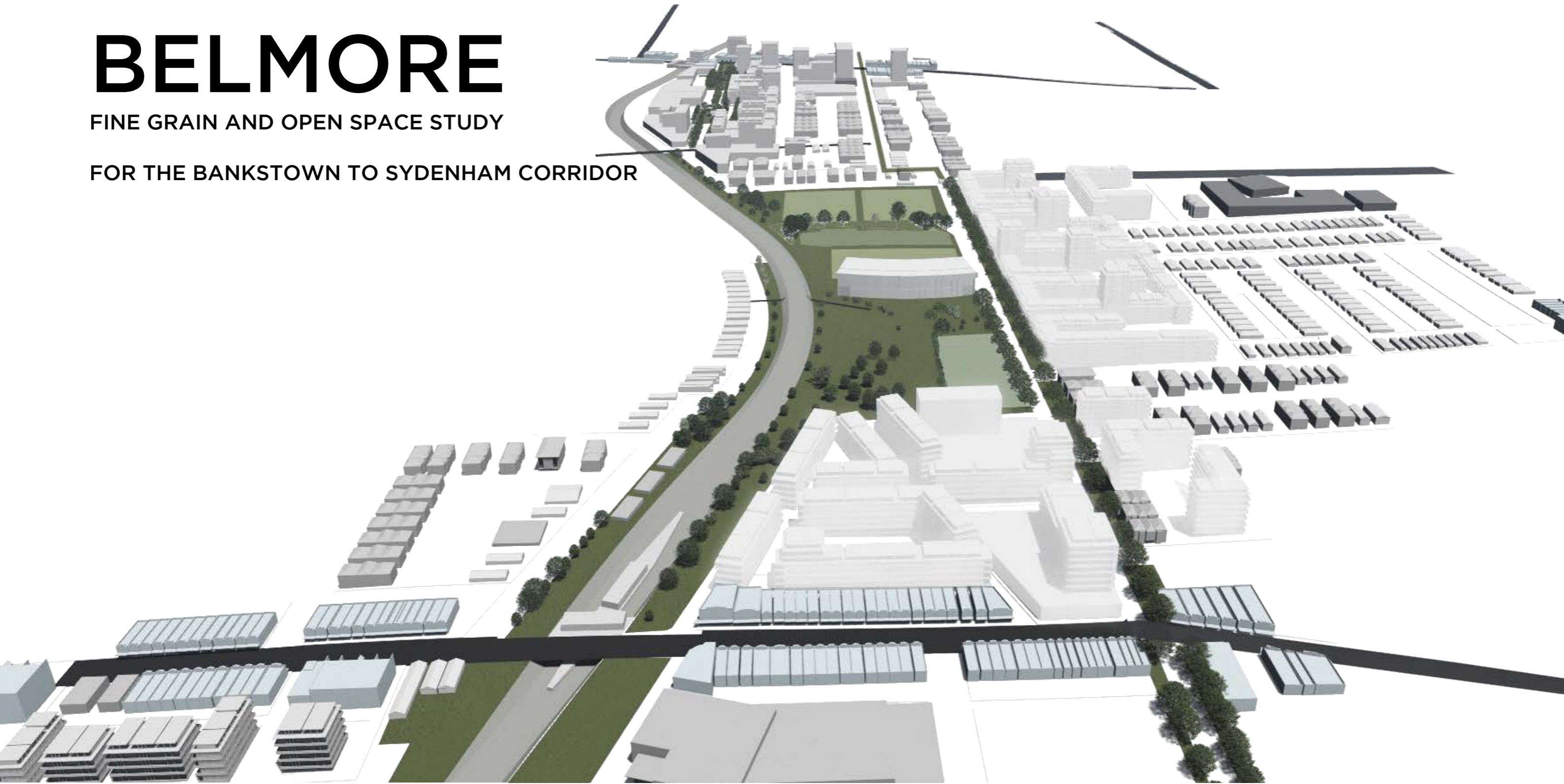


# BELMORE

FINE GRAIN AND OPEN SPACE STUDY

FOR THE BANKSTOWN TO SYDENHAM CORRIDOR



PREPARED FOR



Office of the  
Government  
Architect

TYRRELLSTUDIO

# 1.0

---

## INTRODUCTION

THE BELMORE FINE GRAIN AND OPEN SPACE STUDY REPORT IS STRUCTURED IN FIVE PARTS.

### 1.0 INTRODUCTION

1.1 BUILT FORM TYPOLOGIES

1.2 SUBDIVISION PATTERNS

### 2.0 KEY ELEMENTS OF FINE GRAIN CHARACTER

2.1 FINE GRAIN RETAIL STRUCTURE

2.2 OPEN SPACE PROVISION

2.3 DEVELOPMENT TYPOLOGIES

### 3.0 KEY OPPORTUNITY SITES

3.1 BELMORE SPORTSGROUND

3.2 RAILWAY PARADE & REDMAN PARADE

**INTRODUCTION:  
THE THREE KEY ELEMENTS OF FINE GRAIN CHARACTER**

THIS REPORT IS FOCUSED ON THE EXISTING AND PROPOSED URBAN SYSTEMS OF BELMORE. IT SEEKS TO IDENTIFY POTENTIAL TO TRANSITION EXISTING FINE GRAIN URBAN VIBRANCY INTO THE NEW GRAIN OF THE URBAN SETTING.

The morphogenesis of the urban fabric of the Sydenham to Bankstown corridor is reflected in fairly distinct phases and typologies.

These phases follow initial land release and subdivision, 60's population growth and the current phase of urban infill. The growth of the corridor is also related to the history of the rail line which over several transformations has allowed greater population growth.

This latest transformation from heavy rail to metro will facilitate the greatest spike in the areas growth since initial subdivision. The latest morphogenesis will be from infill to agglomeration and development of original lots once zoning has been finalised.

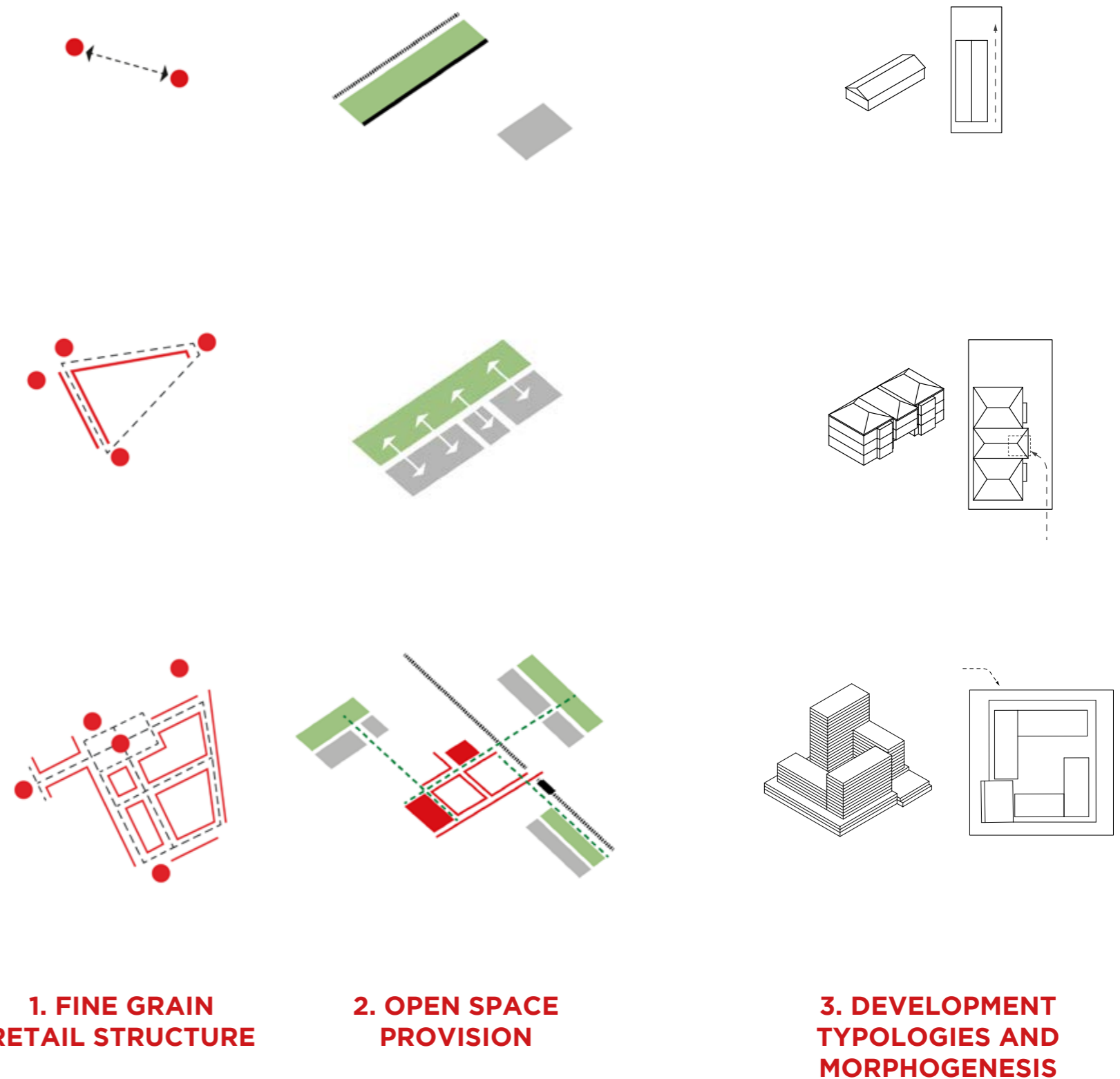
This study is primarily focused on the potential transitioning of the existing fine grain main street retail system into future town centre layouts and also the potential relationship between existing open space provision and future position of increased density.

The attitude taken to fine grain activity is that it is an outcome of an urban system that has developed organically over time. Whilst this 'street life' is at risk through rapid development it may be possible to transition the life into the new urban structure with careful planning.

The report covers three key elements of the fine grain in the station precincts;

1. Fine grain retail structure.
2. Open space provision,
3. Development typologies and their morphogenesis.

Each of these element will be analysed and strategies proposed to adapt and build upon the existing structure. The report will then provide proposed strategies for key opportunity sites that have been identified.

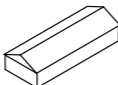
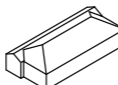
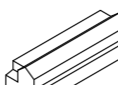
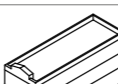

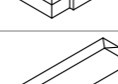


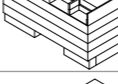



# 1.1

## INTRODUCTION: BUILT FORM TYPOLOGIES

Over time the development typologies have evolved to suit the growth in population and the changing methods of construction.

Apartment developments are more likely to have strata ownership and therefore less likely to be immediate targets for redevelopment.

BUILDING TYPOLOGIES OVER TIME			
Building Types	Development 1880s +	Development 1960s +	Current development
1			DETACHED DWELLING WITH SIDE DRIVE
2			DETACHED DWELLING WITH REAR LANE
3			DETACHED DWELLING WITH FRONT GARAGE
7			2 STOREY SHOP TOP WITH REAR LANE
4			WALK-UP APARTMENT WITH SIDE DRIVE
5			WALK-UP APARTMENT WITH FRONT GARAGE
6			WALK-UP APARTMENT WITH REAR LANE
8			SHOP TOP WITH MULTI STOREY
9			PERIMETER BLOCK WITH MULTIPLE ENTRIES ONE MAJOR VEHICLE ENTRY
10			LARGE COMMERCIAL BLOCK ANCHORS

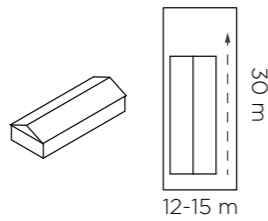


## INTRODUCTION: BUILT FORM TYPOLOGIES

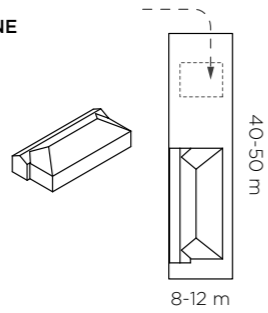
### SUB-DIVISION DEVELOPMENT 1880S +

Detached dwelling density: 12-15 / Ha  
Terraced dwelling density: 20-40 / Ha

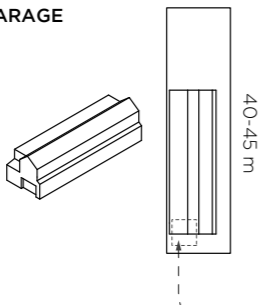
#### 1 DETACHED DWELLING WITH SIDE DRIVE



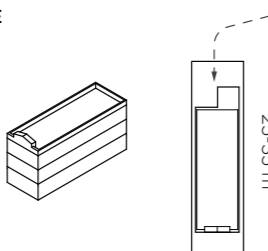
#### 2 DETACHED DWELLING WITH REAR LANE



#### 3 DETACHED DWELLING WITH FRONT GARAGE



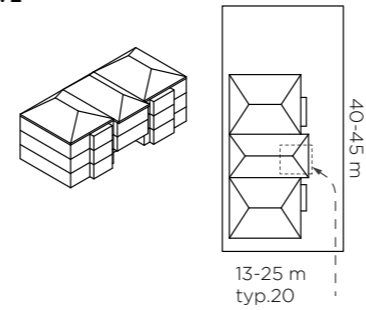
#### 7 2 STOREY SHOP TOP WITH REAR LANE



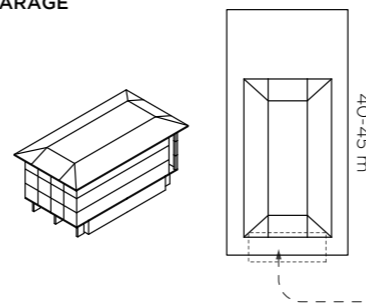
### STRATA DEVELOPMENT 1960S +

Low-rise walk-up dwelling density: 60-80 / Ha

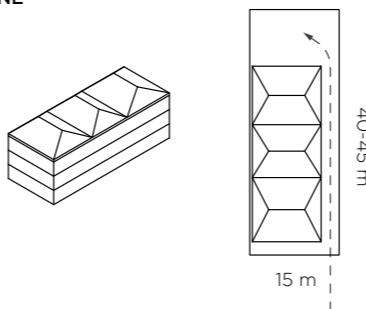
#### 4 WALKUP APARTMENTS WITH SIDE DRIVE



#### 5 WALKUP APARTMENTS WITH FRONT GARAGE



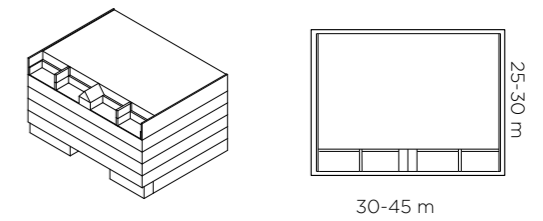
#### 6 WALKUP APARTMENTS WITH REAR LANE



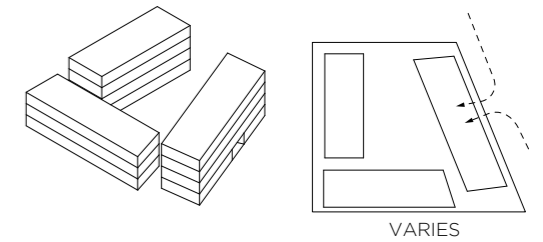
### CURRENT DEVELOPMENT

Mid-rise (5-8 storey) dwelling density: 100-160 / Ha

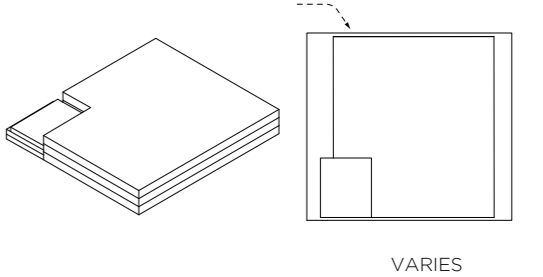
#### 8 SHOP TOP WITH MULTI STOREY



#### 9 PERIMETER BLOCK WITH MULTIPLE ENTRIES ONE MAJOR VEHICLE ENTRY



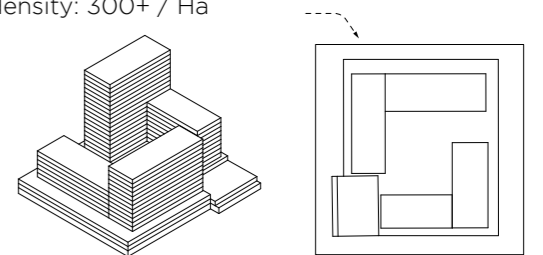
#### 10 LARGE COMMERCIAL BLOCKS ANCHORS



### PROPOSED DEVELOPMENT

High-rise (8+ storeys) dwelling density: 300+ / Ha

#### 11 PODIUM AND TOWERS

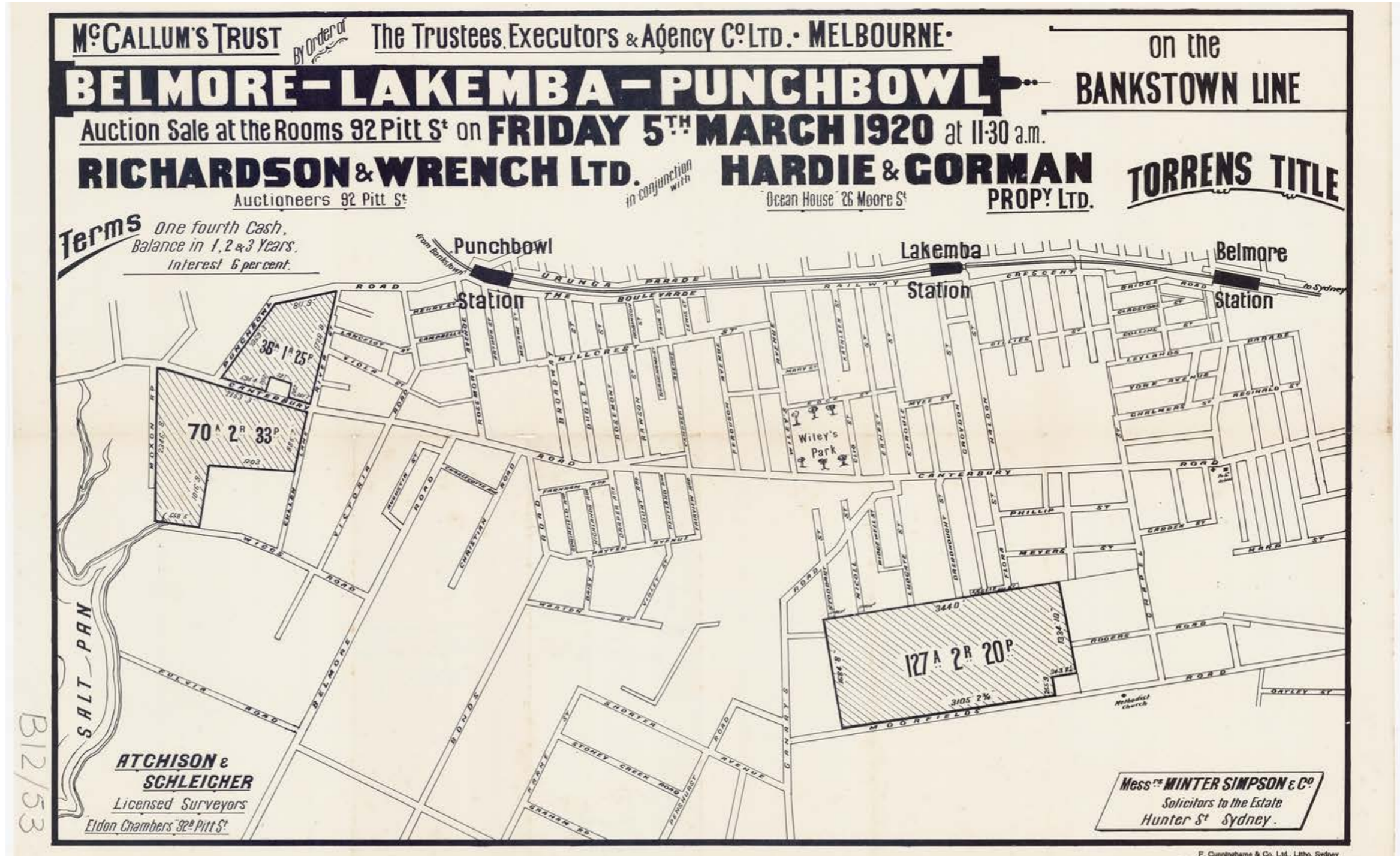




# 1.2

## SUBDIVISION PATTERNS

Early subdivision patterns are still intact in much of Belmore.





SUBDIVISION PATTERNS

**MOONEY ESTATE** 1st Subd. AT LAKEMBA STATION

**BELMORE RAILWAY STATION**

HALDON ST, GODFREY ST, MORETON ST, GILLES ST, PEEL ST, LEYLAND PARADE, COLLINS ST, GLADSTONE ST, BRIDGE ROAD, RAILWAY LINE, BURWOOD RD, BELMORA ST

**TORRENS TITLE**  
Building Covenant for protection of buyers.

**TERMS**  
One tenth deposit, balance by 20 quarterly payments, interest 5%.

**Auction Sale on the Ground SAT. 8th MAY 1915 at 3 p.m.**

**RICHARDSON & WRENCH LTD.**  
Auctioneers 98 Pitt St

**J. WEINGARTH**  
Licensed Surveyor R.P. Act  
10 Castlereagh St.

**BELMORE STATION**

F. Cunningham & Co. Ltd., Litho, Sydney

B12/14

By Order of the **PERMANENT TRUSTEE CO OF N.S.W. LIMITED**

**BELMORE**

**REDMAN'S ESTATE** (Settlement)  
**AT THE STATION**

Auction Sale ON THE GROUND at 3 o'clock  
**SATURDAY. 6th MAY. 1922.**

Auctioneers **Richardson & Wrench, Ltd** Sydney.  
92 Pitt St.

**TERMS OF SALE**  
15 Per Cent Deposit, balance in 20 quarterly payments at 6 per cent.

**TORRENS TITLE**

**BELMORE RAILWAY STATION**

BRIDGE ST, BURWOOD ROAD, COLLINS ST, ACACIA STREET, MYALL STREET, PARK, PARADE, ANDERSON ST, LEYLAND ROAD, DUMMOND ST

Building Covenant to protect Buyers.

S.M. Stephens, Dobbie & Foxall.

All dimensions, etc. are subject to Deposited Plan.

F. Cunningham & Co. Ltd., Litho, Sydney

B12/65

**KARAVILLE ESTATE**

**BELMORE** RING'S PORTION

Auction Sale on the Ground at 3 p.m.  
**SATURDAY 14th NOVEMBER 08.**

**H.W. HORNING & CO**  
Auctioneers 58 Pitt St Sydney

**TORRENS TITLE**

**LIBERAL TERMS**  
£1 deposit, £1 per month, interest 5%.

**BELMORE RAILWAY STN**

**DOBBIE & KENNY**  
Licensed Surveyors under R.P. Act  
Norwich Chambers, Hunter St City.

All measurements subject to Deposited Plan.

BURWOOD ROAD, LAKEMBA STREET, KENNEDY AVENUE, ALLAN AVENUE, BENAROON RD, EULDA ST, DINORA ST, BENDA ST, RING ST, BURWOOD ROAD

F. Cunningham & Co. Ltd., Litho, Sydney

B12/11



# BELMORE 1943



# BELMORE 2016

19 DECEMBER 2016

TYRRELL'S STUDIO

BELMORE STATION

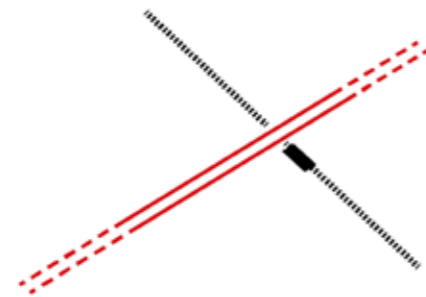
BANKSTOWN TO SYDENHAM: FINE GRAIN STUDY



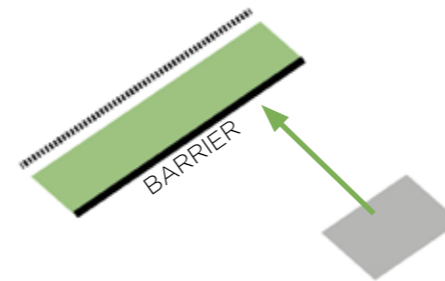
# 2.0

## PRINCIPLES OF THE THREE KEY ELEMENTS OF FINE GRAIN CHARACTER

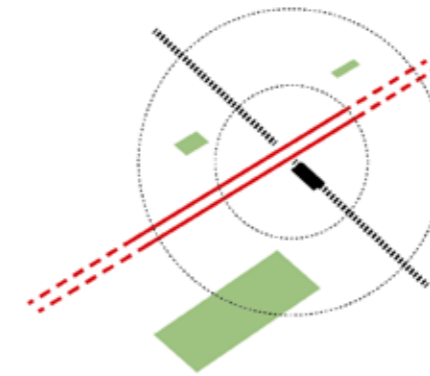
EXISTING CHARACTER



There is a vibrant fine grain retail strip along Burwood Road. The activity is supported by foot traffic and as expected diminishes with distance from station.

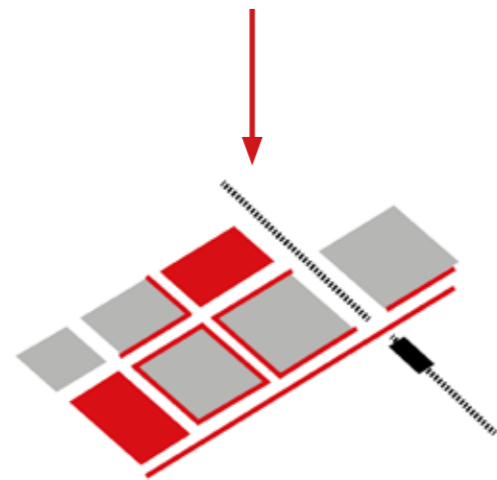


Some existing open space of Belmore is underperforming and underutilised. The access and built form relationships to open space are often poor and open space is not located near areas of density.

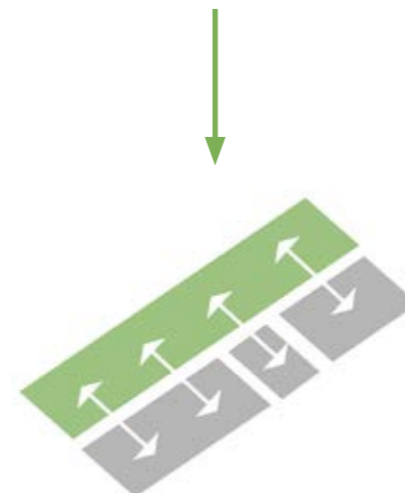


It is often difficult to provide an adequate provision of open space close to the station. Station-centric or transit oriented development is not always located close to open space.

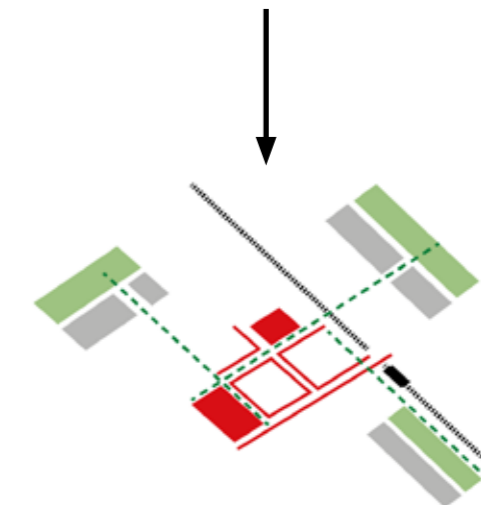
PROPOSAL



The existing retail could transition from being a strip supported by the station and fading with distance, to being a network connecting to new densities of people and reinvented public open spaces.



Density can be distributed along underperforming open space. This will support open space upgrading and prompt the creation of a high performance connected network of open space throughout the neighbourhood.



As well as station centers, high quality neighbourhoods could be encouraged to develop around open space and provide improved links and inter-modal connections directly to stations and retail centres.

### RETAIL STRUCTURE

### OPEN SPACE PROVISION

### DEVELOPMENT TYPOLOGIES



# 2.1

## RETAIL STRUCTURE

EXISTING RETAIL STRIPS ARE KEY TO FINE GRAIN VIBRANCY OF THESE SUBURBS. NEW FINE GRAIN RETAIL SYSTEMS SHOULD BE ENCOURAGED BY NEW CITY FORM SO THAT VIBRANCY REMAINS.

There is an existing pattern of successful fine grain retail along the main streets. This will either fail as development intensifies, or must be encouraged to transition to a new system, with a short window to re-house the fine grain.

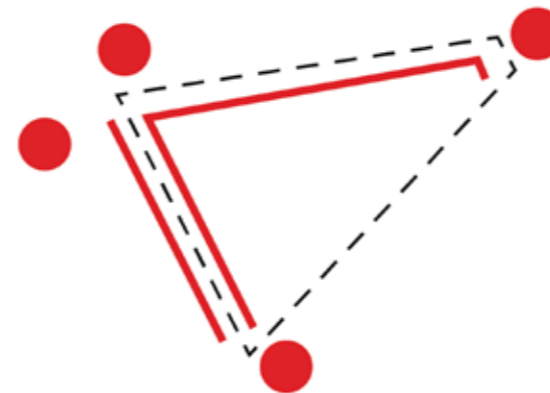
The following retail patterns or systems integrate the main strip into a cluster of anchors around the station, rather than allowing activity to dissipate further away.

To propose a new system:

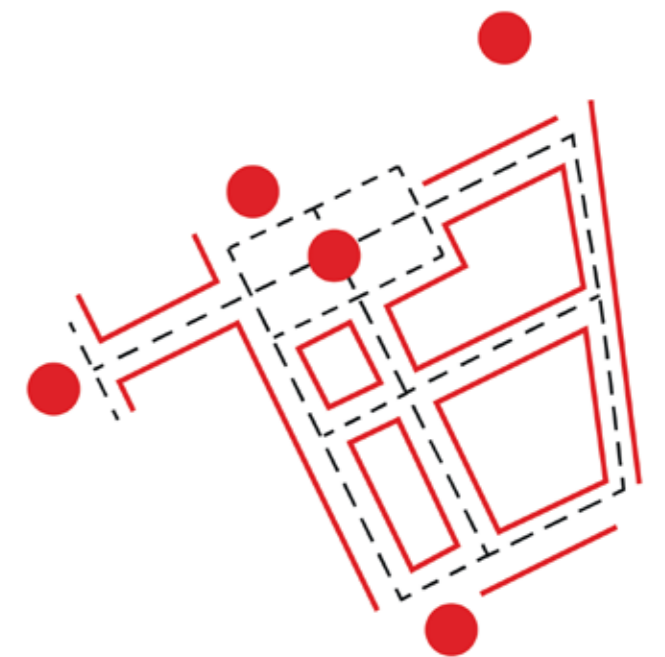
- establish a conservative quantum of street retail and potential retail anchors based on projected population growth.
- suggest new arrangement of retail such that the energy and street life can transition to new, more sustainable forms; from main street structure to a cluster of offerings.



**RETAIL DUMBBELL**



**RETAIL LOOP**



**RETAIL GRID**

**FUTURE RETAIL REQUIREMENTS**

**BELMORE PROJECTIONS FOR 2036**

**4000 ADDITIONAL DWELLINGS**

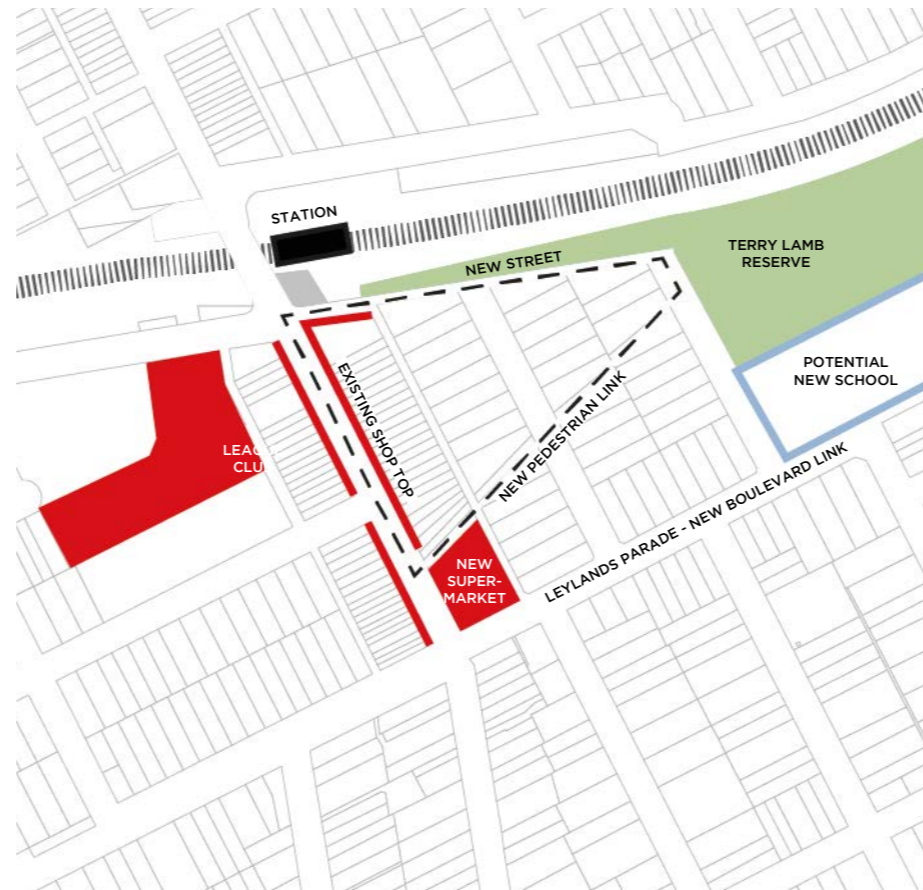
conservatively at 2 residents per dwelling will provide housing for approximately 8,000 additional residents.

**8,000 ADDITIONAL RESIDENTS**

Supporting 0.5sqm / person is approx. 4,000sqm additional local strip retail, which equates to approximately 400m additional retail frontage.

**400M ADDITIONAL LOCAL STRIP RETAIL FRONTAGE**

**1 NEW SMALL SUPERMARKET**



**EXISTING RETAIL STRUCTURE**

Possible location for new small supermarket to form a retail anchor on the corner of Burwood Avenue and Leylands Parade.

A new vehicular street from station to park (Myall Avenue), and a new pedestrian through site link could generate a loop of pedestrian activity between the major anchors of the park, station, supermarket and main street.

There may be potential for a new school in the existing location of the former bowls club.

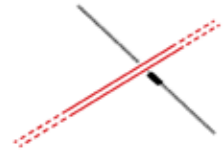


**PROPOSED FINE GRAIN RETAIL**

Fine grain retail tenancies (5-8m wide frontages) focused along new street along railway, with further tenancies along through site link, opposite park and on Leylands Parade.

Create new linear park link to station in place of existing surface car park and by realigning the easement fence.





## EXISTING RETAIL STRUCTURE

VIBRANT FINE GRAIN RETAIL  
ALONG MAIN ROAD, GENERALLY  
WITH ACTIVITY DIMINISHING WITH  
DISTANCE FROM STATION.







## PROPOSED RETAIL STRUCTURE

TRANSITION RETAIL STRIPS TO  
NEW RETAIL SYSTEMS BASED  
ON NEW ANCHORS AND FINE  
GRAIN RETAIL, SUPPORTED BY  
HEIGHTENED DENSITIES



### LEGEND

- Open Space
- New Open Space
- Train Station
- Retail
- Commercial Anchors
- Low Rise Mixed Use
- Rail Lines
- School
- New Development Infill
- Station Concourse / Plaza
- Aquatic Centre
- Ice Ring



# 2.2

## EXISTING OPEN SPACE STRUCTURE

FRAGMENTED AND UNDER-PERFORMING OPEN SPACE ON THE PERIPHERY OF PRECINCTS; GENERALLY SOME OPEN SPACE IN CENTRES AND A DEFICIENCY IN MID ZONES





## PROPOSED OPEN SPACE STRUCTURE

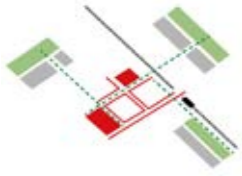
FRAMEWORK OF DENSITY DISTRIBUTED BETWEEN STATION SURROUNDS AND OPEN SPACE OPPORTUNITIES, USING DEVELOPER CONTRIBUTIONS TO REINVENT UNDER UTILISED OPEN SPACE. ALTHOUGH JUST OUTSIDE TYPICAL WALKING RADIUS, DEVELOPMENT BESIDE UNDER UTILISED GREEN SPACE PROVIDES BETTER LIVING CONDITIONS FOR FUTURE POPULATIONS.



### LEGEND

- Open Space
- New Open Space
- Train Station
- Rail Lines
- School
- New Development
- Station Concourse / Plaza
- Aquatic Centre
- Ice Ring
- Existing Trees
- New Trees





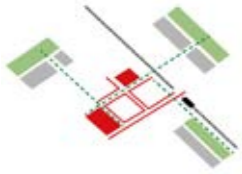
**PROPOSED**

**OPEN SPACE STRUCTURE  
PEDESTRIAN & BIKE NETWORK**

STRONG PEDESTRIAN AND CYCLE  
CONNECTIONS BETWEEN AMENITY  
AND STATIONS & RETAIL CENTRES.







**PROPOSED  
OPEN SPACE STRUCTURE  
BUS NETWORK**

INTERMODAL CONNECTIONS  
BETWEEN AMENITY AND STATIONS  
& RETAIL CENTRES.



**LEGEND**

- Open Space
- New Open Space
- Train Station
- Rail Lines
- School
- New Development
- Station Concourse / Plaza
- Aquatic Centre
- Ice Ring



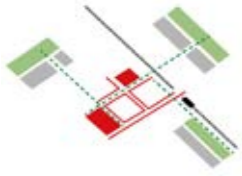
# 2.3

## EXISTING DEVELOPMENT STRUCTURE

DEVELOPMENT CURRENTLY OCCURS ON SITES WHERE RETAIL ACTIVITY PETERS OUT AT THE ENDS OF MAIN STREETS







## PROPOSED DEVELOPMENT STRUCTURE

INFILL DEVELOPMENT WILL BE MOST LIKELY TO FIRST OCCUR IN THE LESS CONSTRAINED SITES WHICH CONTAIN GROUPS OF LARGER SINGLE DWELLING BLOCKS RATHER THAN STRATA DEVELOPMENTS.



### LEGEND

- Open Space
- New Open Space
- Train Station
- Rail Lines
- School
- New Development Infill
- Station Concourse / Plaza
- Aquatic Centre
- Ice Ring
- Existing Trees
- New Trees
- Pedestrian and Cycle Connection

# 3.0

---

## THREE PUBLIC DOMAIN OPPORTUNITY SITES

### 3.1 BELMORE SPORTSGROUND

### 3.2 RAILWAY PARADE & REDMAN PARADE





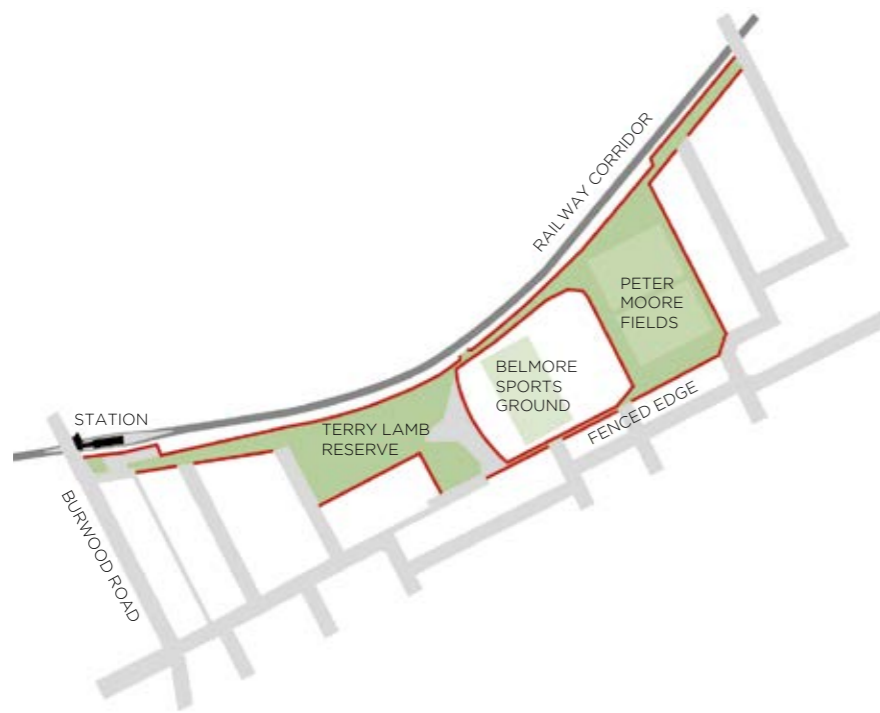
3.2 RAILWAY PARADE & REDMAN PARADE

3.1 BELMORE SPORTSGROUND

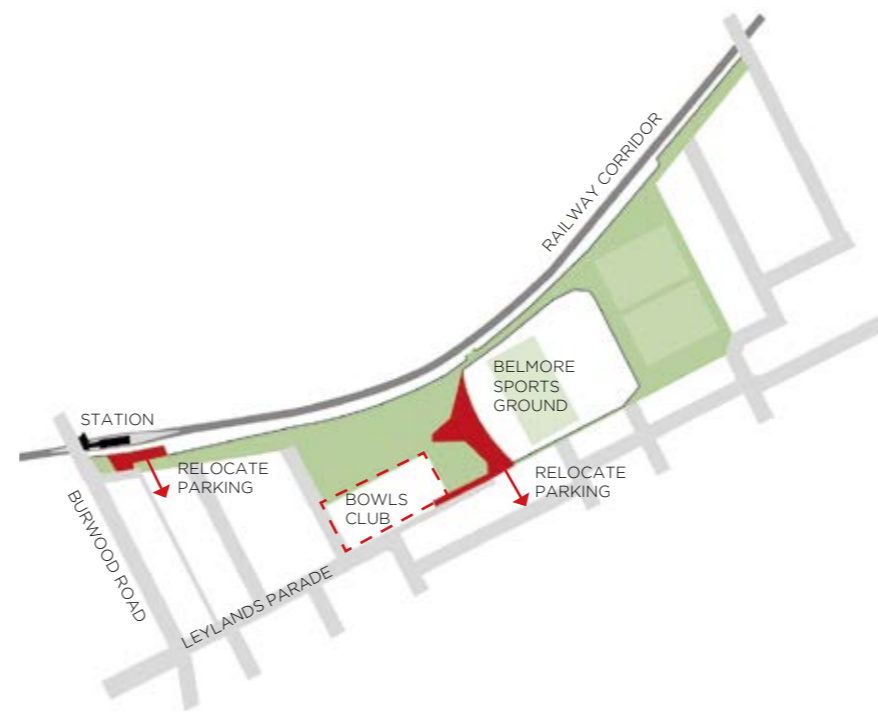


# 3.1

## OPPORTUNITY SITE: BELMORE SPORTSGROUND



Currently, dead fenced edges surround the open space. The Peter Moore playing fields are isolated behind the Sportsground and side fences creating an unsafe condition lacking wider connectivity. The Terry Lamb Reserve is bordered by rear fences to Belmore Bowling Club and the private car park of the Belmore Sportsground.



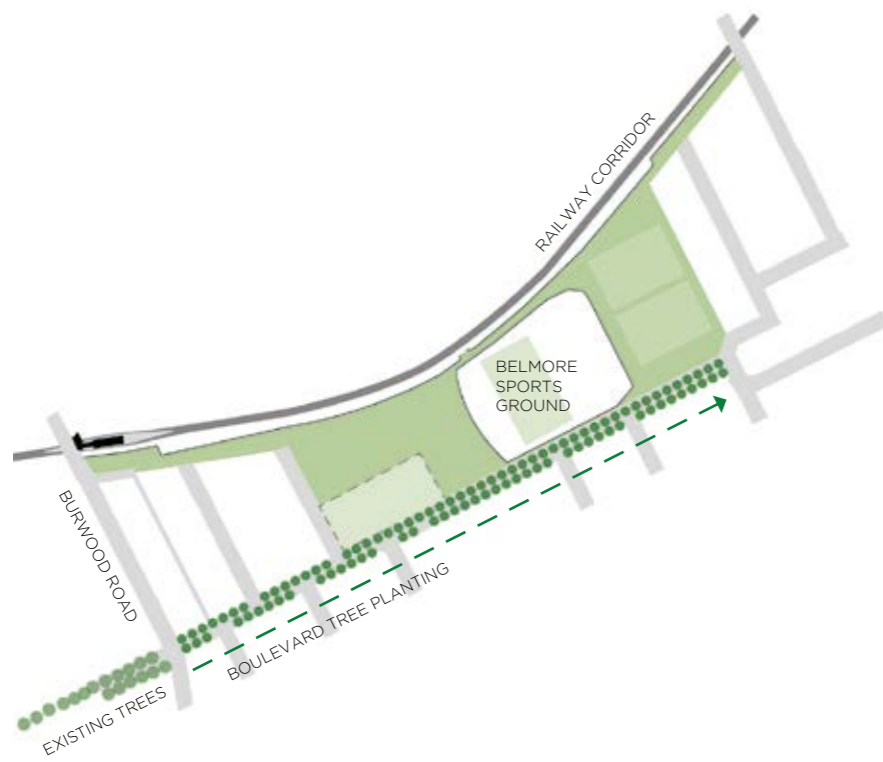
Existing surface car parks take up a lot of area in the open space. Parking could potentially be consolidated into new developments to regain open space.

The Bowling Club could potentially become additional open space, or a new community facility such as a school.



There may be potential for a new street to activate and connect the southern edge of the open space, By relocating existing streets as development occurs and orienting new buildings to the park.

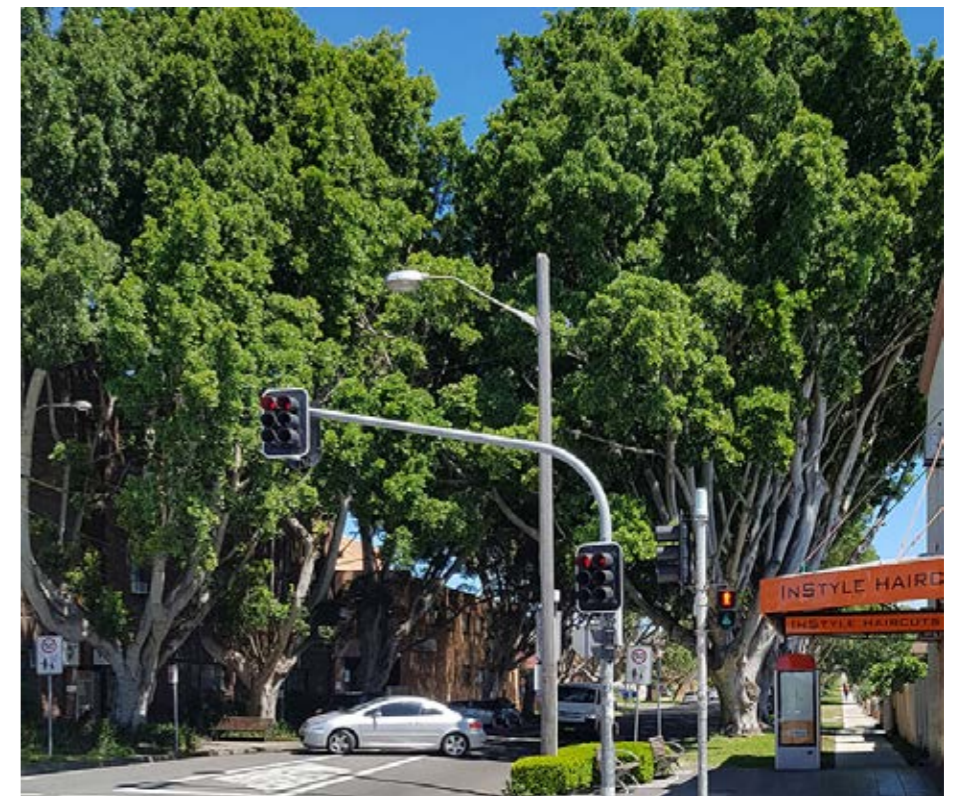




West of Burwood road, Leylands Parade has high quality street trees creating a fig lined avenue. There is great potential to draw this character east to create a tree lined boulevard along the park edge.



There is potential to activate a linear park along the railway by creating a new street and retail strip connecting to the station and the existing retail on Burwood St.



Existing fig plantings on Leylands Parade should continue along the edge of Belmore Sportsground as a new street edge between the new development and the park.



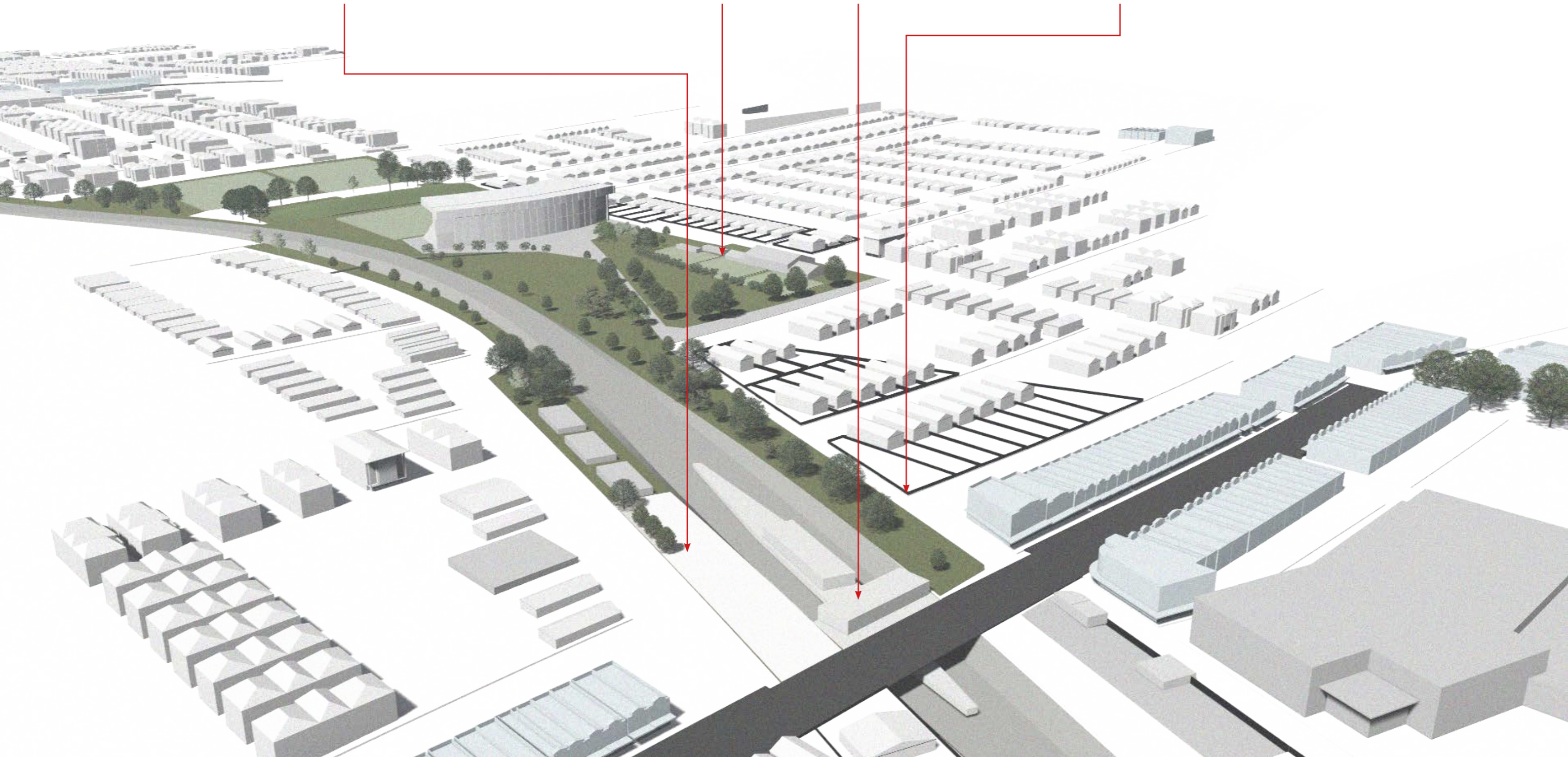
**BELMORE SPORTSGROUND: EXISTING CONDITION**

Surface car parks can be agglomerated into new building basements

Existing bowling club

Belmore Station

Back fences to park create unsafe walking conditions





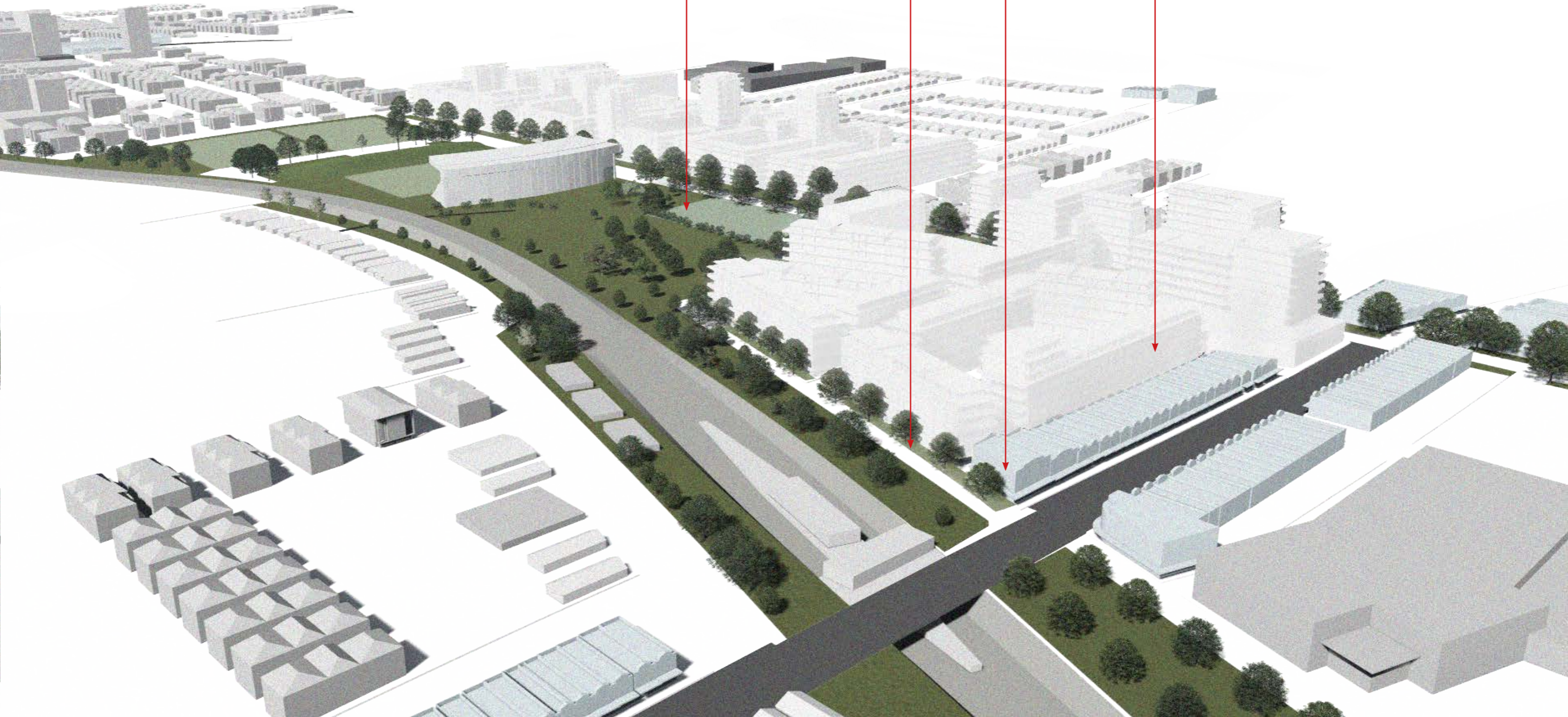
**BELMORE SPORTSGROUND: PROPOSED CONDITION**

Potential community use site as open space, school or community facility.

Road and retail strip along park edge to activate linear park

Pub remains as corner activator

Indicative building height and form only





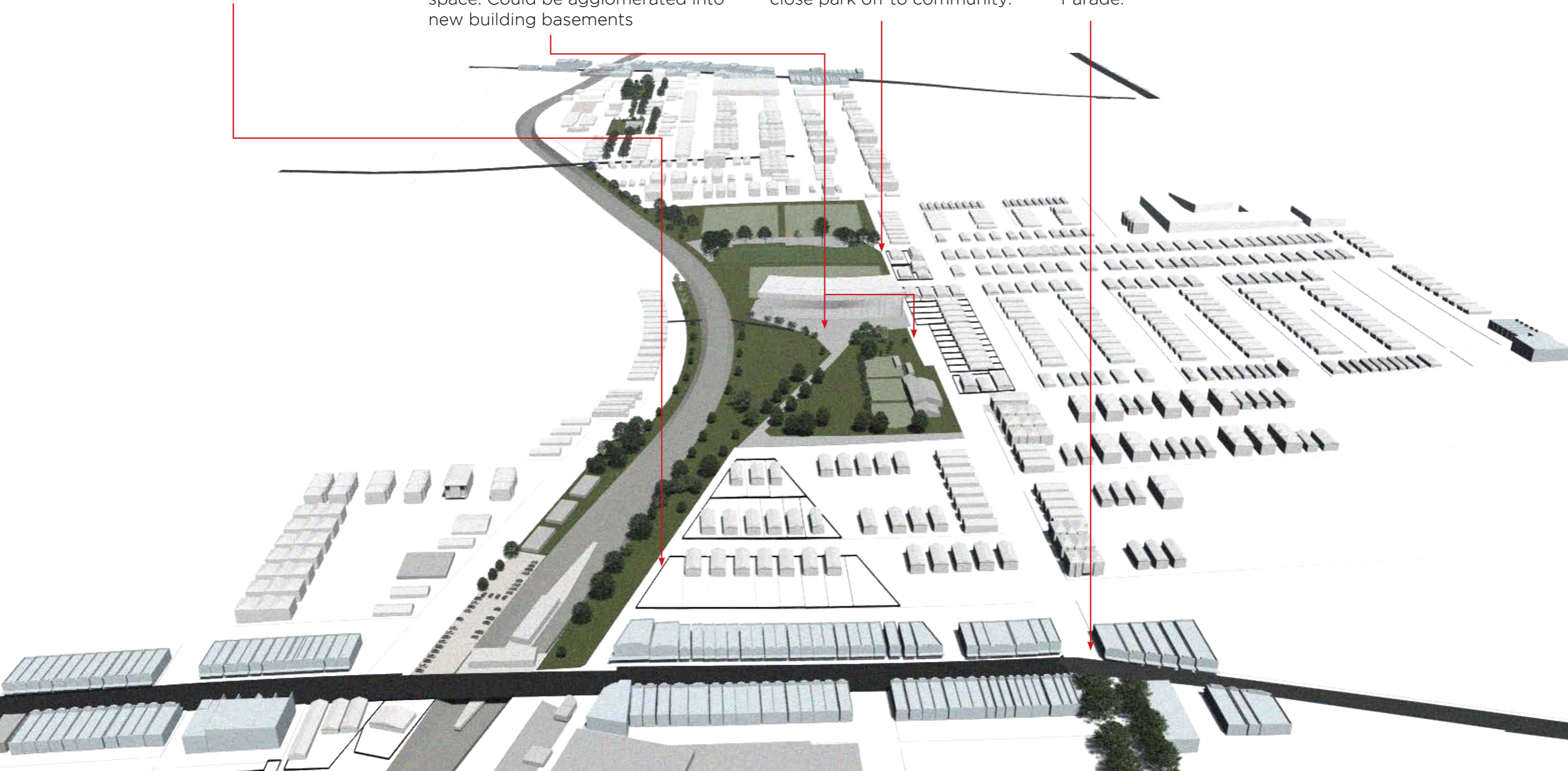
## BELMORE SPORTSGROUND: EXISTING CONDITION

Dead rear fence edge to Terry Lamb Reserve

Surface car parks of Belmore Sports Ground take up lots of park space. Could be agglomerated into new building basements

Back fences to park create unsafe walking conditions and close park off to community.

Very high quality street tree planting creates fig lined avenue on Leylands Parade.





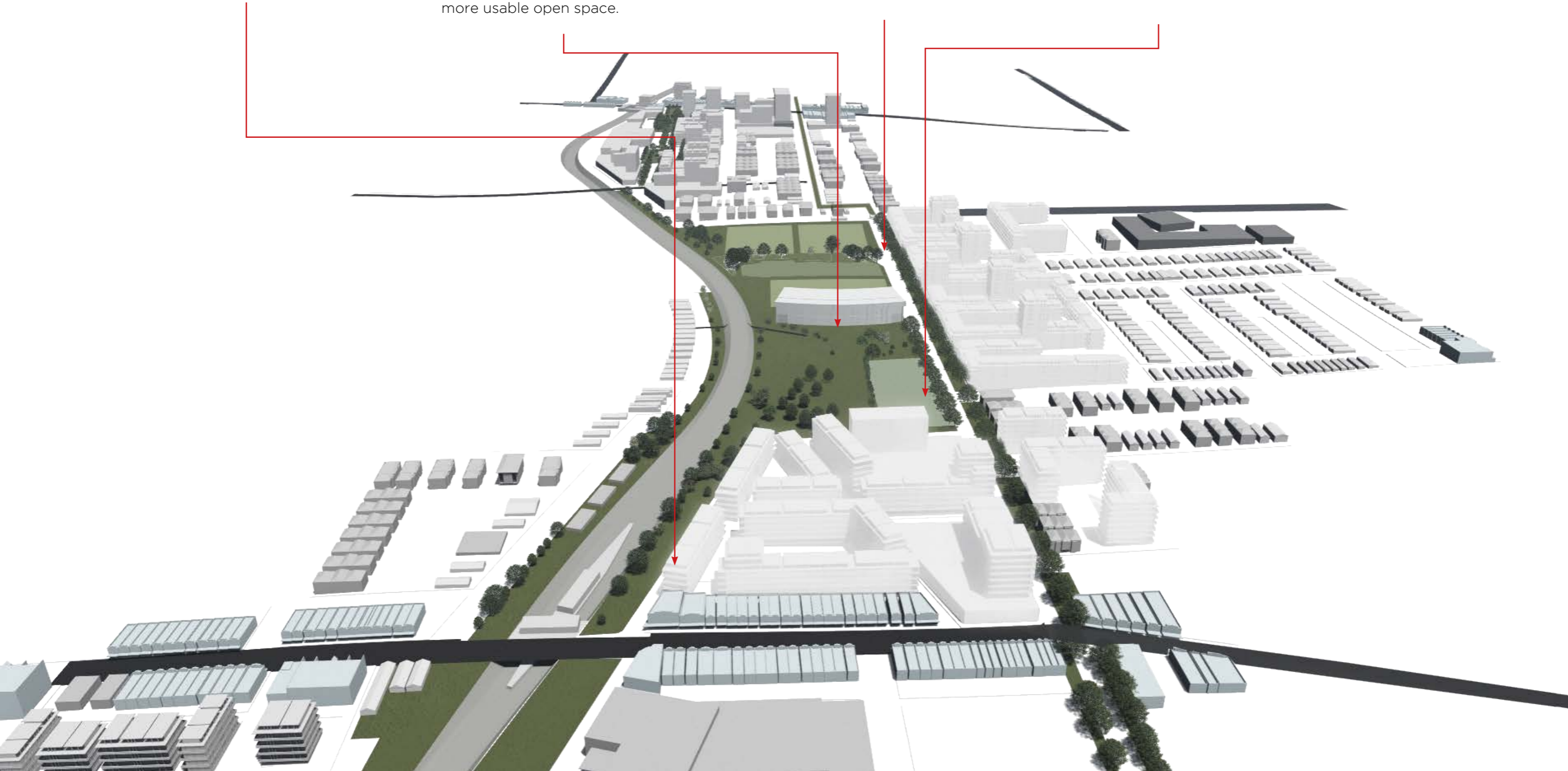
## BELMORE SPORTSGROUND: PROPOSED CONDITION

Road and retail strip along park edge to activate linear park

Transition surface car parks into nearby developments to improve relationship between stadium and park and open up more usable open space.

Extend existing Fig Trees from Leylands Parade along a new park edge street to Loftus Street.

Potential community use site as open space, school or community facility.





**BELMORE SPORTSGROUND: EXISTING CONDITION**

LOWEST DENSITY  
BESIDE HIGHEST AMENITY

REAR OR SIDE FENCE TO PARK

FENCE AND LANE ISOLATES PARK  
FROM COMMUNITY





**BELMORE SPORTSGROUND: PROPOSED CONDITION**

UP TO 8 STOREY TO SOUTH OF PARK

NEW BOULEVARD EDGE TO PARK

MOVE FENCE TO CREATE LARGER LINEAR PARK

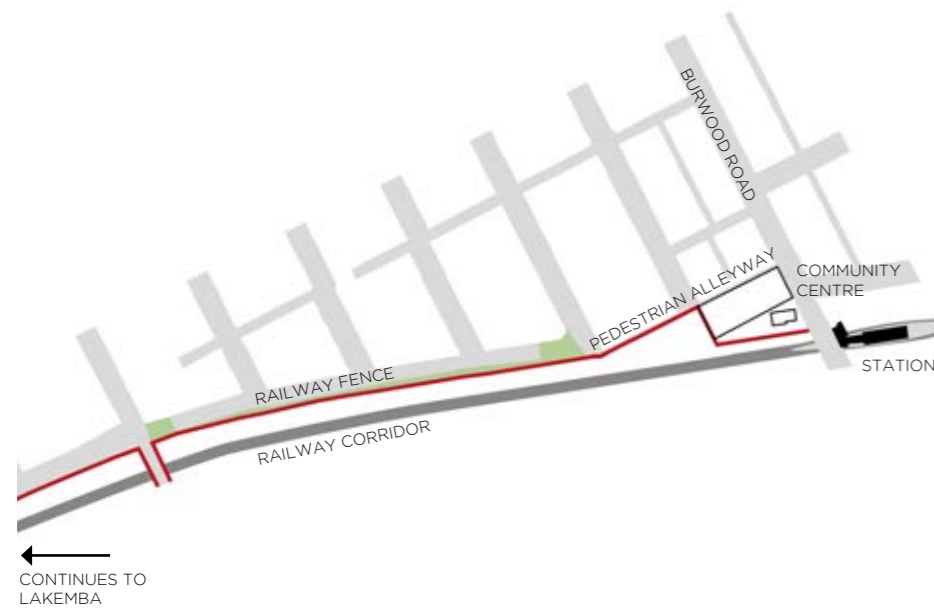
VISUAL BUFFER TO FENCE



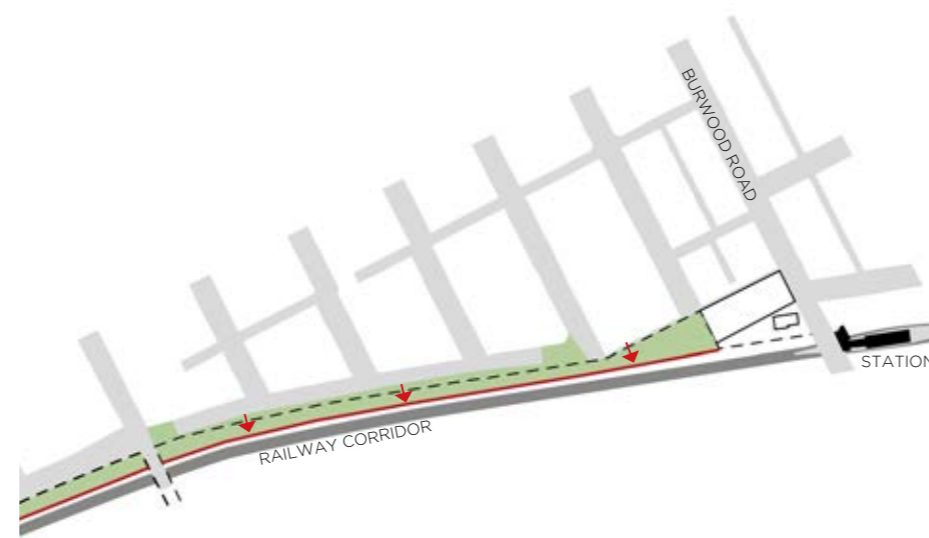


# 3.2

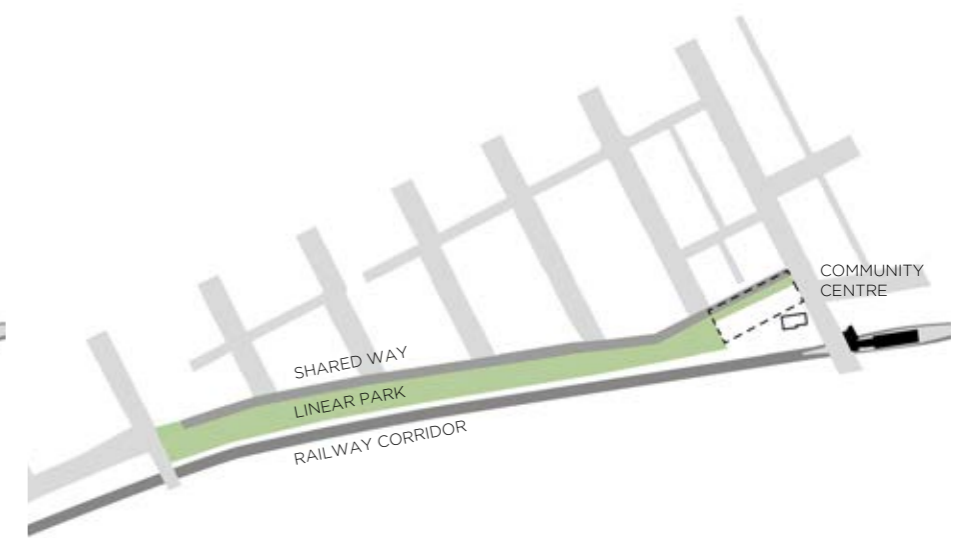
## OPPORTUNITY SITE: RAILWAY PARADE & REDMAN PARADE



The fence between the railway easement and Railway Parade isolates a wide area of under utilised open space. There is a poor connection from Railway Parade to the station, with an narrow pedestrian alleyway beside the railway fence and community centre.

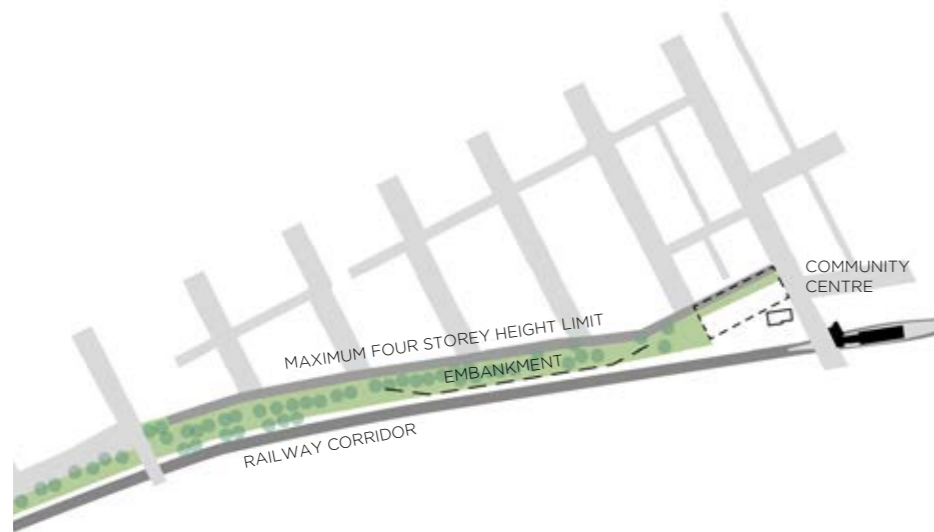


There is potential to relocate the railway fence south, to the top of the embankment to create a linear park.



Potential to narrow the street to a one lane shared way and redevelop the community centre to enable an activated connection through to Burwood Road and the station.





The linear park capitalises on existing mature trees along the easement, and celebrates the embankment. New development to the north is to actively address the park and to be a maximum of 4 storeys to ensure solar access.



Landform based play can make use of embankments along the linear park and the rail corridor.



Transform industrial landforms into usable and interesting landscape spaces along the linear park.

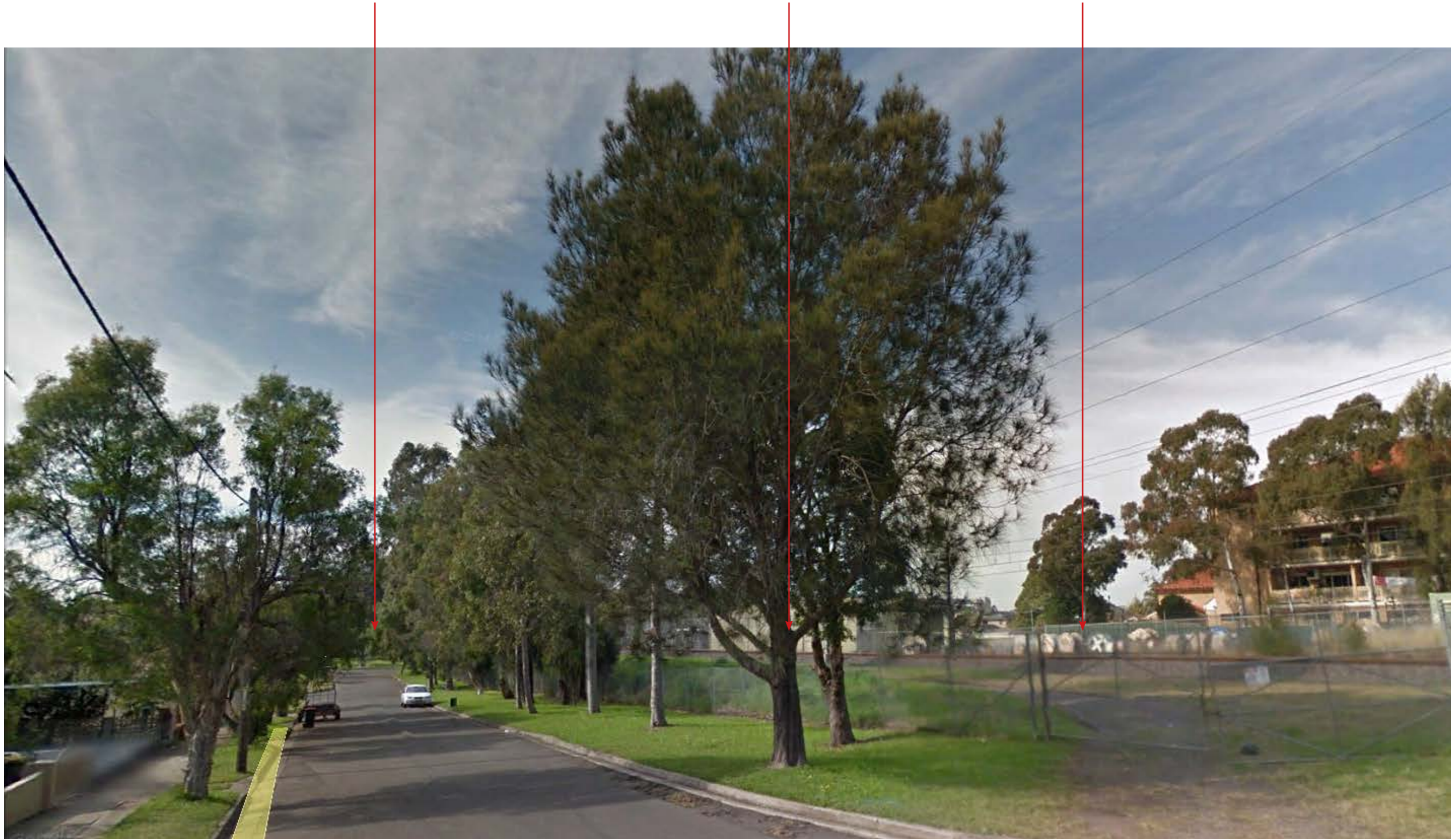


**RAILWAY PARADE & REDMAN PARADE: EXISTING CONDITION**

GENEROUS STREET WIDTH

MATURE TREES

FENCED OFF AREA IS LARGE





**RAILWAY PARADE & REDMAN PARADE: PROPOSED CONDITION**

CREATE STOOPS

SHARED WAY TREATMENT

ADD RAIN GARDENS

MOVE FENCE TO CREATE LARGER  
LINEAR PARK

VISUAL BUFFER TO FENCE

