access, and slender towers that are attractive and cast narrow shadows.

Victoria Park: An example of the preferred building typology

Envelope massing



Yield Calculations

Building ID	GBA	Storeys	Total GBA	Efficiency	GFA
Basement S/M	2,500	1	2,500	90%	2,250
Ground floor retail	5,077	1	5,077	90%	4,569
A	300	5.75	1,725	75%	1,294
B	700	14	9,800	75%	7,350
C	982	5	4,910	75%	3,683
D	1,000	5.75	5,750	75%	4,313
E	1,310	5.75	7,533	75%	5,649
F	785	14	10,990	75%	8,243
Total			**48,285**		**37,350**

Option A: With retail

Retail Total	6,819
Residential Total	30,531
Total units	305
Residential carpark	305
Visitors carpark (1 space per 5 units)	61
Retail carpark (1 space per 100sqm)	68
Total car spaces required	435
Total area for carpark (35sqm/vehicle)	15,210
Total GFA	37,350
Site Area	11,600
Total FSR	3.2

Option B: Residential only

Residential Total	34,338
Total units (avg. 100sqm)	343
Residential carpark	343
Visitors carpark (1 space per 5 units)	69
Total car spaces required	412
Total area for carpark (35sqm/vehicle)	14,422
Total GFA	34,338
Site Area	11,600
Total FSR	3.0

4.4 Option 3 - Preferred 3.8:1 FSR scheme (2 x 20 storey tower)

Option 3 is the same building footprint presented in Option 2. The variation is in the building heights, from 15 to 20 storey towers and the FSR increase.

Key Features

– Group consists of 21 lots, total area 11,600 sqm.

– Heights are transitioned from high density towards Kellyville Station to low density dwellings.

– 2 x 20 storey towers located in the lot group, with views to the creek & public open space with 6 storey street wall.

– Tower location and orientation to minimise overshadowing (narrow side to the north)

– 18-20m building depth and building separation in accordance with SEPP 65 and 785 sqm BEA maximum tower floorplate.

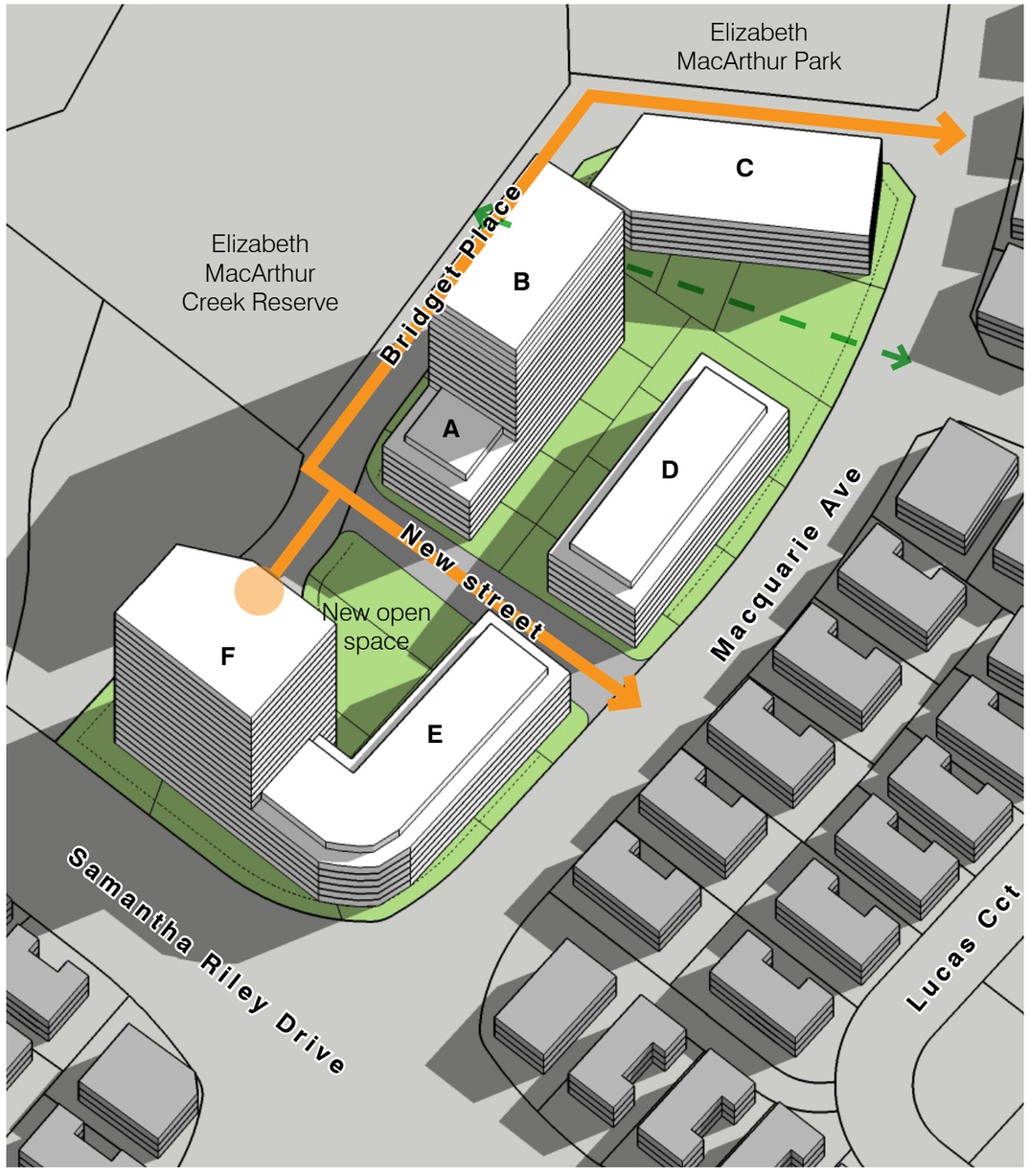
– Improved connection through a new street and new pedestrian through site link with potential to connect to train station. Also new open space within development.

Built Form

Buildings comprising street wall heights of 6 storeys and tall, slender 20 storey towers is a superior design and amenity outcome for high density residential sites. It provides for pedestrian scale streets with good solar access, and slender towers that are attractive and cast narrow shadows.

Victoria Park: An example of the preferred building typology

Envelope massing



Yield Calculations

Building ID	GBA	Storeys	Total GBA	Efficiency	GFA
Basement S/M	2,500	1	2,500	90%	2,250
Ground floor retail	5,077	1	5,077	90%	4,569
A	300	5.75	1,725	75%	1,294
B	700	19	13,300	75%	9,975
C	982	7	6,874	75%	5,156
D	1,000	5.75	5,750	75%	4,313
E	1,310	5.75	7,533	75%	5,649
F	785	19	14,915	75%	11,186
Total			**57,674**		**44,392**

Option A: With retail

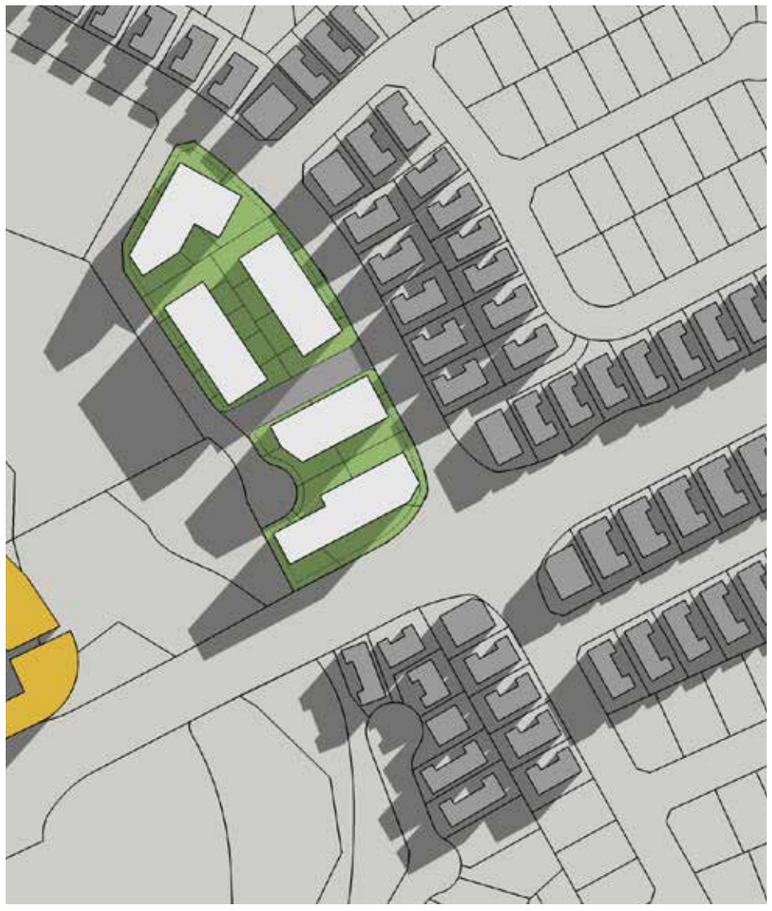
Retail Total	6,819
Residential Total	37,572
Total units (avg. 100sqm)	376
Residential carpark	376
Visitors carpark (1 space per 5 units)	75
Retail carpark (1 space per 100sqm)	68
Total car spaces required	519
Total area for carpark (35sqm/vehicle)	18,167
Total GFA	44,392
Site Area	11,600
Total FSR	3.8

Option B: Residential only

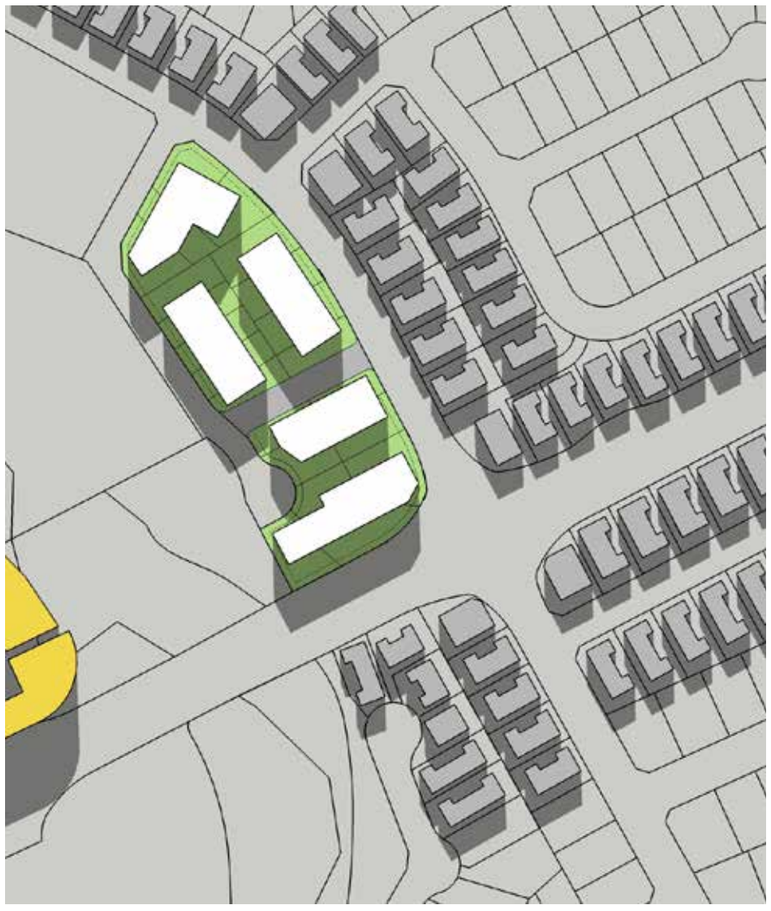
Residential Total	41,380
Total units (avg. 100sqm)	414
Residential carpark	414
Visitors carpark (1 space per 5 units)	83
Total car spaces required	497
Total area for carpark (35sqm/vehicle)	17,380
Total GFA	41,380
Site Area	11,600
Total FSR	3.6

4.5 Shadow study winter solstice - Option 1

9am



12 noon



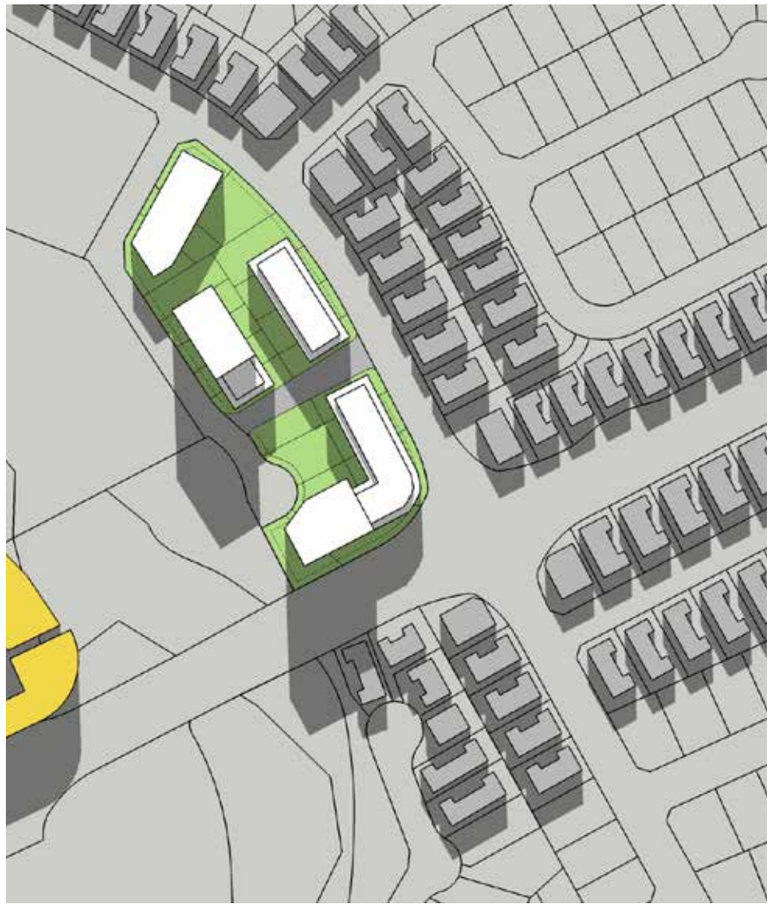
3pm

The shadow study was undertaken on the winter solstice between 9am-3pm. All options provide 3 hours sunlight to dwellings to the south of the proposal.

4.6 Shadow study winter solstice - Option 2

9am

12 noon



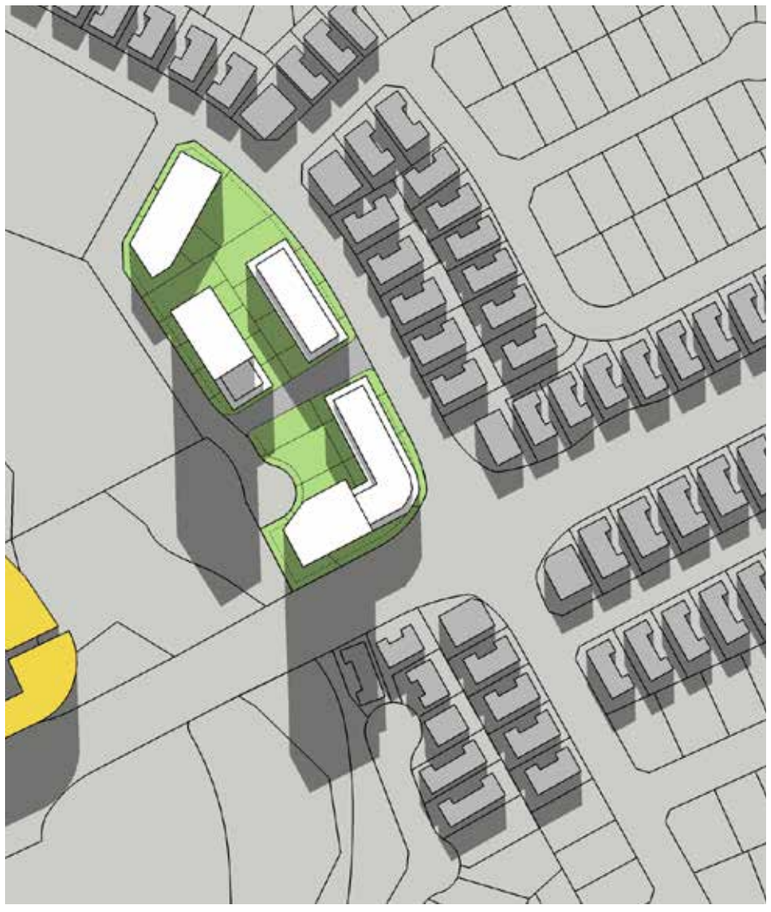
3pm

The shadow study was undertaken on the winter solstice between 9am-3pm.

4.7 Shadow study winter solstice - Option 3

9am

12 noon



3pm

The shadow study was undertaken on the winter solstice between 9am-3pm.

5.0 Conclusion

5.1 Recommendations and next steps

Recommendations

The site is in the right location for high-density development, and its potential should be maximised, but in response to the site's constraints and local context. The site should provide for some public space and amenity, which becomes increasingly important the centre increases in density.

Key benefits of the preferred master plan are:

– Increased density and active edges to Elizabeth MacArthur Creek Reserve and will help to create a busy and vibrant hub and active open space areas.

– A new laneway running through the site that would improve pedestrian permeability through the centre.

– High quality design and increased densities, consistent with Kellyville's role as a Station Precinct.

The planning and urban design options testing process has resulted in the following findings:

– A scheme that is consistent with a maximum 6 storeys on the creek reserve frontage can achieve an FSR of 2:1, but results in less open space areas and no through site link opportunities.

– The best design and planning outcome for the site is to provide increased densities close to the proposed town centre on the park frontage, providing through site links to break up the large block and improve permeability.

Having investigated the site and its context in detail, Architectus is confident that a further tested and refined version of Option 3 (6-20 storeys) represents the best design and public domain outcome for the site.

Next steps to progress the preferred master plan are:

– Further design development to test and refine the master plan, with input from DPE and Council, traffic engineers and other specialists.

– Consultation with DPE and Council to better understand their vision for Kellyville Station Precinct, and how the re-development of this strategic site could contribute positively to that vision.

5.2 Proposed planning controls

The preferred option for the site is for residential flat buildings, with some neighbourhood shops or commercial uses at ground level opposite the park that achieves:

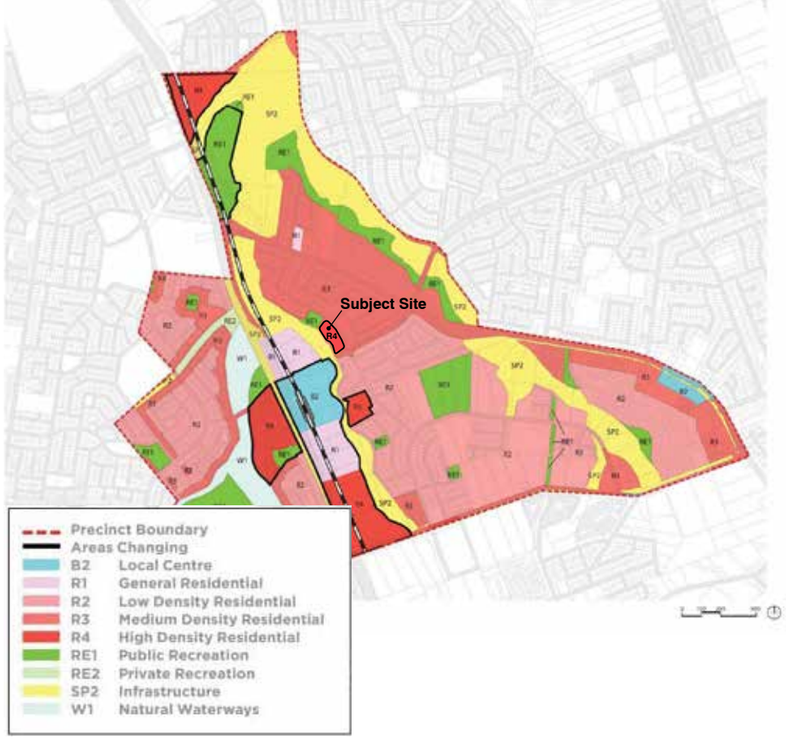
– A maximum height of 66m (63m buildings + 3m for roof and lift overruns)

– An FSR for the combined site of 3.8:1.

It is recommended that the proposed controls for the renewal of the Kellyville be amended to allow for the development of the preferred option, but only where the sites are developed as one contiguous parcel.

The key objectives for the planning controls are:

1. The site is developed in an orderly way, with the maximum density only being achievable once the site is one ownership.
2. The site is developed in accordance with the master plan for the site.
3. The development of the site delivers the public benefit outcomes outlined in the master plan.



Architectus proposes the following planning controls for the site, in order to achieve these objectives:

Land use

The site is currently zoned R3 – Medium Density under Hills LEP 2012. The Precent Proposal seeks to maintain this zone. This zone allows for dual occupancy development, multi dwelling housing (multiple townhouses on one lot) but does not permit residential flat buildings.

It is a poor outcome for land within 400m of the station to be developed for dual occupancy development. This would serve to further fragment land ownership and make cohesive, meaningful renewal unachievable. This proposal is also inconsistent with the NSW Government's 2013 Structure Plan, which anticipates 3-6 storey residential apartments in this area. There is insufficient justification for this departure from the 2013 plan. As such, it suggested that the plan is inconsistent with the objectives of Local Planning Direction 5.9, which seek to:

> (a) promote transit-oriented development and manage growth around the eight train stations of the North West Rail Link (NWRL)
>
> (b) ensure development within the NWRL corridor is consistent with the proposals set out in the NWRL Corridor Strategy and precinct Structure Plans.

And should be amended.

It is recommended that the subject site be rezoned for R4 – High Density Residential, which allow for the development of residential flat buildings. The testing in this report has shown that flat buildings are achievable and acceptable on the site, even at the lower, recommended maximum building height of 10m. Allowing for flat buildings provides more options for housing choice and design. The proposed R4 zoning would be consistent with the North West 2013 Structure Plans and Local Planning Direction 5.9.

Maximum building height

This report sets out a recommended urban design outcome on the basis of the combined site area of 21 lots. A key risk of this approach for planning authorities is the lack of certainty that the site would be developed as a whole to meet the cohesive plan set out in this report.

We note that a memorandum of understanding has been prepared by The Bridget Place and Macquarie Ave community group, through which all owners have committed to the plan and to collective sale of their land. This is currently confidential but may be provided to the Department of Planning and Environment to support further discussions relating to the site.

The site currently has a maximum building height of 10m (3 storeys), and this is proposed to remain unchanged as part of the Precinct Proposal.

This report demonstrates that the site has more development potential as one consolidated lot, and more density should be permitted on this lot given its proximity to the station.

It is proposed to that the Hills LEP 2012 be amended to allow for buildings up to 66m on the subject site – but only where the development meets certain standards and conditions. Architectus has developed a mechanism to ensure that the additional height set out in this plan can only be accessed if the site is developed as a single lot and key aspects of the plan are delivered:

– The 10m height limit is retained as a 'base' building height.

– The building height plan identifies the area as 'Area X'.

– A new local provision is inserted into Part 7 of the LEP, that provides alternative controls for the consolidated site.

The alternative controls provision could be worded as such:

"Clause 7.XX – Kellyville Opportunity Site

Despite Clause 4.3, in the area marked as Area 1 on the Height of Buildings Map development consent may be granted to the erection of buildings with a maximum height of 66m provided that Council is satisfied of the following:

a) The development application relates to all of the land shown in Area 1;

b) The land shown in Area 1 has been amalgamated to form one lot;

c) The development application includes the provision of any public domain identified in Council's plans (we note, that (c) allows Council to refuse a DA that accesses the bonus height if the proposal is not in accordance with Council's site specific DCP);

d)The development application provides a satisfactory distribution of built form and floor space development;

e)The proposed development does not have an FSR exceeding 3.6:1."

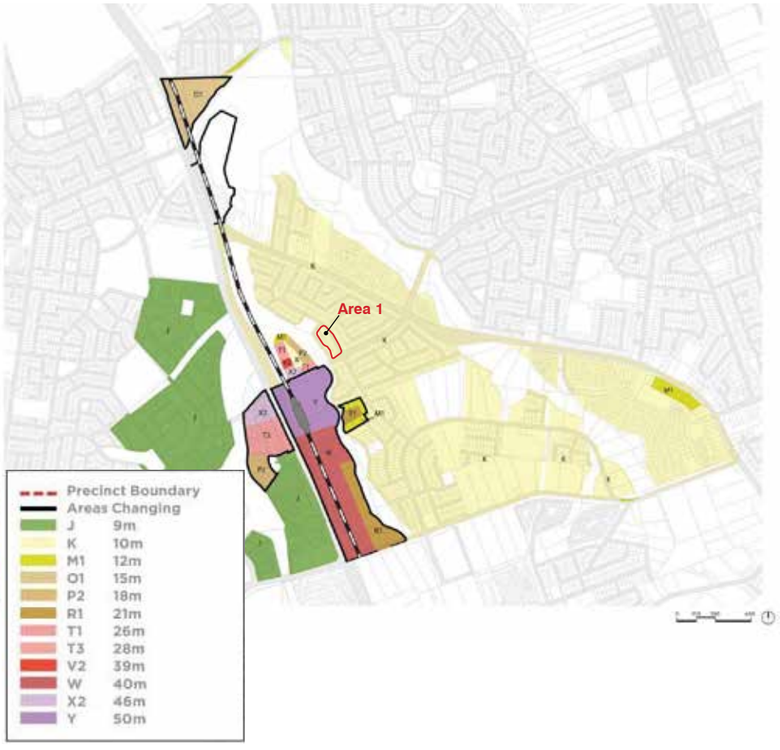
In this Clause, Area X would refer to the land that is the subject of this report, including all 21 lots between Bridget Place and Macquarie Ave.

It is considered that this mechanism provides certainty for the Department and Council that the site would be developed as a single site, while providing flexibility with respect to public domain and design outcomes.

FSR

The Precinct Proposal proposes no FSR for the subject site.

This is appropriate to be retained for the 'base' 10m building height scheme. For the alternative controls, the new local provision limits the FSR on the site to a maximum of 3.8:1 (see above), ensuring the site is responsibly developed and achieves excellent amenity.



Setting a precedent for the Kellyville Station Precinct

Council officers and residents may be concerned that allowing greater densities on the subject site may create an expectation for greater densities on other sites in the precinct. In defence, the site is uniquely positioned for denser development because the site:

– Is less than 400m from the new train station.

– Is opposite the linear open space which affords excellent amenity for tall towers.

– The site provides an active edge, passive surveillance and new public domain which improves the quality of the existing open space.

– The site can be developed as one parcel, and the planning controls ensure this outcome.

Architectus Group Pty Ltd
ABN 90 131 245 684

Nominated Architect
Managing Director Sydney
Ray Brown
NSWARB 6359

Architectus Sydney
Level 18 MLC Centre
19 Martin Place
Sydney NSW 2000
T +61 2 8252 8400
F +61 2 8252 8600
sydney@architectus.com.au

Architectus Melbourne
Level 7 250 Victoria Parade
East Melbourne VIC 3002
Australia
T +61 3 9429 5733
F +61 3 9429 8480
melbourne@architectus.com.au
Managing Director Melbourne
Mark Wilde

www.architectus.com.au