

SJB Urban
PwC



Huntingdale Precinct Plan

Prepared for
City of Monash

Issued
31 May 2019

Level 5, 18 Oliver Lane
Melbourne VIC 3000
Australia
T. 61 3 9699 6688
urban@sjb.com.au
sjb.com.au

We create amazing places



At SJB we believe that the future of the city is in generating a rich urban experience through the delivery of density and activity, facilitated by land uses, at various scales, designed for everyone.

Version: 03
Prepared by: LF & NC
Checked by: AR

Contact Details:

SJB Urban
Level 5, 18 Oliver Lane
Melbourne VIC 3000
Australia

T. 61 3 9699 6688
urban@sjb.com.au
sjb.com.au

SJB Urban Pty Ltd
ABN 65 310 854 308
ACN 123 754 361

Contents



1 Page 04
Introduction

2 Page 06
Context

3 Page 14
Vision & Principles

4 Page 16
Precinct Plan

5 Page 31
Activity Areas

6 Page 57
Conclusion

1

Introduction

Introduction

Introduction

PricewaterhouseCoopers Consulting (Australia) Pty Limited and SJB Urban Pty Ltd have been engaged by the City of Monash to develop a Precinct Plan (the Plan) for Huntingdale.

The objective of the Plan is to:

- articulate a transformative vision for Huntingdale in its role as a key Precinct within the Monash National Employment and Innovation Cluster (NEIC)
- identify how changes in land use activity and built form will transform the Huntingdale Precinct and make the vision a reality

Changes in land use activity and built form are drawn from analysis in five background reports addressing:

- economics
- land use
- transport
- community infrastructure
- urban design

A summary of these background reports is provide on the following pages.

It should be noted that, while the Plan identifies the changes in land use activity and built form required to achieve the Precinct vision, it does not identify changes to planning controls required to facilitate future land use and activity. The relevant planning mechanisms required to implement the recommendations of the Precinct Plan will be determined by Monash City Council once the Plan is formally adopted.

Summary of Background Reports

Economics

The report develops a transition pathway to higher value economic activities and positions Huntingdale to complement the NEIC over the next 25 years by:

- Identifying the key industries which Huntingdale should retain, grow and attract.
- Recognising the industries expected to transition out of Huntingdale.
- Developing scenarios to estimate the jobs growth expected in Huntingdale.

Land Use

The land use report uses employment outputs from the economics report and combines this with residential and retail analysis to identify:

- The transition in activity required to realise the economic transformation of the Precinct.
- The floorspace requirements of each activity.
- Catalytic sites and activities that might facilitate and accelerate transition.

Transport

The transport report considered:

- Travel demand and behaviour that would result from the change in activity analysed in the economic and land use reports.
- The extent to which changes to the transport network facilitate and accelerate land use and economic transitions.

Community Infrastructure

The Community Infrastructure report audits community infrastructure provision within Huntingdale and establishes benchmark provision targets to assess the adequacy of supply to the current and forecast future users. It develops recommendations for infrastructure investment and delivery models to meet these needs.

Urban Design

The Urban Design report incorporates the output of the 4 previous background reports and identifies a set of design principles and considerations to inform changes to built form that facilitate changes to land use, community infrastructure and the transport network.

2

Context

Context

Local Context

The Study Area comprises of approximately 1.7 km² and is centred around the Huntingdale Train Station, stretching around 1.3 km north-west along the train line to Hanover Street, south-east along the train line to Colin Road, then Valley Street in the south and Burlington Road in the north. It is surrounded by the suburbs of Oakleigh in the north-west, Oakleigh East in the north-east, Oakleigh South in the south-west, Clayton North in the east and Clayton in the south-east. The Clayton Activity Centre including upgraded train station is a pivotal hub for the nearby Health Education and Research Precinct and NEIC. Huntingdale's close physical relationship and existing transport networks with Clayton provide a strong base for increased supporting industries, employment and services.

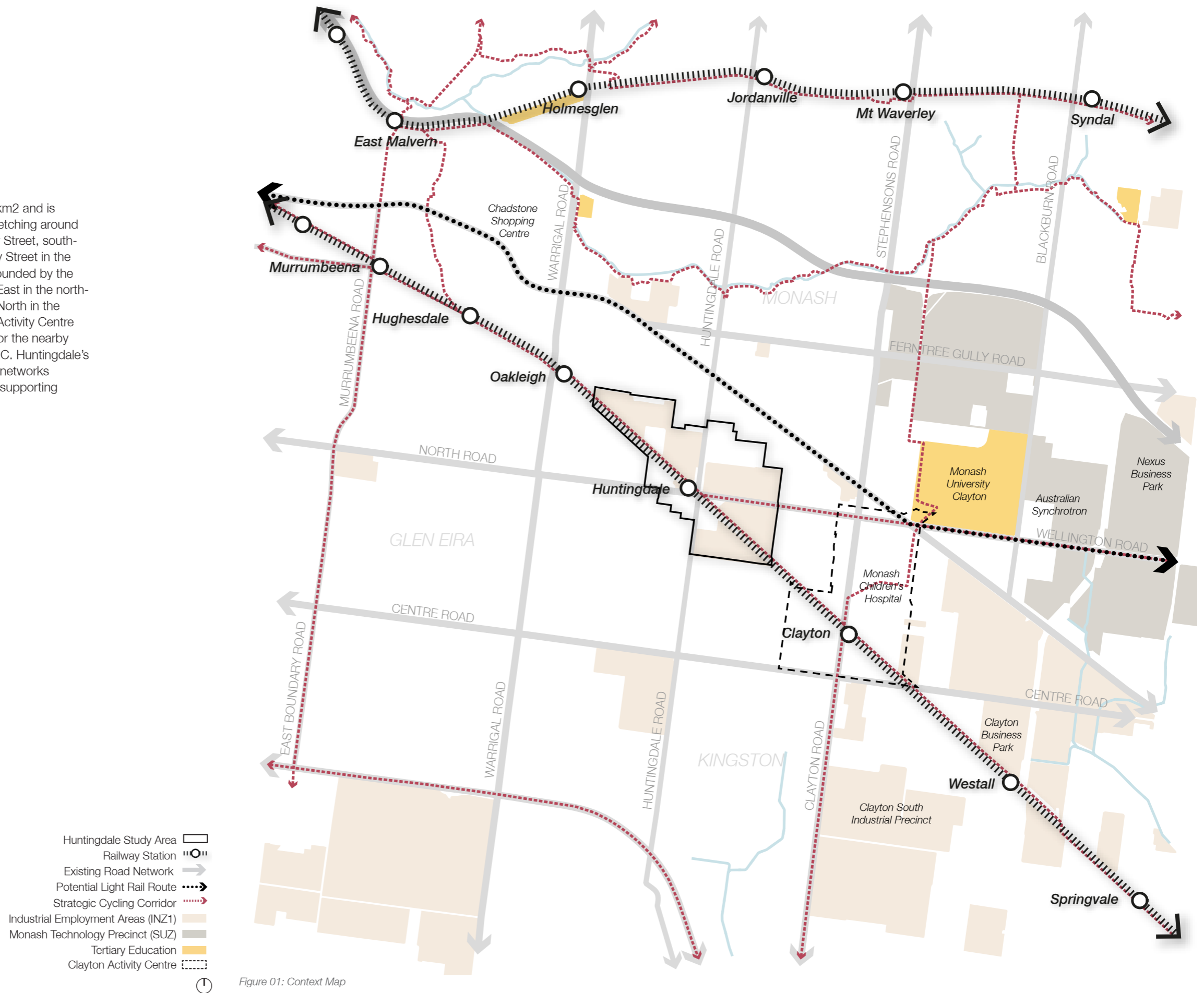


Figure 01: Context Map

Context

Economic activity

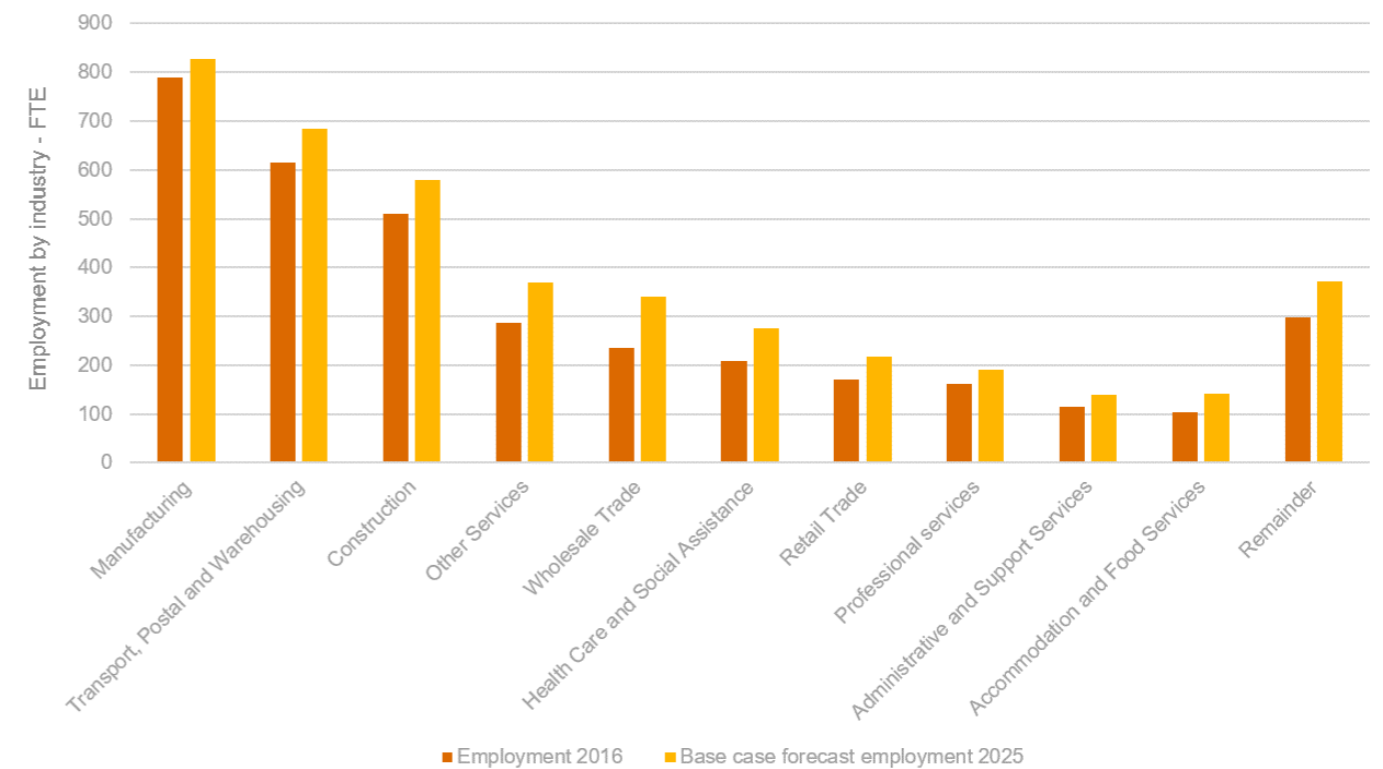
Table 1 shows current economic activity in the Huntingdale Precinct.

As shown, economic activity (as measured by output) in the Precinct is dominated by manufacturing, construction, wholesale trade and transport and logistics activities. Not surprisingly, these industry sectors generate the largest employment in the precincts.

Figure 2 shows forecast growth in employment by industry sector in the Huntingdale Precinct to 2025. As shown, there is very little growth forecast in key Industry Sectors and the Precinct as whole in this timeframe. Therefore, future economic growth is likely to be limited (unless there is a substantive change in GVA per employee in key Industry Sectors in this timeframe).

Table 01: Economic Activity in Huntingdale

Industry	GVA		Employment	
	(\$ million)	(proportion of total)	(number employed)	(proportion of total)
Manufacturing	\$112	22.20%	790	22.60%
Construction	\$85	16.90%	511	14.60%
Transport, Postal and Warehousing	\$83	16.50%	614	17.60%
Wholesale Trade	\$53	10.60%	236	6.80%
Other Services	\$25	5.00%	287	8.20%
Professional, Scientific and Technical Services	\$23	4.50%	161	4.60%
Retail Trade	\$22	4.30%	171	4.90%
Health Care and Social Assistance	\$20	4.10%	208	6.00%
Administrative and Support Services	\$18	3.50%	114	3.30%
Rental, Hiring and Real Estate Services	\$16	3.20%	45	1.30%
Education and Training	\$10	1.90%	77	2.20%
Information Media and Telecommunications	\$8	1.60%	16	0.50%
Electricity, Gas, Water and Waste Services	\$8	1.60%	19	0.50%
Accommodation and Food Services	\$6	1.20%	104	3.00%
Public Administration and Safety	\$5	1.10%	61	1.70%
Arts and Recreation Services	\$6	1.10%	65	1.90%
Financial and Insurance Services	\$4	0.80%	8	0.20%
Agriculture, Forestry and Fishing	\$-	0.00%	8	0.20%
Mining	\$-	0.00%	-	0.00%



Source: PwC GEM Analysis (2018), using ABS census data for employment by industry in 2016 (ten largest ABS divisions and the remainder). Geospatial unit – Destination Zone, as defined by the ABS. Growth rates sourced from TfV's VITM and applied to model a base case employment for 2025.

Figure 02: Employment Growth by Industry Sector - Huntingdale Precinct

Context

Land Use

Table 2 defines existing land use by area (gross floor area) and Figure 3 on the previous page shows the location of the dominant land uses within the Huntingdale Precinct.

There is a strong demand for residential redevelopment in the Precinct, primarily for medium and high density development as shown below in Table 3. As noted, development to date has focussed on the retail strip on Huntingdale Road although permits have been issued elsewhere in the Precinct.

Table 02: Land Use in Huntingdale

Activity	Estimated future (2016 GFA sqm)	Comment
Industrial	757,000	<ul style="list-style-type: none"> This is the dominant activity in the Precinct. Industrial areas are largely single use – there is minimal mixed use within these areas which reflects the ‘traditional’ manufacturing nature of uses and need for buffering from incompatible uses. Interfaces with other activities are generally poor Intensity of use on sites is generally low – most are configured for labour intensive activity and circulation of heavy vehicles on site Many sites have significant areas of at grade parking which is not a productive use of available land
Commercial (including retail)	25,000	<ul style="list-style-type: none"> There is limited commercial activity building stock in the Precinct While some stock is distributed throughout the Industrial areas, there is also a concentration of commercial building stock along and in close proximity to the retail strip on Huntingdale Road Retail development is largely confined to Huntingdale Road (north of the junction of Huntingdale Road and North Road) The stock is aged and there are few examples of recent redevelopment The retail offer is dominated by specialty stores and food and beverage outlets
Residential	115,000	<ul style="list-style-type: none"> Residential stock in the Precinct is dominated by single story detached housing More recently, there has been some medium density residential development in the precinct – this is largely confined to the retail strip on Huntingdale Road and in proximity to Huntingdale rail station

Table 03: Residential Demand Forecasts

Type	Under Construction	Registration and Sales	Approved	Planning Assessment	Share of pipeline by type
Units (low-rise)	358	223	142	70	44.8%
Units (mid-rise)	208	89	253	30	32.8%
Units (high-rise)		348			19.7%
Apartments (low-rise)				48	2.7%
Grand Total	358	223	142	70	44.8%



Figure 03: Huntingdale Land Use Map

Context

Community Infrastructure

The distribution of community infrastructure – which refers to the public places and spaces that accommodate community facilities and services that support individuals, families and groups to meet their social needs, maximise their potential and enhance community wellbeing – in the Precinct and surrounds are shown in Figure 4.

This indicates that there is little ‘local’ community infrastructure within the Huntingdale community, and surrounding infrastructure is over utilised. There is an abundance of facilities surrounding Huntingdale. However, geographically these tend to be clustered around other community hubs such as the Clayton and Oakleigh Activity Centres. Few facilities are provided in the Precinct itself.

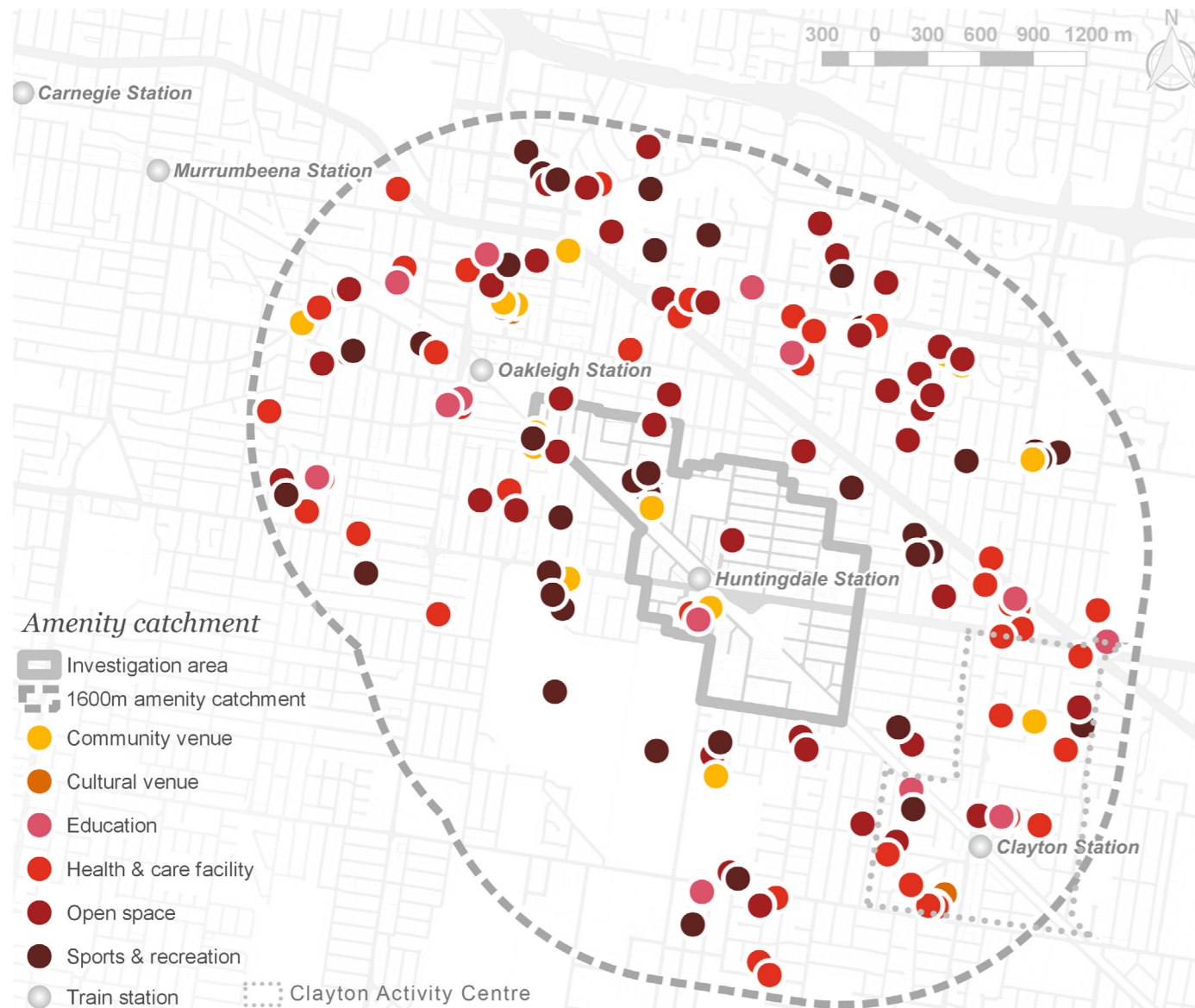


Figure 04: Community Infrastructure

Transport

The road network in Huntingdale is well established, with the last major infrastructure change, the North Road overpass, in 1972. The Huntingdale Precinct is served by the following major road network:

- Princes Highway – a 6 lane highway with service lanes each way, connecting South Yarra, Caulfield, Chadstone, Clayton, out past Dandenong to Pakenham.
- North Road - 6 lane highway with bus lanes connecting Huntingdale Railway Station with Monash University and beyond (becoming Wellington Road out to Rowville).
- Huntingdale Road – a 2 lane arterial road divided by the North Road overpass, connecting North Road with the Monash Freeway east-facing ramps to the north, and Centre Road to the south.

A map of the arterial and highway network is shown in Figure 5. Given the access configuration from North Road, several local roads adjacent to the overpass are required to provide a highway or arterial road function to support connections between Huntingdale Road and North Road. This results in congestion and safety issues given the lack of capacity and inadequate design relative to volume, creating significant urban separation as shown in Table 4.

Huntingdale Precinct has a well established public transport network with good connections to the CBD, South East Melbourne, and the Monash NEIC as shown in Figure 6. The public transport offer includes:

- Rail: Cranbourne Pakenham Train Line - a high frequency high capacity service to the Melbourne CBD (via Oakleigh, Caulfield, South Yarra and Richmond) and Dandenong (towards Pakenham and Cranbourne)
- Bus: three out of the four bus routes connect Huntingdale Station to Monash University (the 601, 900 and 630). The directedness of the connection across the three routes ranges from shuttle to smart bus to suburban route, and frequency from 4 minutes to 15-20 minutes across the weekday am peak to interpeak.
- High frequency shuttle and smart bus services include:
 - route 601 – an express shuttle service between Huntingdale Station and Monash University – frequency of 4 minute intervals from the AM peak to the end of the PM peak including intraday
 - route 900 – a SmartBus service from Rowville to Caulfield Station via Monash University, Huntingdale Station, Oakleigh Station, and Chadstone – frequency of 12-15 minutes from the AM peak to the end of the PM peak including intraday
 - Routes 603 and 704 operate on a mixture of arterial roads (with bus lanes) and collector roads to connect Huntingdale Train Station to a range of destinations:
 - route 603 connects Huntingdale Station and Monash University Clayton Campus, and services a range of other destinations
 - route 704 moves along Huntingdale Road in a complex route (from north to south, and vice versa). It primarily connects suburban stops in proximity of Clayton, Huntingdale and Oakleigh stations with the stations.

Context

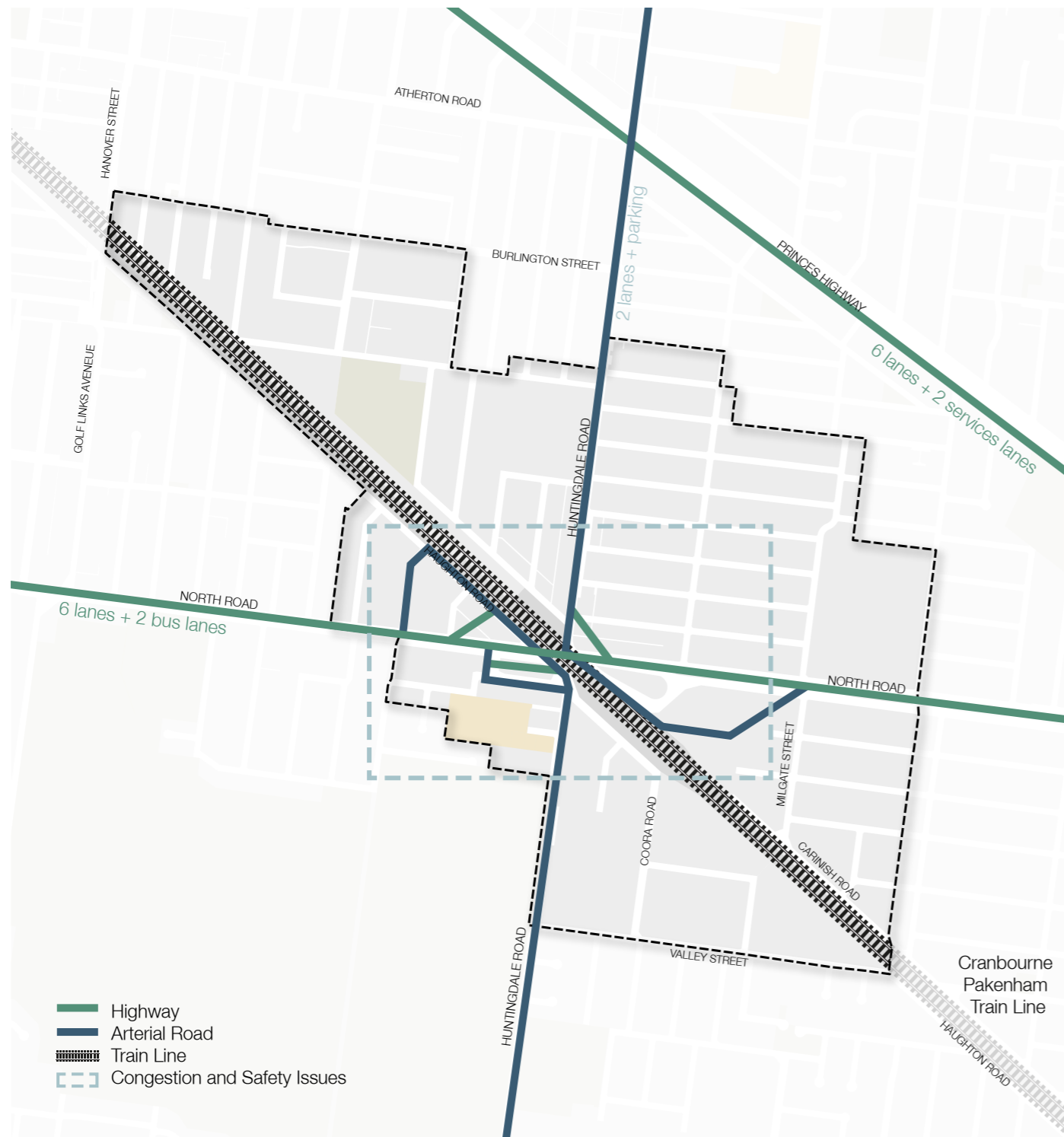


Figure 05: Arterial and Highway Network

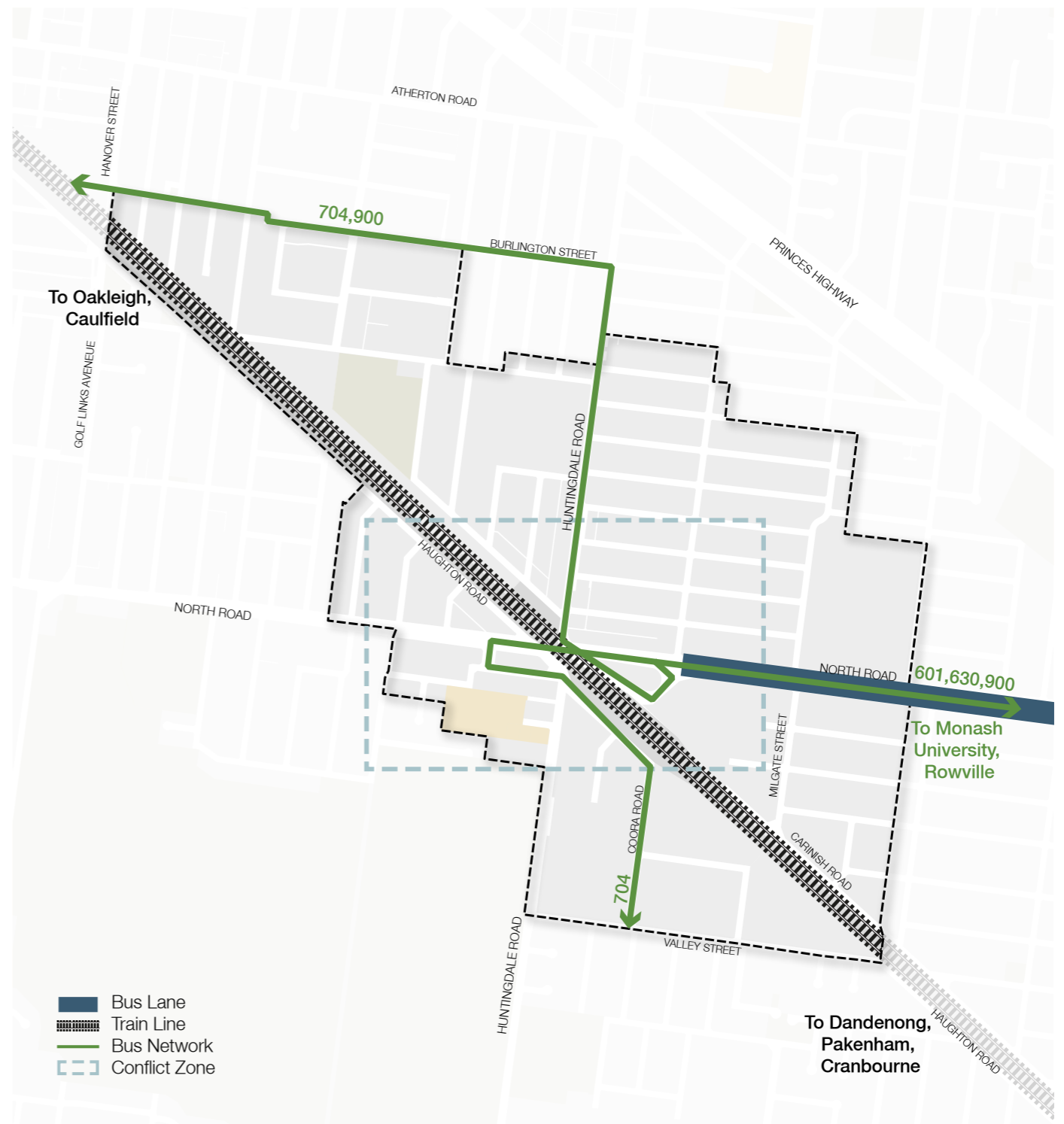



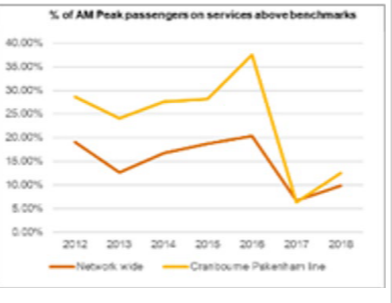
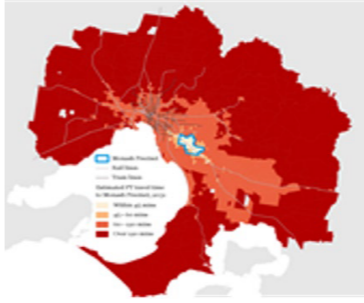


Figure 06: Huntingdale Precinct Public Transport Network

Context

Table 04: Transport Bottlenecks - Huntingdale Precinct

Mode	Road Network		Public Transport		
Bottlenecks	A: Traffic movement to/from Huntingdale Road (south of North Road overpass) to the Huntingdale Road Shopping Strip 	B: Traffic flow along North Road 	C: The connection from Huntingdale to Monash University via rail and bus 	D: Rail line crowding 	E: Public transport network travel time 
	Capacity - volume capacity analysis shows congestion. Safety - design results in counterintuitive movements and poor safety outcomes.	Capacity - volume /capacity analysis shows congestion. Safety - crash data shows the performance of the network is inconsistent with Vision Zero.	Network Capacity - The transition between the rail line and the bus service results in observed crowding and waiting. Safety - the crowding has a second order impact on safety as passengers' wait near the road.	Capacity - The rail line that serves Huntingdale is crowded, with a higher percentage of services running in the AM and PM peaks that are over capacity than the network baseline. 20 minute city - Crowding impacts on traveller comfort and amenity, as well as the ability to reliably access services.	20 minute city - Travel time analysis - the current public transport network supports an east-west movement to the heart of the Monash NEIC via Huntingdale station, but does so in a way that only enables the 20 minute city only for proximate LGAs - with the majority of the LGAs having 45+ minutes to access the NEIC.
Performance Issues					

Urban Design

A number of factors contribute to the existing character of Huntingdale including:

Location

- Location between the Clayton and Caulfield Campuses of Monash University generating student activity
- Proximity to the Monash Health and Technology Precinct
- Location near the established Activity Centres of Clayton (north-west) and Oakleigh (immediately west)
- Its location on the edge of the Monash National Employment and Innovation Cluster (NEIC)

Transport links

- Proximity to a heavy rail link
- Cycle paths linking neighbouring suburbs
- Train and bus interchange servicing a significant student population

Built Form

- Industrial uses with the associated large land parcels and large building footprints
- Residential streets with predominately single and two storey dwellings.

Major physical characteristics include a well-defined Main Street occupying Huntingdale Road north of the Train Station to Hargreaves Street, the mix of individual residential dwellings and industrial buildings as well as the major transport 'landmark' of the North Road overpass which severely restricts movement between the north and south of the train line and each side of North Road.

Current zoning includes large portions of Industrial 1 Zone, sections of Commercial 1 Zone around Huntingdale Road with the existing residential fabric in a General Residential Zone.

The streetscapes and public spaces, (the public realm) provide a variety of experiences and quality. The neighbourhood feel of Huntingdale Road with canopies, cafes and street trees provides a small defined retail core with good street tree planting. Other streets vary considerably in building setbacks, landscape quality and street tree planting with many including dominant off-street vehicle parking in front setbacks, poor maintenance of grass verges and a lack of canopy street trees.

The major open space is Jack Edwards Reserve containing synthetic and natural turf soccer pitches and a dog off-leash area however access and alternative uses are restricted by fences and limited informal green spaces.

Context

The Monash National Employment and Innovation Cluster

Located approximately 25 km south east of the Melbourne CBD, the Monash NEIC, shown in Figure 7, is the largest of all the major innovation precincts within Victoria. The Monash NEIC is a key education, health, research and commercial hub. Key organisations include Monash University, the Australian Synchrotron, the Melbourne Centre for Nanofabrication, Monash Medical Centre, a new Monash Children's Hospital, CSIRO's largest site in Victoria and the Monash Enterprise Centre. This mix of organisations makes the Monash NEIC a key component of Australia's knowledge based sector.

Vision for Huntingdale within the Monash NEIC

The Monash NEIC Draft Framework Plan (2016) sets out the following long term objectives:

- renewal of industrial precincts by attracting high value economic activity associated with the broader NEIC
 - as development accelerates in the NEIC spill over opportunities are expected to emerge, with land values and land use change supporting the shift of some activities to Huntingdale
 - capturing greater activity in Huntingdale to boost local economic performance and expand the array of jobs in the cluster
- to become an important gateway, transit interchange and node of activity for Monash University and the local community, and increase retail capture
- a gritty urban attractor, leveraging its industrial history
- a greatly improved public realm will change the feel of the area as a destination rather than simply acting as a transport interchange
- increased dwelling diversity and density will support a range of successful community, retail and recreational infrastructure.

The NEIC Economy

In 2016, \$8,181 million of GVA was generated in the Monash NEIC. Comparatively, the Huntingdale Precinct generated GVA of \$504 million, or 5.9 per cent of the GVA of the combined area. Therefore, Huntingdale can be understood to be underperforming in terms of its role as an area of significant employment generating land in the NEIC. This can be attributed to the difference in industry composition and output as shown in Figure 8.

Figure 8 indicates that sectors underpinning innovation and capability oriented employment– such as education, health and professional services –play a stronger role in the NEIC. It also shows that economic activity is more diverse in the NEIC, with division contribution to GVA is relatively evenly split between the top five industry sectors in the NEIC. These five industries account for approximately 50 per cent of all output. By contrast, in Huntingdale, activity is concentrated in the top three divisions of manufacturing, construction and transport, which account for almost 55 per cent of output.



Figure 07: Monash NEIC

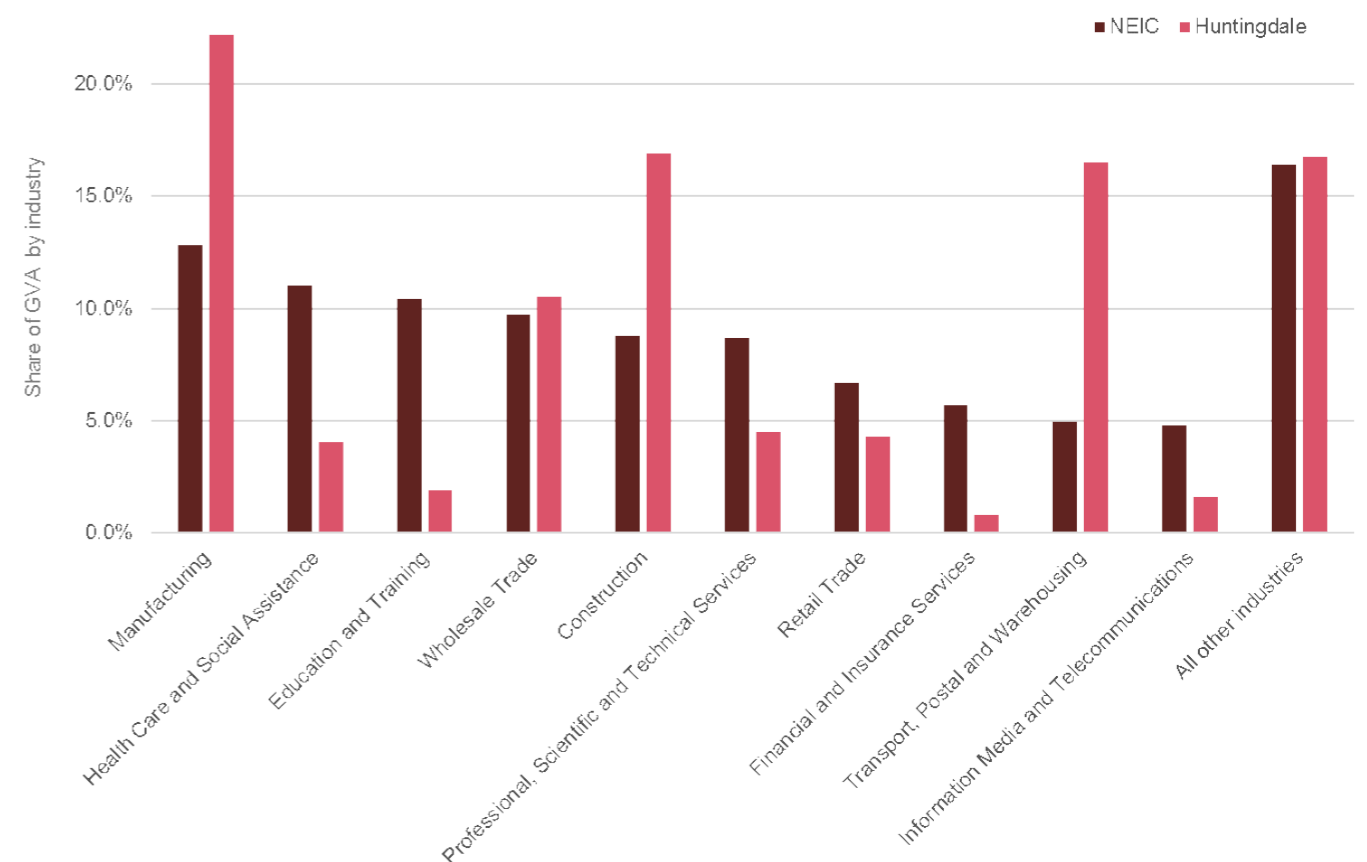


Figure 08: GVA Comparison – Monash NEIC and Huntingdale Precinct

3

Vision & Principles

Vision

The Vision is derived from the urban renewal opportunity in Huntingdale, the role the Precinct can play in the NEIC and the character required to achieve this vision.

The Huntingdale Precinct is the premier location for knowledge intensive based businesses seeking a location within the Monash NEIC that have synergies with education, health, technology and manufacturing in Clayton Health and Education Research Precinct and Clayton, which do not require immediate proximity. These tenants are co-located within existing businesses which are growing and underpin the strength of the local economy.

The Precinct is a diverse village that provides a range of employment, recreation and residential opportunities. Offering spaces that allow for innovative businesses of all types, the industrial character inspires adaptable appropriation meeting the needs of today and catering for the potential of the future.

Well connected transport linkages, including cycling and pedestrian networks build on the excellent public transport infrastructure connecting the village to its neighbours and beyond. The Main Street provides a safe, leafy, place to shop and socialise offering a variety of local businesses that cater to the everyday needs of locals who live and work in the village as well as those who pass through on the way to nearby education and employment hubs.

Principles

The following four overarching Principles are to be applied across the Huntingdale Precinct. They provide high level guidance for the future of Huntingdale to ensure Objectives and Strategies will accomplish the transformative outcomes identified in the Vision. Underpinned by the detailed research contained within the background reports they address employment, economic resilience, opportunities for iterative change and creating well considered urban environments for everyone.

Foster innovation as a cornerstone of the economy

- Trade and investment in knowledge intensive and high value industry sectors that can compete in global markets.
- Employment growth in high skill, high wage jobs.
- Economic resilience and transition to digitised economy.

Productive use of Industrial land

- Recognise the changing land and site requirements of knowledge intensive industrial sectors - less land intensive, higher employee per m2 ratio, higher amenity requirement, reduced negative spill over, extended hours of operation.

20-minute neighbourhoods

- Housing in close proximity and accessible to activities that generate significant inward migration such as universities and hospitals.
- Increase mixed use development where conflict of activity can be minimised and mitigated.
- Increase housing density around transport links and in existing residential areas.
- Scale of retail and commercial activity is commensurate to scale of centre wide activity (residential and employment).
- Transport networks have capacity for trips (including active transport).

Place through site responsive design

- Built form outcomes respond to the existing character while allowing for future opportunities.
- Provide high amenity streetscapes and public places framed by appropriately scaled built form.
- Activity Areas allow for specific design responses based on land use establishing a network of neighbourhoods.
- Provide logical and clear movement routes for pedestrians, cyclists, cars and heavy vehicles maximising efficiency and safety for all.
- Design focused on amenity uplift and seamless interface between activities.



The Plan provides Precinct wide guidance that specifically focuses on the broader themes of:

- Economic Mix
- Access
- Place

4

Precinct Plan

Precinct Plan

Urban Renewal Levers

There are three key levers required to implement urban renewal in Huntingdale; Economic Mix, Place and Access. The Precinct Plan focuses on these areas of intervention and proposes a series of high level Principles, supporting Objectives and associated Strategies all working toward an overarching Vision grouped around these levers.

As shown in Figure 9, these levers must work together to achieve transformative change in Huntingdale. Implementation of the Principles, Objectives and Strategies can be accomplished through a variety of means and by numerous stakeholders and include: potential Planning Policy changes, market interest and private investment and the impact of new, appropriate development and ongoing investment by Council and government on major infrastructure and local public realm improvements.

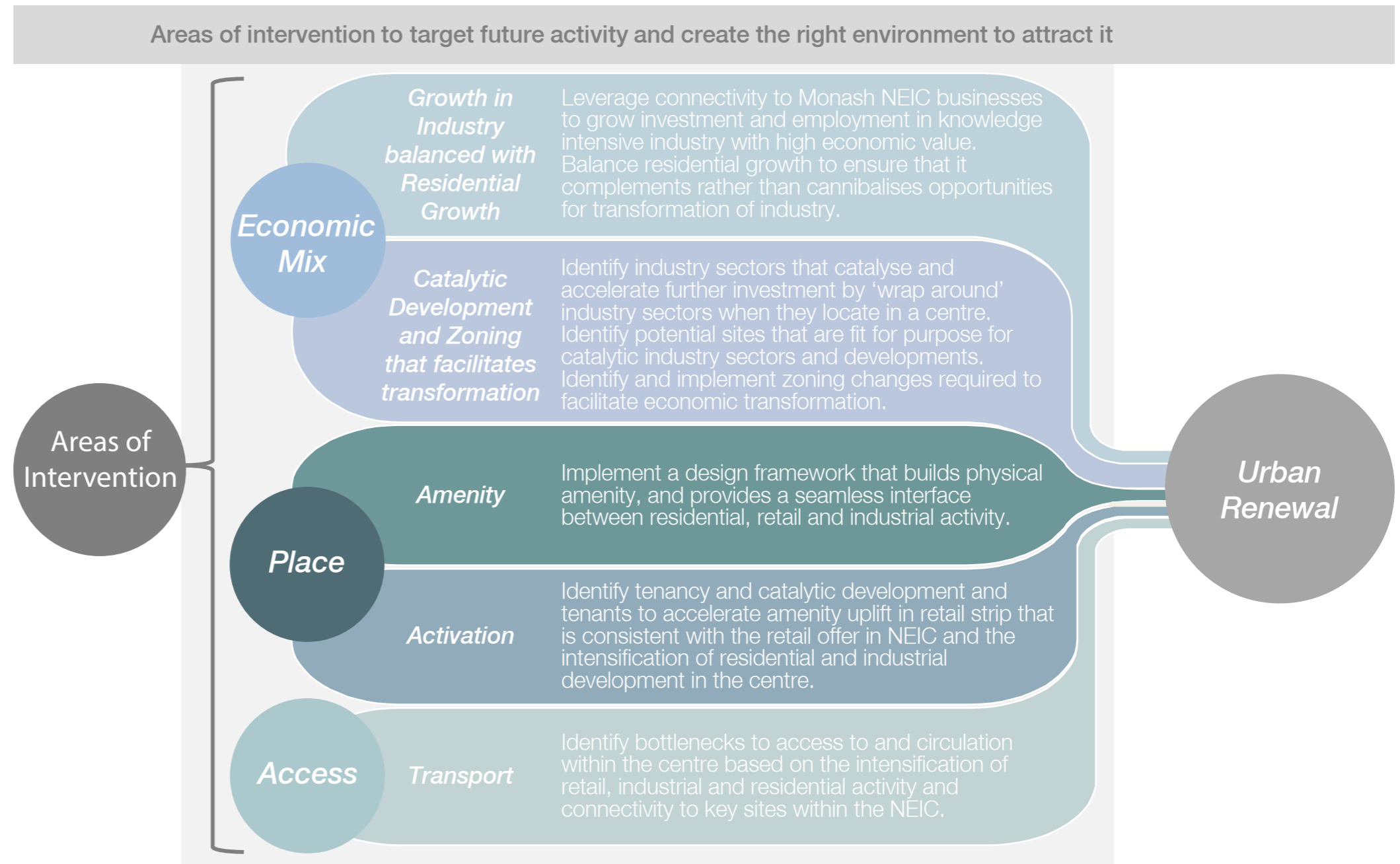


Figure 09: Areas of Intervention

The Challenge

The challenges facing sustainable growth and iterative change in Huntingdale are summarised under Economic Mix, Place and Access. Each of the challenges must be addressed to enact change and they are explored in further detail in the subsequent chapters.



Economic activity in Huntingdale is heavily reliant on industries which are expected to transition out of the Monash NEIC.

Huntingdale will need a catalytic transformation to attract knowledge intensive business to the activity centre. Catalytic developments and anchor tenants from knowledge intensive industry sectors will accelerate the transformation.

Huntingdale currently has a low service offering and needs significant changes to support the local economy.

Existing and historical industrial uses mean there are potential land contamination and poor soil conditions that are likely to require the application of an Environmental Audit Overlay (EAO) and affect the construction costs of new built form.

Portions of the Study Area are prone to overland flooding affected by the Special Building Overlay (SBO).



There is a significant under supply of community infrastructure in Huntingdale and the surrounding area. Highest priority areas for investment include a kindergarten and day care centre, a community centre, an outdoor sports facility and public open space.

Population for the Huntingdale Activity Centre is expected to grow by 50 per cent between 2016 and 2051, to 3,000 residents.

Poor levels of pedestrian amenity and safety as a consequence of the predominantly industrial land use and existing building types.



North Road and the Railway Line create a significant north-south physical barrier.

Huntingdale Station lacks the quality and amenity expected of a major transport interchange.

Transport network does not deliver connectivity and accessibility.

Poor public realm contributes to poor walkability. Streets have a lack of trees, active frontages and active transport infrastructure.

The Opportunity

The opportunities for Huntingdale highlight the variety of existing attributes, in particular regarding location proximate to the Monash NEIC and Monash University, the rail and transport infrastructure and current building stock and land value, that allow for a variety of uses to evolve that are complimentary to neighbouring activity centres and uses.

Huntingdale is well positioned to attract and retain high value industries to complement the growth of the Monash NEIC.

Development trends could be catalysed to create the right conditions for uplift in Huntingdale.

Multi-purpose facilities housing multiple services are an opportunity to efficiently meet future additional community infrastructure.

Community spaces that encourage interaction and collaboration.

Character defined by existing industrial uses, to form a place with a distinct identity.

Provision for additional green space is recommend to address the needs of the community and support amenity as the residential population grows.

Huntingdale is well positioned to support growth in demand for student accommodation.

Investment in active transport modes through safe and attractive streets will promote local trips via these modes reducing the incident of private vehicle use.

Planning for heavy and frequent vehicle movements to occur logically and through networks that do not clash with priority pedestrian and cycle streets will allow industries to function efficiently and effectively.

Long term projects, including removing the North Road overpass should continue to be discussed to achieve the best possible outcome for a 20 minute Huntingdale.

Precinct Plan

The three levers identified for urban renewal in Huntingdale are, as discussed previously, Economic Mix, Access and Place. Each of these levers cover a broad spectrum of physical and non-physical attributes that together will promote transformational urban renewal in Huntingdale. The Precinct Plan proposes a series of Objectives under each of these levers with specific Strategies outlined in both the Precinct Plan and under each individual Activity Area. These Activity Areas are shown in Figure 10.

Economic Mix addresses the relationship of the Precinct to surrounding activity centres and the Monash NEIC and the opportunity to provide supporting services and industries locally and to these areas. It also addresses the need to balance uses, such as residential, employment and service, within the Precinct to create a vibrant and sustainable employment focused outcome. These are reflected in the Precinct Plan through land use diagrams, proposing a focused retail core, nominating appropriate residential development including student accommodation and identifying strategic redevelopment sites.

Access addresses the existing movement network including pedestrian, cycle, public transport and light and heavy vehicle movements. It proposes upgrades, new infrastructure and streetscape improvements to increase amenity for the community, provide the infrastructure for connectivity and allow for the efficient and effective movement of vehicles associated with employment uses.

Place contemplates the built form and 'sense of place' elements of Huntingdale that will enable the ongoing success and health of businesses, residents and visitors. The Precinct Plan addresses community facilities, building height, setbacks, streetscapes, public spaces, and supports the increased greening of Huntingdale to create a place that people enjoy.

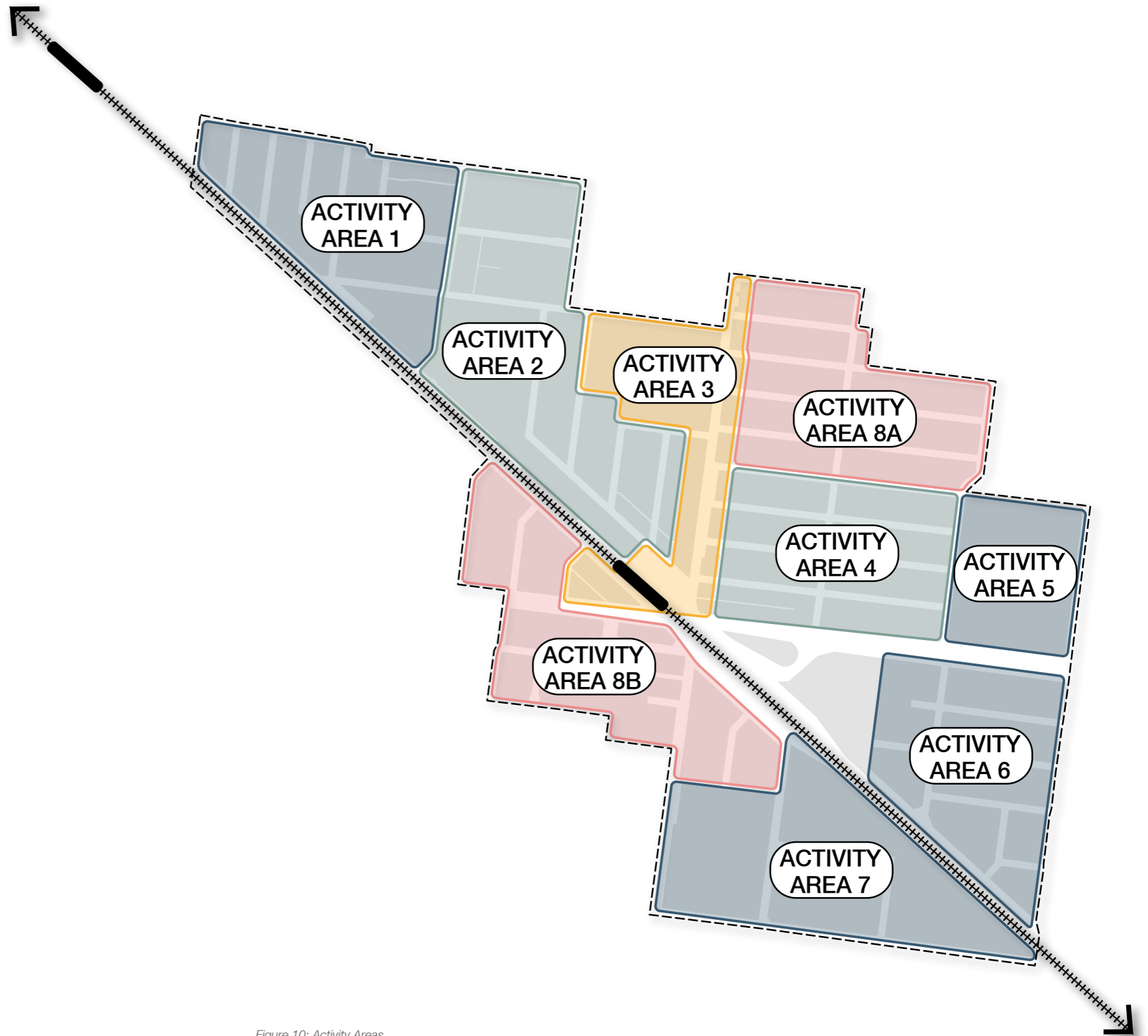


Figure 10: Activity Areas

Precinct Plan



Economic Mix

Support the highest standards of contemporary architecture, landscape and urban design. With curation and investment, employment in Huntingdale can grow by 4,500 FTE in 2025. A substantive proportion of the jobs will be generated by the value of the agglomeration benefits realised by locating within the NEIC in sectors such as professional, scientific and technical service, advanced manufacturing and wholesale trade. Anchor tenants that could accelerate demand and investment in the Precinct include:

- Chemical and Chemical Product Manufacturing.
- Specialised wholesale trade firms such as Pharma businesses.
- Professional service firms such as accountants, tech etc.

Based on existing development application trends, indications are that an additional 540 dwellings will be provided in the Precinct by 2030. Student accommodation will generate a significant proportion of this demand given Precinct access to Monash University Campuses. Improved amenity, retail proposition and an efficient public transport interface are key catalysts for residential development in the Precinct.

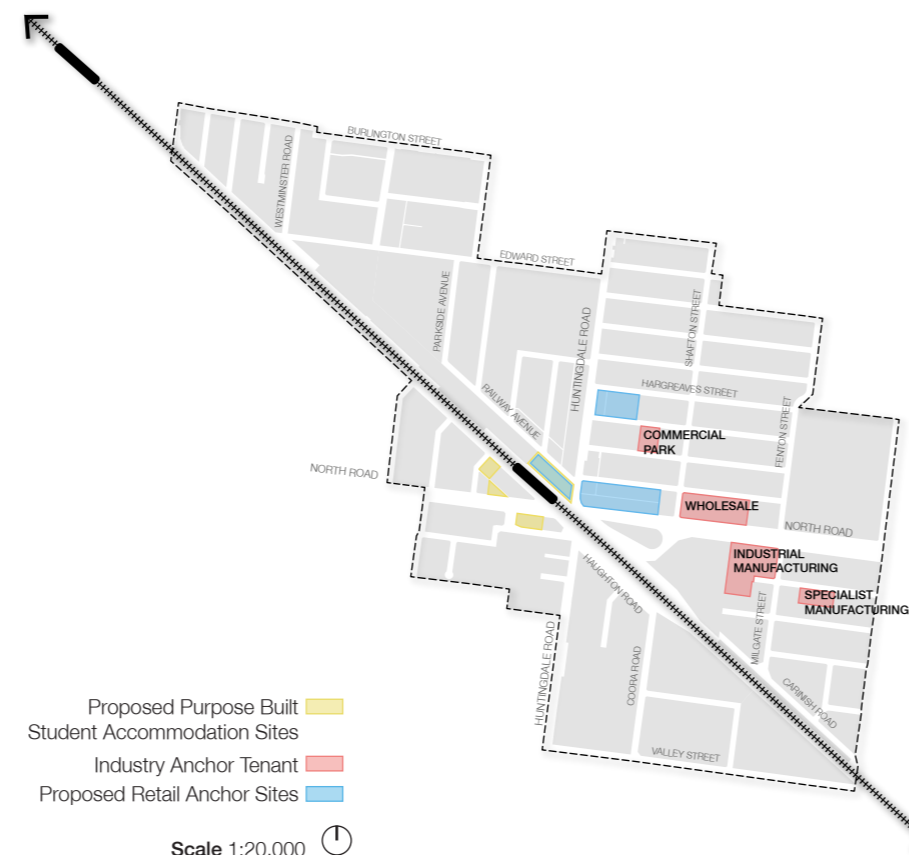
Huntingdale is developed into a sub regional retail centre. The service catchment for this centre does not extend beyond local boundaries – ensuring that the majority of retail-related trips within the local area are able to be made within 20 minutes. Retail floor space should not exceed 10,000 to 20,000sqm. The retail floor space should comprise a full line supermarket and up to 40 high-quality specialty shops including a diverse range of food and beverage outlets and entertainment facilities.

Objectives

Grow investment and employment in knowledge intensive industry.

Flexibility to allow for the diversity of industry.

Balance residential growth with employment uses to complement the transformation of industry.



Scale 1:20,000
Figure 11: Economic Mix Map



Scale 1:15,000
Figure 12: Economic Mix Plan

Strategies

Industry / Employment

M01. Support industrial transition of historically heavy industrial uses to more future oriented industries servicing the area such as manufacturing and wholesaling, and enable the location of growing professional and technical services (Figure 13).

M02. Facilitate catalytic industry anchor tenants to enter the Precinct to accelerate the Precincts transition (noting opportunities are not limited to those indicatively shown in Figure 14):

- Professional, Scientific and Technical Services / Commercial
- Future Manufacturing (Industrial / Specialist)

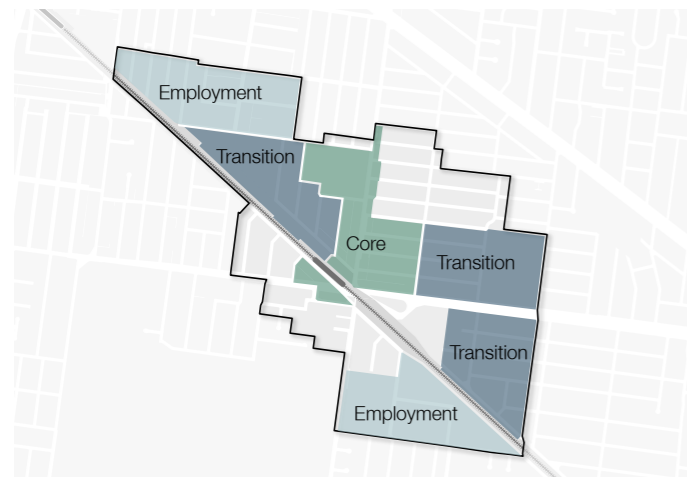


Figure 13: Land use change and responsive built form guidelines.

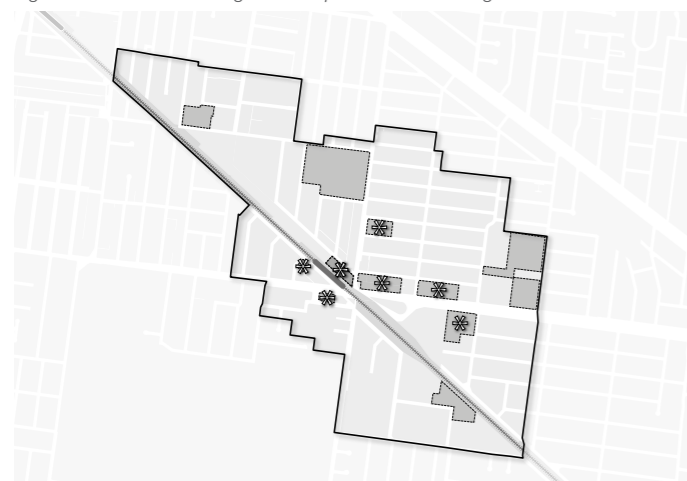


Figure 14: Potential strategic redevelopment sites.

- Wholesale Trade

Huntingdale Road Retail Core

M03. Create an identifiable urban centre that delivers a range of amenities serving the residential and worker population including an anchor retail tenant (Figure 15).

M04. Support existing and future fine grain retail along the retail strip to reinforce the community sense of place and 'heart'.

M05. Encourage a full line supermarket to provide essential retail amenity to the community.

M06. Encourage higher density development and activity around the retail core (Figure 16 on the next page).

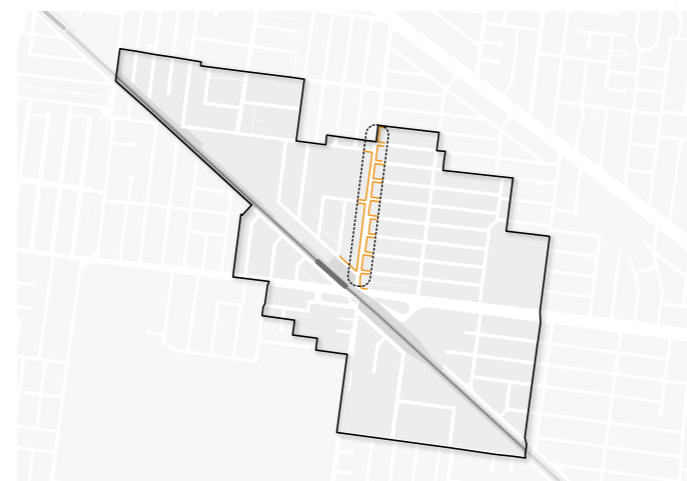


Figure 15: Active and engaging retail core along Huntingdale Road.

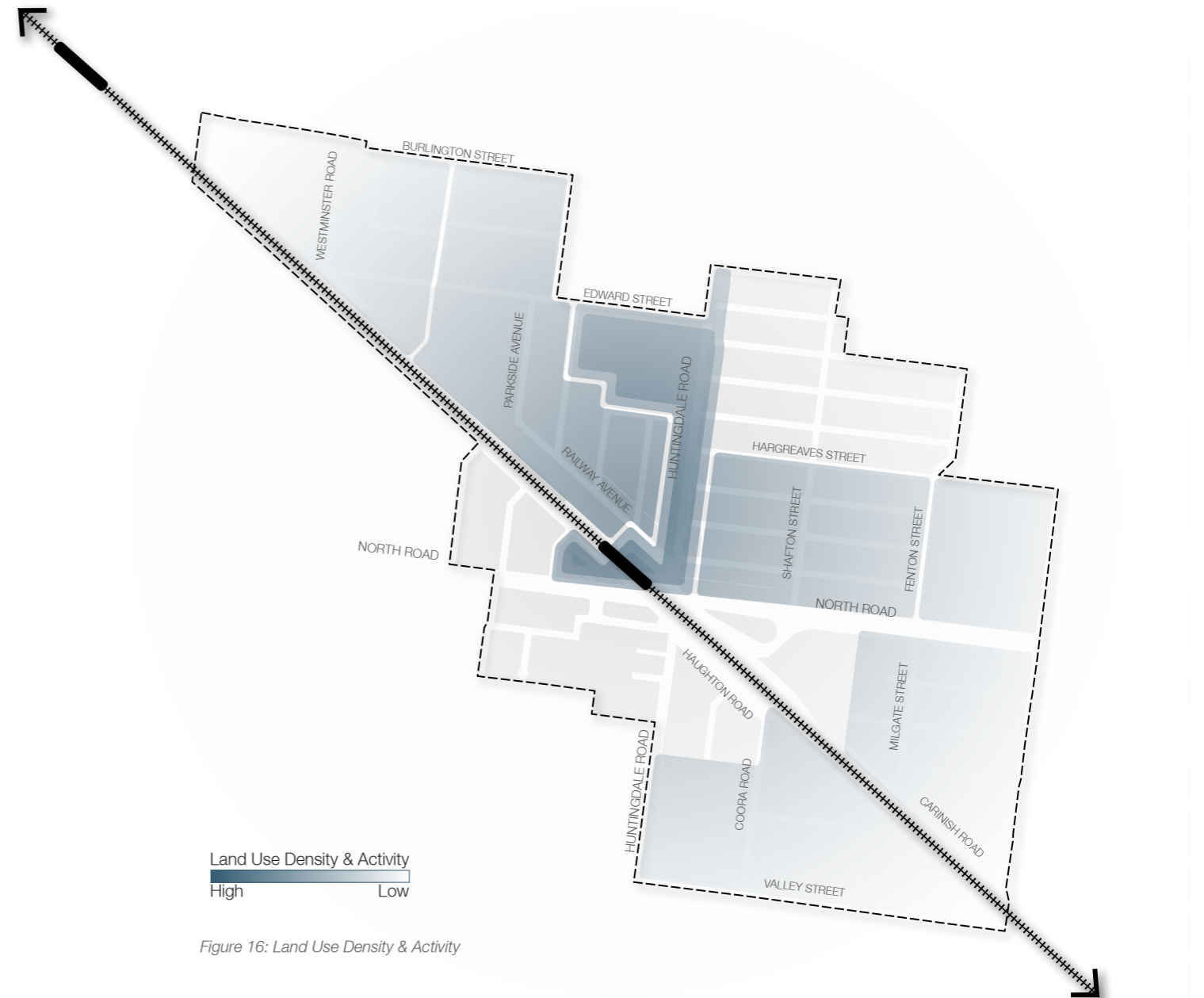
Residential

M07. To accommodate required change and growth within the Huntingdale Precinct without unreasonable impacts on surrounding residential areas.

M08. To encourage well-design medium density housing around the retail core providing additional life and activity to the Precinct 'heart'.

Student Housing

M09. Encourage Purpose Built Student Accommodations (PBSA) around transport nodes.



Land Use Density & Activity
High Low

Figure 16: Land Use Density & Activity

Precedents



Commercial
Cremorne Street, Cremorne, VIC



380 Degrees Mixed Use
Bay Street, Brighton, VIC



Main Assembly Building
Tonsley, SA

Source: <https://architectureau.com/articles/tonsley-main-assembly-building-redevelopment/>

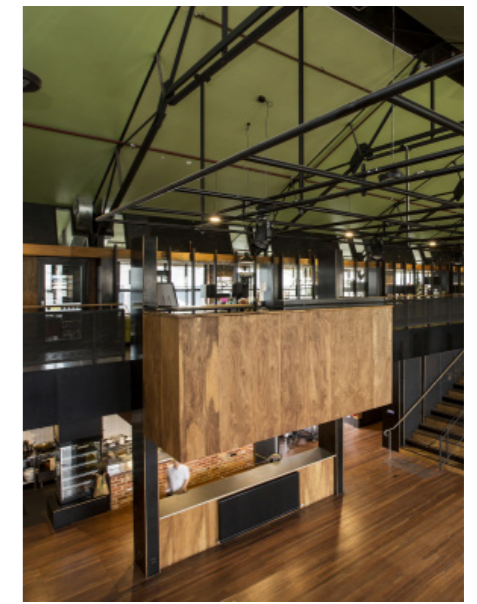


Victoria Beer Factory
Malaga, Spain

Source: <https://www.archdaily.com/884123/new-victoria-beer-factory-in-malaga-gana-arquitectura>



New Lab
Brooklyn Navy Yard, NY, US



Albert Park Environmental Hub
Albert Park, VIC

Buildings with a variety of uses within them help contribute to a vibrant, safe community by providing a variety of uses that may occur at different times of the day. This results in people coming and going and 'eyes on the street' throughout the day and night. It also contributes to increased density of uses including residential densities focused around key infrastructure such as public transport and retail uses.



Mixed Use - Oxford and Peel
Peel Street, Collingwood, VIC

Considering a range of light and clean industrial uses within Huntingdale will contribute to a diverse workforce and the opportunity to exchange information, innovation and ideas across industries.



ADO Manufacturing
Brooklyn, NY, United States

Source: <https://www.archdaily.com/806317/manufacturing-utopia-how-assemble-is-creating-a-model-factory-at-a-d-o>

Encouraging a variety of knowledge intensive industries will support the transformative change desired in Huntingdale. These uses can be highly compatible with existing, large floor plate built form allowing change to happen easily within the existing fabric.



Business Accelerator
Western BASE, Melton, VIC

Strategies

Public Transport

- A01.** Improve Huntingdale Station design, accessibility and interchange in the short term.
- A02.** Advocate for the long-term reinstatement of the North Road and Huntingdale Road intersection and underground or elevate the rail to re-connect the Precinct north and south (Figure 18).
- A03.** Advocate for upgrades to the existing bus routes, infrastructure and investigate new routes.
- A04.** Seek opportunities to leverage major investment in the transport network to drive urban renewal.
- A05.** Plan for committed major transport projects including (Suburban Loop, Rowville Rail Extension, Caulfield to Rowville Light Rail).

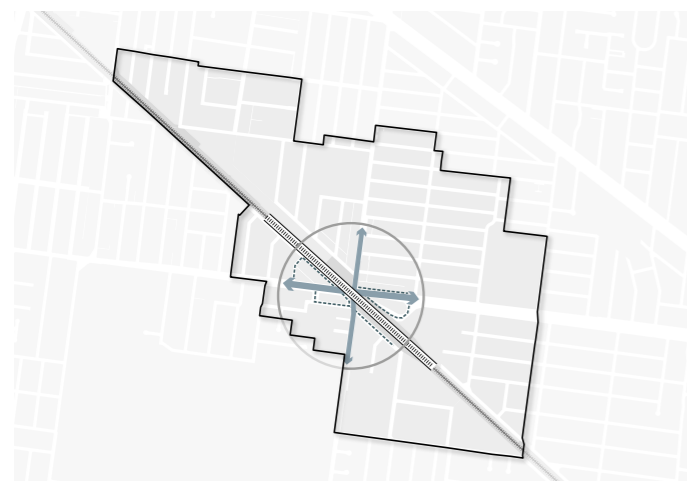


Figure 18: Advocate for major road and rail infrastructure upgrades.

Walking and Cycling

- A06.** Introduce new through-site links and courtyard space typologies within new developments to improve site permeability and reintroduce the fine grain within the study area (Figure 19 and 20). New laneways should be:
 - Publicly accessible
 - Safe and direct, with clear lines of sight
 - At least 6 metres wide unless one-way
- A07.** Enhance pedestrian amenity and experience on all streets through the provision of improved street lighting, greening, and nodes to stop and interact.
- A08.** Enhance pedestrian amenity and safety by providing consistent pedestrian footpaths on both sides of streets with a minimum width of 1.6 metres and greater width on pedestrian priority streets.
- A09.** Provide pedestrian priority crossings including signalised crossing, elevated and at grade zebra crossings at key intersections in the pedestrian priority network and along Huntingdale Road Main Street/ retail portion to allow for the safe and convenient movement of pedestrians.
- A10.** Create a network of cycling routes with separated cycle infrastructure that connects to existing networks. Key routes include: Huntingdale Road, North Road, Burlington Street, Westminster Road, Edward Street, Parkside Avenue, Hargreaves Street, Fenton Street, Milgate Street, Carinish Road, Haughton Road, Coora Road and Valley Street (Figure 22).

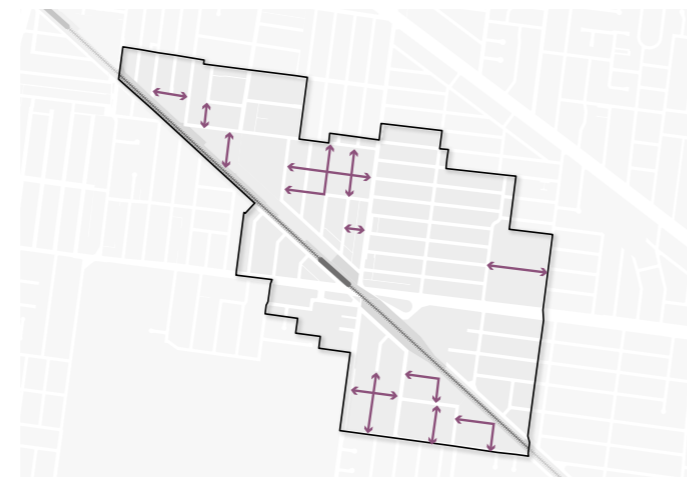


Figure 19: Increase permeability by introducing new through block links.

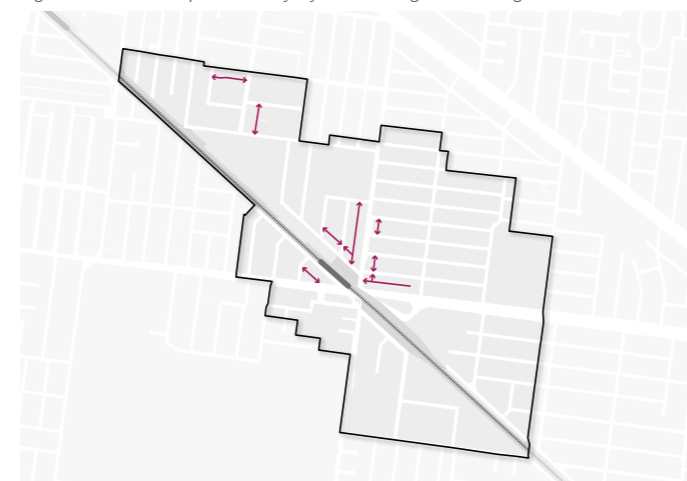


Figure 20: Widen existing laneways.

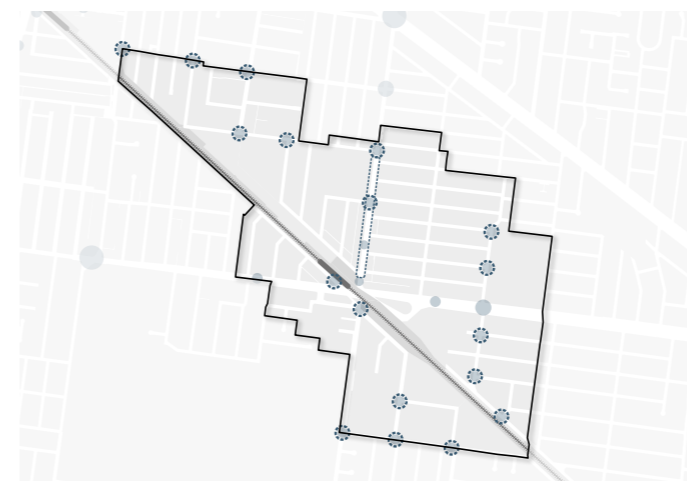


Figure 21: Increase safe pedestrian crossing opportunities.

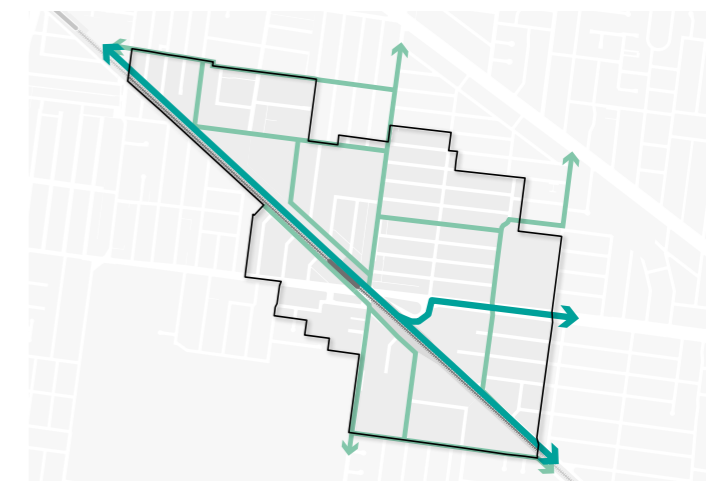


Figure 22: Create a safe priority walking and cycling network.

- A11.** Provide wayfinding signage in key locations including 'walk and ride times' to key destinations.
- A12.** Improve existing and provide additional connections to the Station Trail.
- A13.** Install high quality bicycle parking and facilities (such as lockers) at the Huntingdale Station interchange.
- A14.** Require high quality end-of-trip facilities in new development.
- A15.** Investigate bike sharing schemes, including a potential partnership with Monash University.

Precinct Plan

Vehicles

A16. Support sustainable transport, encouraging new development to incorporate green travel plans and provide car share spaces.

A17. Continue to monitor car parking in the Precinct as trip demand increases to ensure land uses, pedestrian amenity and built form design outcomes achieve an appropriate balance.

A18. Slow traffic speeds on the northern portion of Huntingdale Road. This may be achieved by extending the retail core north allowing for a 40km/hr zone to be implemented (Figure 23).

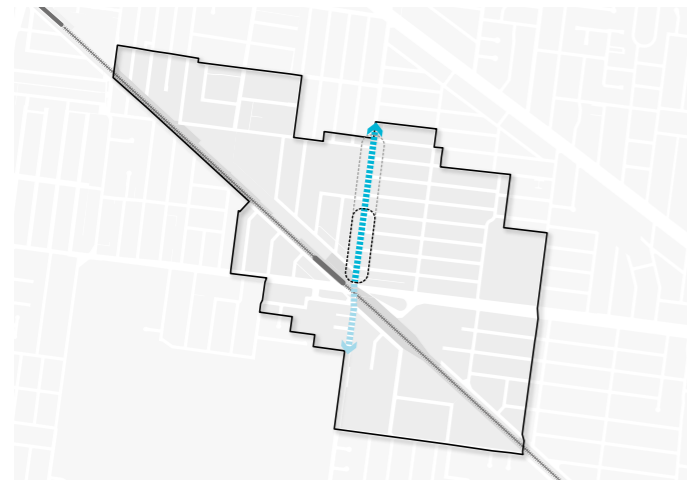


Figure 23: Extend Huntingdale Road retail core and reduce traffic speeds.

Precedents



Bicycle Parking
Bell Street, Seattle, WA, USE



Bidirectional Separated Cycleway
Bourke Street, Sydney, NSW

Providing ample bike facilities including on-street, highly visible parking will promote cycling as a viable transport option and allow more people to safely choose sustainable transport modes.



Secure Station Bicycle Storage
Murrumbena, VIC

Precinct Plan



Place

Green Open Space

- Locations aim to improve pedestrian flow and connect with wider trail network.
- Location near areas of high residential density that will benefit most from green open space.
- Projected development activity may create opportunity for spaces to be funded by developer.

Mixed Use Facility

- Purpose-built kindergarten / child care facility delivered in mixed use zone – high level of access to open space and accessible for both residential and employee communities. Opportunity to be delivered as part of a major mixed use residential development.

Sessional Day Care

- Near major residential and sub-regional shopping centre.

Community Hub

Provision of 1 small multi-purpose facility

- Multiple rooms.
- Access to public transport and high levels of local retail and service amenity is preferred.
- Central location to develop social cohesion and sense of local community is preferred.



Figure 24: Place Map

Objectives

Support the highest standards of contemporary architecture, landscape and urban design.

Establish a new character and identity that is complementary to the existing context.

The scale, height and setbacks of new buildings creates a liveable, compact, mid-rise, human-scaled built residential and employment environment.

To accommodate required change and growth within the Huntingdale Precinct.

Regenerate the Precinct's public realm.

Increase the quality and coverage of the Precinct's landscaping and canopy vegetation.

Improve accessibility to existing open spaces and increase the provision of open space within the Precinct.

Support the health and wellbeing of existing and future residents and workers through the provision of community infrastructure.

Design multi-purpose, adaptable and future proofed facilities that provide for a range of functions.



Figure 25: Place Plan

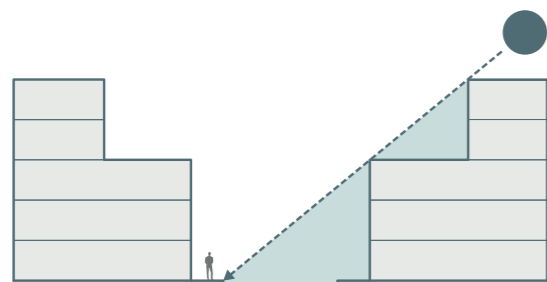
Strategies

Built Form

Built form guidelines will guide future building heights and setbacks across the Study Area.

P01. Front setbacks, where required should provide generous public realm, including opportunities for canopy planting, pedestrian pathways and seating. Car parking within front setbacks should be avoided (Figure 26).

P02. Ensure an appropriate transition in scale to surrounding residential areas by introducing suitable building scale, heights and setbacks at interface areas (Discussed in detail in the Activity Areas) (Figures 27 and 28).



Levels above street wall must be set back to avoid overshadowing of opposite footpath at specified times.

P03. Minimise the overshadowing impacts on the public realm and open space - existing and proposed (Figure 29). Built form guideline testing to utilise the equinox solar access test on key streetscapes with the following parameters:

- Southern footpaths between the 10am and 2pm
- Western footpaths from 10am
- Eastern footpaths before 2pm.

P04. Encourage sufficient separation between buildings to maximise outlook and amenity (Figure 28). Development should be setback from common boundaries at the upper levels a minimum of:

- 4.5 metres from the boundary where habitable rooms and balconies are proposed
- 3 metres from the boundary where non-habitable rooms or commercial uses are proposed.

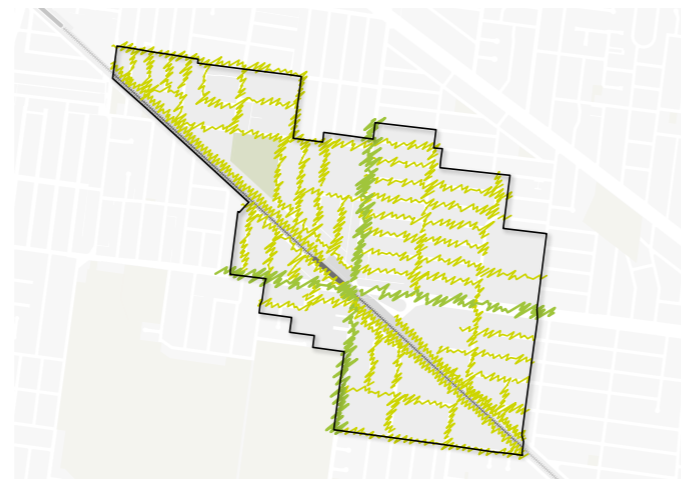


Figure 26: Increase canopy cover and garden character.

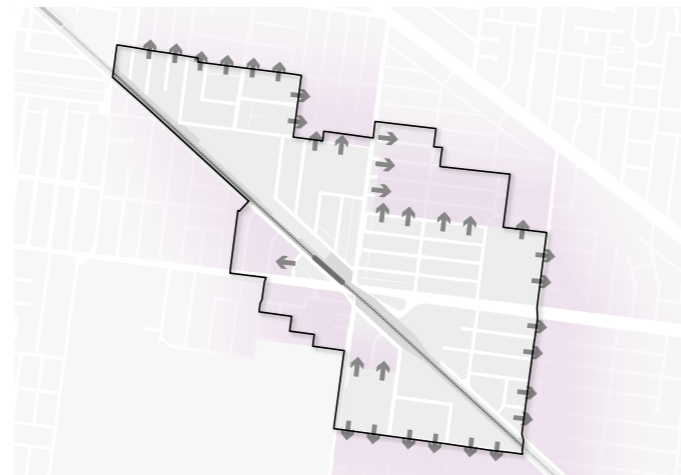


Figure 27: Transition to residential areas.

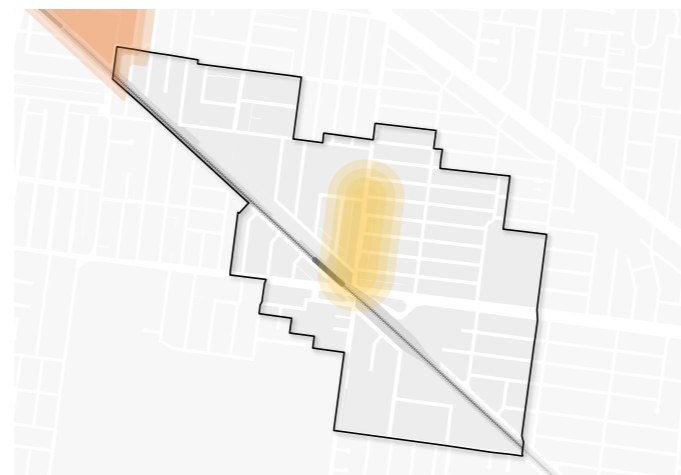
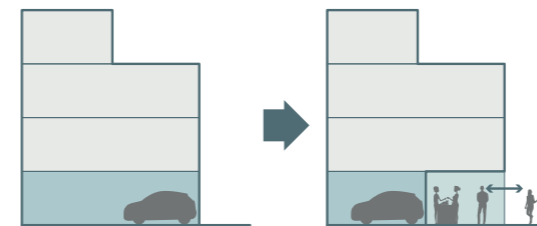


Figure 28: Heights responsive to Activity Centre context.

P05. Encourage active frontages to enable visual interaction and engagement between the inside of buildings and the street.

P06. Where podium car parking is proposed car parking levels should be above the first floor and sleeved with active uses to streetscapes.



Avoid podium car parking on street interfaces.

Sleeve car parking with active uses.

P07. Provide adequate floor to ceiling heights to ensure development is adaptable to future change. Floor to floor heights of at least 4.5 metres at ground floor and 3.2 metres above ground floor (including podium car parking).

P08. Encourage adaptive reuse of suitable existing buildings to retain the 'grit' of the existing character.

Streetscape Design

P09. Introduce a high quality, consistent streetscape materiality and furniture palette throughout the entire Study Area, including lane ways, and thus providing a common theme tying the individual areas together (Figure 30).

P10. Utilise water sensitive urban design elements in streetscape upgrades and new public spaces, including tree water pits, urban swales, water re-use, and recycling initiatives.

P11. Development within the Flood Overlay (SBO) should specifically address the likelihood of flood events through principles of integrated water management reducing on-site damage and any impact on downstream land.

P12. Canopy trees of appropriate species should be introduced at every opportunity both within the streetscape and within required building setbacks to reduce the heat island effect, increase visual and physical amenity and positively impact on property values.

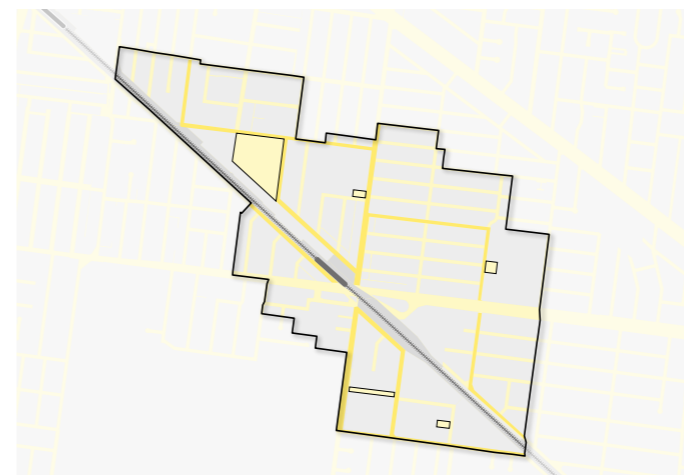


Figure 29: Minimise overshadowing to main streetscapes and open space.

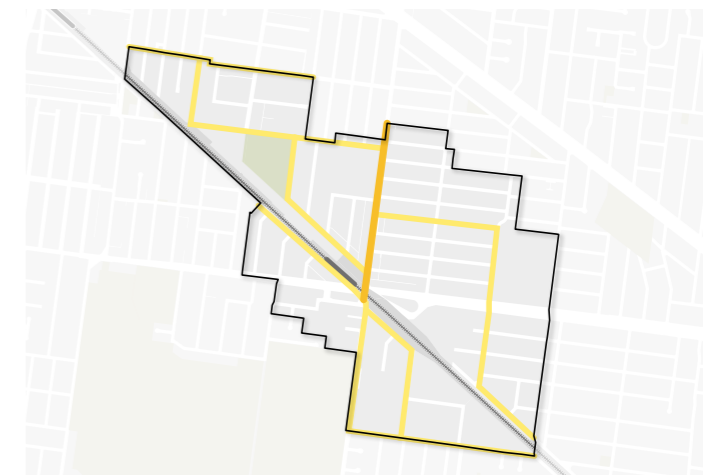


Figure 30: Priority streetscapes.

Precinct Plan

Public Space

P13. Improve the quality and quantum of public open space within the Precinct, including better connections between the existing spaces within and immediate to the Study Area.

P14. Deliver new and upgraded open spaces in priority areas to meet the changing needs of the employment and residential population. This may include hardscape/plazas, reclaimed streets and larger verges.

P15. Offer passive and active recreation opportunities.

P16. New local open spaces should be integrated into large strategic redevelopment sites (Figure 31). New open spaces should be located and designed to have the following qualities:

- Minimum size of 0.3 hectares
- Northern orientation to maximise solar access
- Adjacent to existing streetscape
- Unencumbered from easements and services.

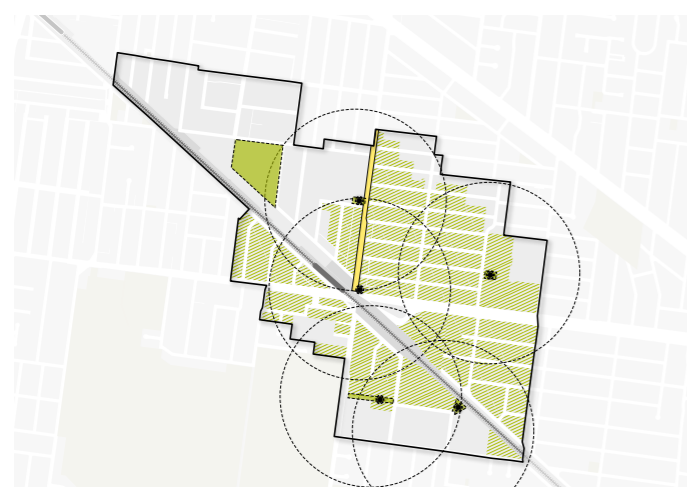


Figure 31: New open space opportunities through redevelopment.

Community Infrastructure

P17. Work in partnership with the private sector to deliver required community infrastructure to meet current and future demand.

P18. Kindergarten, sessional day care and long day care will be required and may be delivered through:

- One small multi-purpose facility providing long day and sessional care.
- One medium sized purpose-built facility providing a kindergarten, sessional and long day care uses.

P19. A community centre, neighbourhood house and community arts facility will be required and may be delivered as:

- One multi-purpose facility serving as a neighbourhood house, and small community facility or hall.

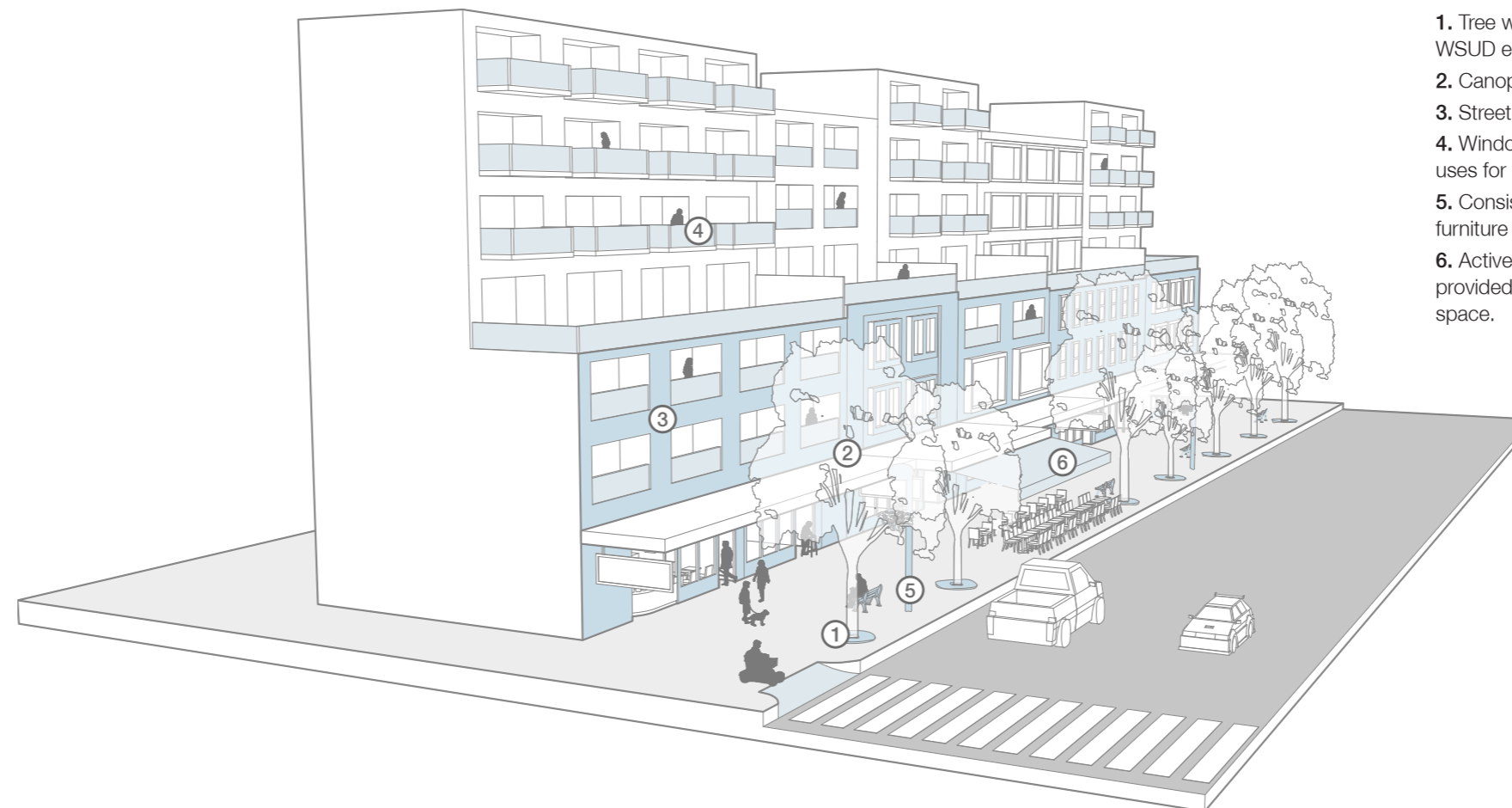


Figure 32: Place Strategy Diagram

1. Tree water pits, urban swales and other WSUD elements.
2. Canopy trees of appropriate species.
3. Street wall that maintains human scale.
4. Windows and balconies with active uses for passive surveillance.
5. Consistent streetscape materiality and furniture palette.
6. Active uses on ground floor with spaces provided for temporary use of public space.

Precedents



Lothian Townhouses
North Melbourne, VIC



Student Accommodation
Waymouth Street, Adelaide, SA



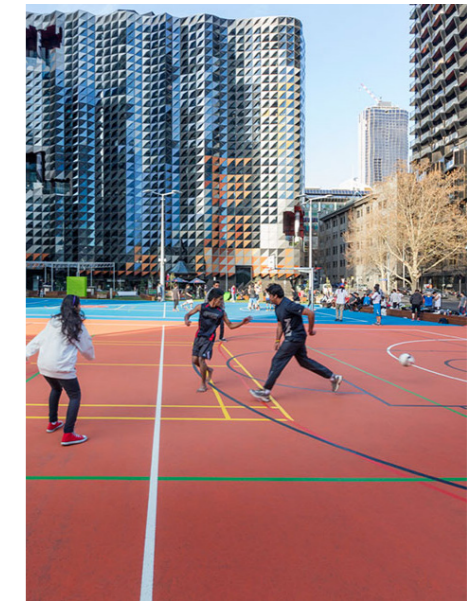
East Sydney ELC
Sydney, NSW



Neighbourhood Centre
Surry Hills, NSW



Bank Street Parklet
Adelaide, SA



A'Beckett Urban Square
Melbourne, VIC

Student accommodation and medium density developments can contribute to increase residential densities and all-hours activities. Huntingdale is ideally placed on the public transport network to allow for development with minimal car parking leading to enhanced built form outcomes.



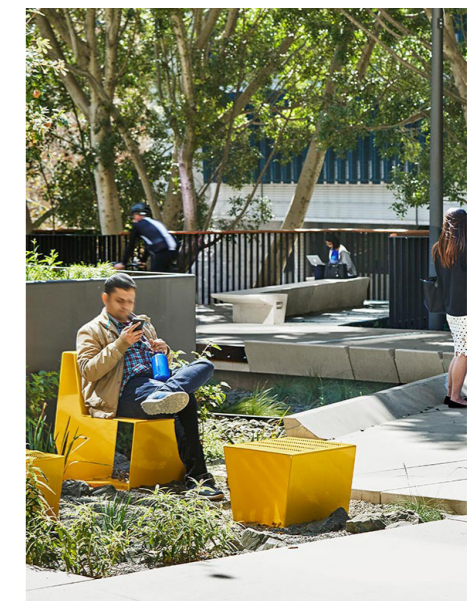
Mixed Use
Beecroft, NSW

Sustainable communities should include a range of amenities for residents, workers and visitors. Providing amenities such as child care, kindergartens and multipurpose community centres will support community life.



Bunjil Place
Narre Warren, VIC

Public spaces can come in a variety of forms including green 'soft' landscape and harder urban spaces. Providing a variety of open spaces and good wayfinding within Huntingdale will cater for a range of uses at different times of the day and night and promote social interaction.



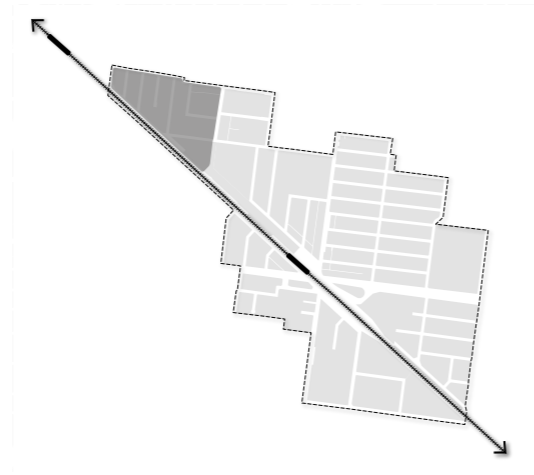
The Goods Line
Ultimo, Sydney, NSW

5

Activity Areas

Activity Area 1

Activity Area 1 is a neighbourhood focused on employment opportunities in clean industry, warehousing and associated commercial sectors. The existing network of streets and larger lot sizes allow for safe movement of goods and efficient floor plates and connect through to Oakleigh. Streetscapes respond to the dominant existing typologies and interfaces including garden areas, upper level setbacks and heights.



Challenges & Opportunities

- Built form needs to respond to Special Building Overlay.
- Residential streetscape interfaces (Burlington Street and John Street).
- Scale responsive to emerging and proposed height in the Oakleigh Major Activity Centre.
- Built form response to rail interface and activation of Station Trail.

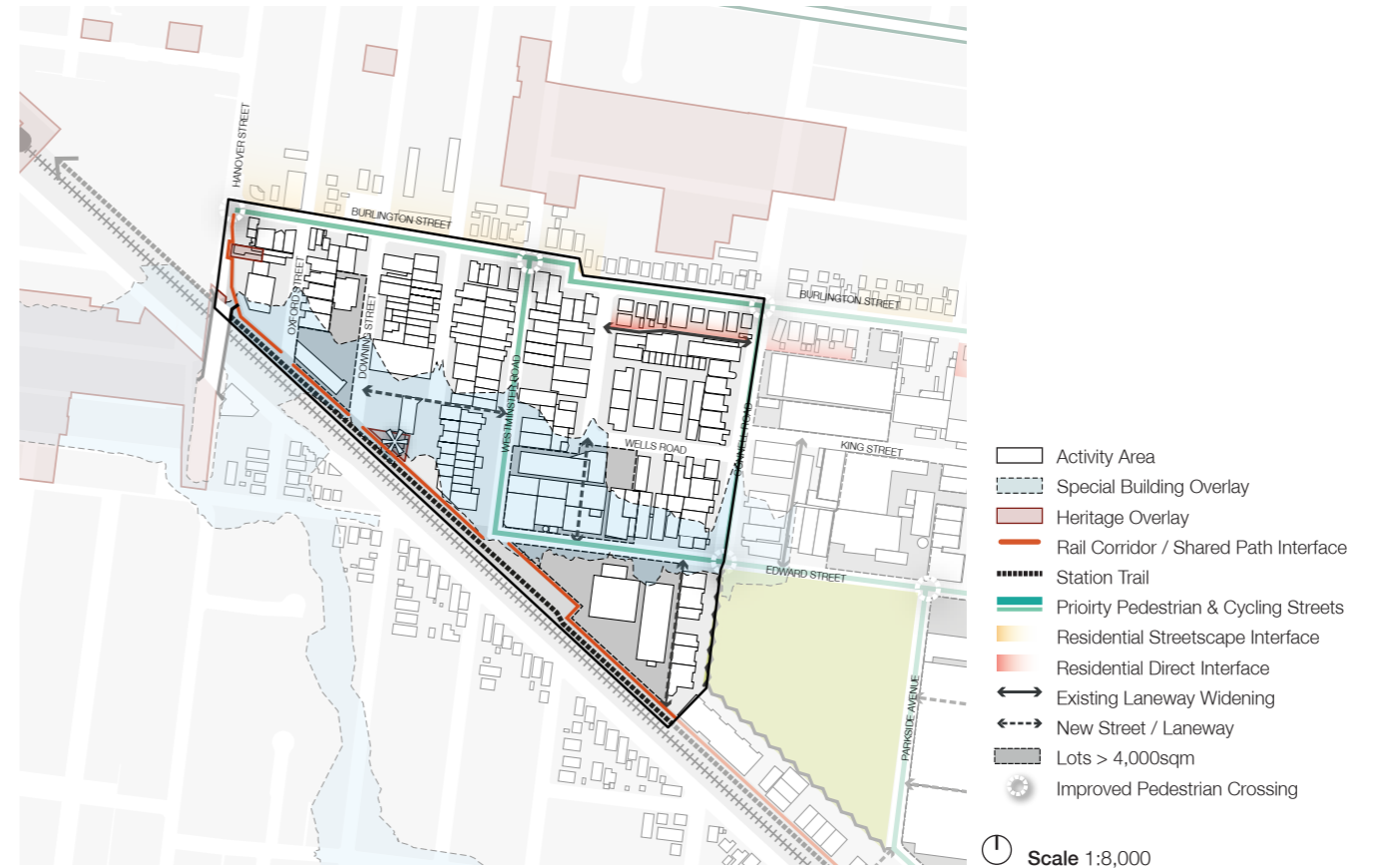


Figure 33: Area 1 - Challenges & Opportunities



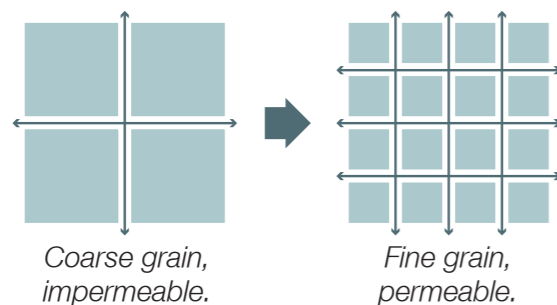
Activity Areas

Mix

- Industrial – for example, modern clean industry
- Wholesale – for example, soft furnishing wholesaler
- Limited residential – ancillary to the employment generating activity

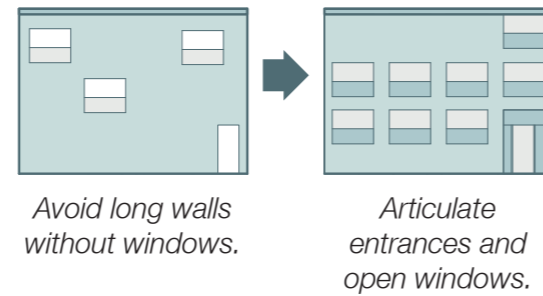
Access

- Improve access to Station Trail via Oxford Street, Downing Street and Westminster Street.
- Burlington, Westminster Street and Edward street as key cycle routes.
- Introduce a fine grain, permeable street network through the creation of new streets, including:
 - EW between Downing Street and Westminster Street;
 - NS extension of Wells Street to Edward Street; and
 - NS between Edward Street and the Station Trail.



Place

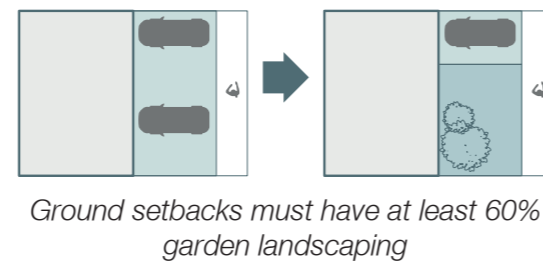
- Predominately a neighbourhood of employment opportunities capitalising on the existing road network, connecting along Burlington Street to Oakleigh.
- Existing buildings can be adapted to new uses with a number of larger lots offering opportunities for increased density of employment.
- New development will respond to neighbouring residential product through massing and materially ensuring new built form along key streets utilises robust materials, articulates entrances and avoids expanses of blank walls with no windows.



- Creation of a new pocket park at the termination of Downing Street, connecting to the Station Trail.

Streetscape Setbacks

- Provide setbacks responsive to streetscape character (existing and desired). Setbacks where provided are to include at least 60% garden landscaping:
 - 0 metres / built to boundary: Burlington Street (between Hanover Road and Oxford Street), Oxford Street, Downing Street, Regent Street & Westminster Street.
 - Minimum 3 metres: Burlington Street, Edward Street & Connell Road.



Upper Level Setbacks

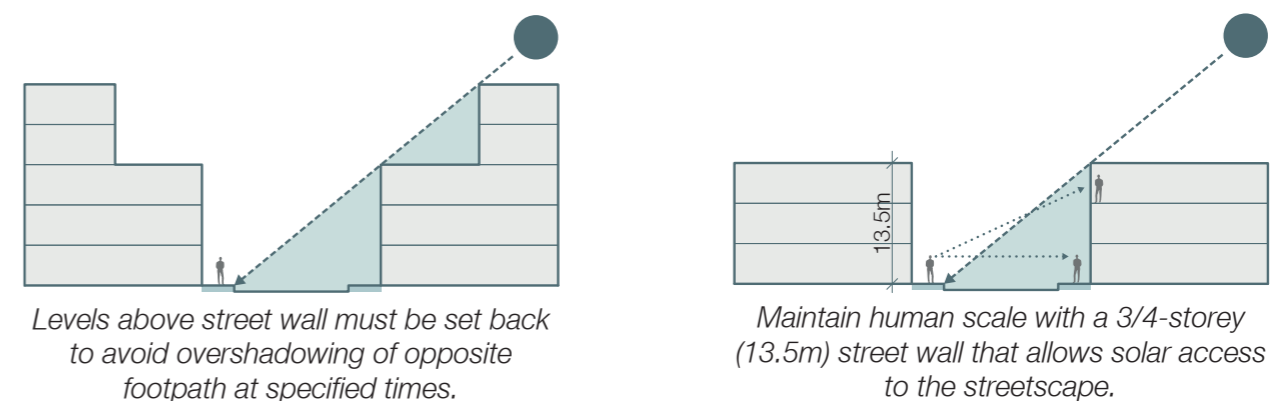
- Upper level setbacks of 5 metres above 3 storeys to Burlington Street.
- Maintain human scale, maintaining a street wall height of 3 storeys with upper level setbacks that maintain solar access to the streetscape.

Overall Building Heights

- Allow for heights between 4-6 storeys across the Sub Precinct, with taller forms focused in proximity to Oakleigh Major Activity Centre.



Figure 34: Area 1 - Plan



Activity Areas

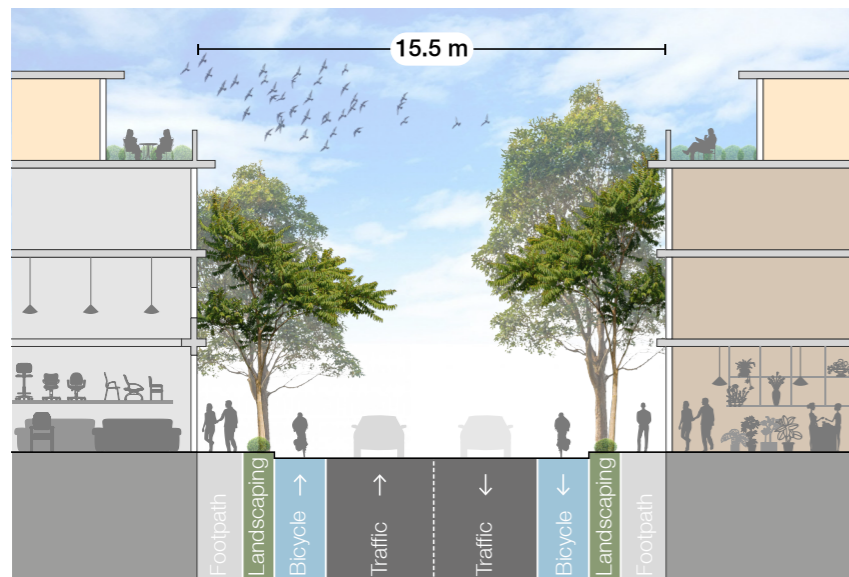


Figure 35: Area 1 - Typical Cycling Street

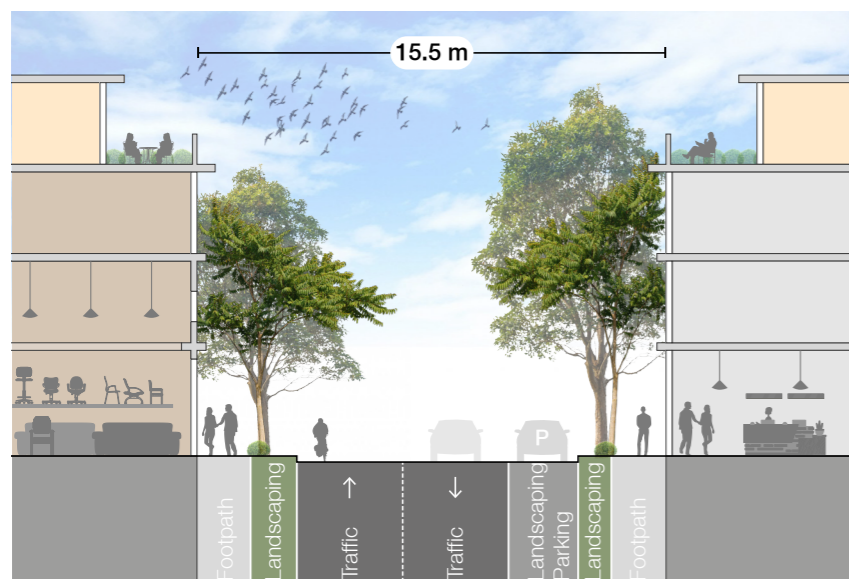


Figure 36: Area 1 - Typical Street with Parking on One Side

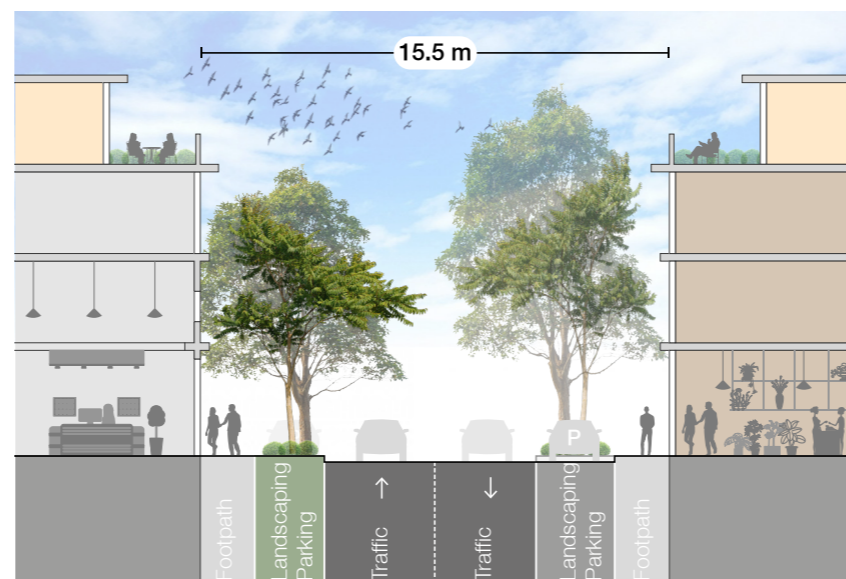
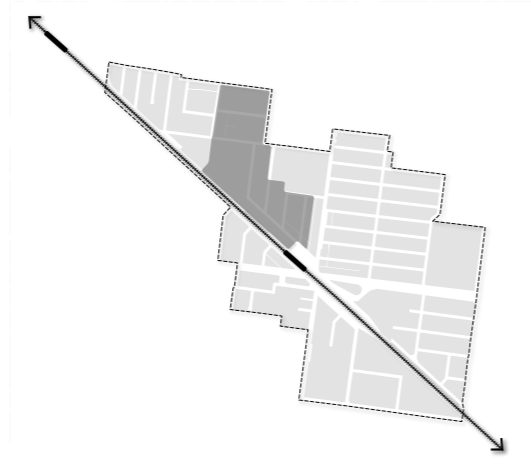


Figure 37: Area 1 - Typical Street with Parking on Both Sides

Activity Area 2

Activity Area 2 is a mixed use neighbourhood that transitions density and uses from the Precinct Core surrounding Huntingdale Road to the western Activity Area. Featuring the largest existing public open space in the Precinct, existing connections along Burlington Street and the Station Trail, Activity Area 2 will encourage further permeability through new streets and laneways allowing for a network of connections focused on pedestrian and cycle amenity. Heights allow for very good solar access to footpaths which will have improved canopy coverage in the streets and garden setbacks. Enhanced public access to the Jack Edwards Reserve will add to the recreation offer within the Precinct.



Challenges & Opportunities

- Interface with Station Trail & Rail Corridor
- Lot configuration limits access to Station Trail and Jack Edwards Reserve
- Inactive edges to Jack Edwards Reserve
- Lacks arterial road frontage for commercial uses
- Large allotments present strategic redevelopment opportunities
- Mixed streetscape setback conditions (0 - 16m)



Figure 38: Area 2 - Challenges & Opportunities



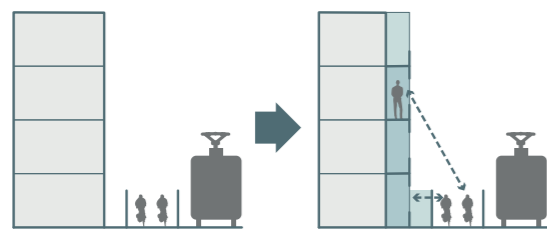
Activity Areas

Mix

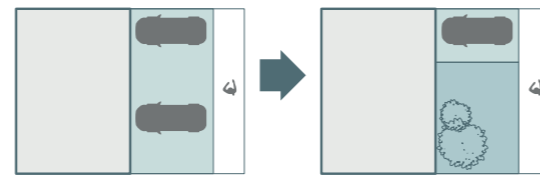
- Industrial
- Commercial
- Retail
- Residential

Access

- Encourage greater connection to the Station Trail through development sites.
- Encourage development along the Station Trail to have windows, balconies and communal spaces facing the trail to provide increased passive surveillance opportunities.
- Create new street links through large blocks to increase permeability.

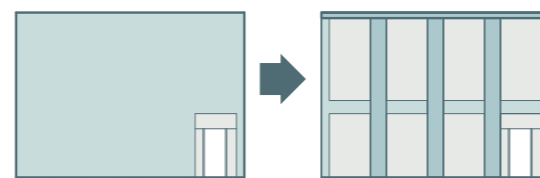


Encourage windows, balconies and communal open spaces facing the trail.



Ground setbacks must have at least 60% garden landscaping

- Administrative and office components to be located at the street frontage/s for improved access, streetscape activation and engagement with the public domain.
- Long or large-footprint buildings should incorporate articulation in their facades, such as expressed recesses or protruding elements.



Avoid plain large/long facades.

Articulate large/long facades.

Place

- A mixed use area that provides a transition in uses and density from the retail core along Huntingdale Road to the larger lot development to the west.
- Provide setbacks responsive to streetscape character (existing and desired). Setbacks where provided are to include at least 60% garden landscaping:
 - 0 metres / built to boundary: King Street, Parkside Avenue (eastern side), Hamilton Street, Moller Street, Warner Street, Croft Street (southern side)
 - Minimum 3 metres: Burlington Street, Connell Road, John Street and Railway Avenue
 - Minimum 5 metres: Edward Street (southern side)
- Allow for heights between 4-6 storeys across the Activity Area, with taller forms focused in proximity to Huntingdale Road and the rail corridor.

- Vehicle crossovers should be minimised and located separate to main pedestrian routes to building entries, to reduce conflict with pedestrians.
- Locate car parking and loading to the side and rear of the building.



Activity Areas

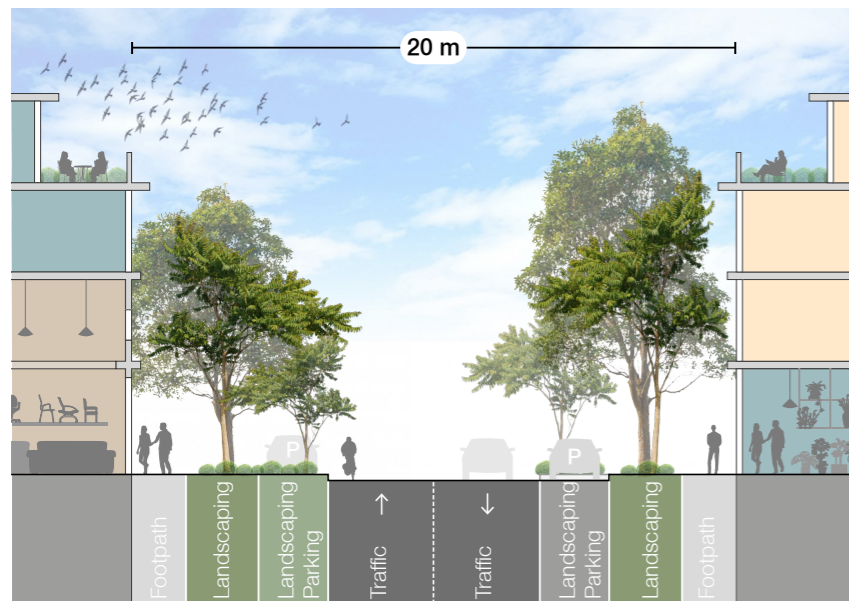


Figure 40: Area 2 - Connell Road

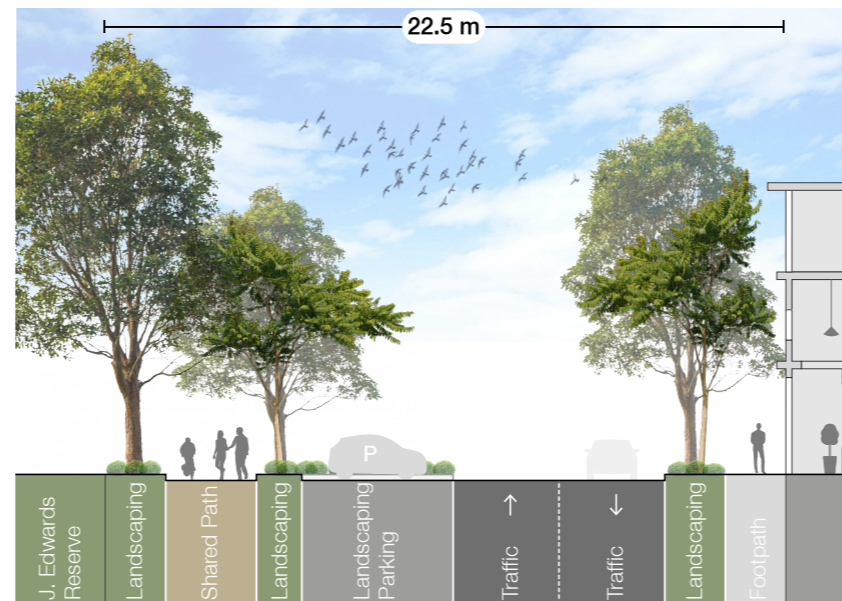


Figure 42: Area 2 - Parkside Avenue

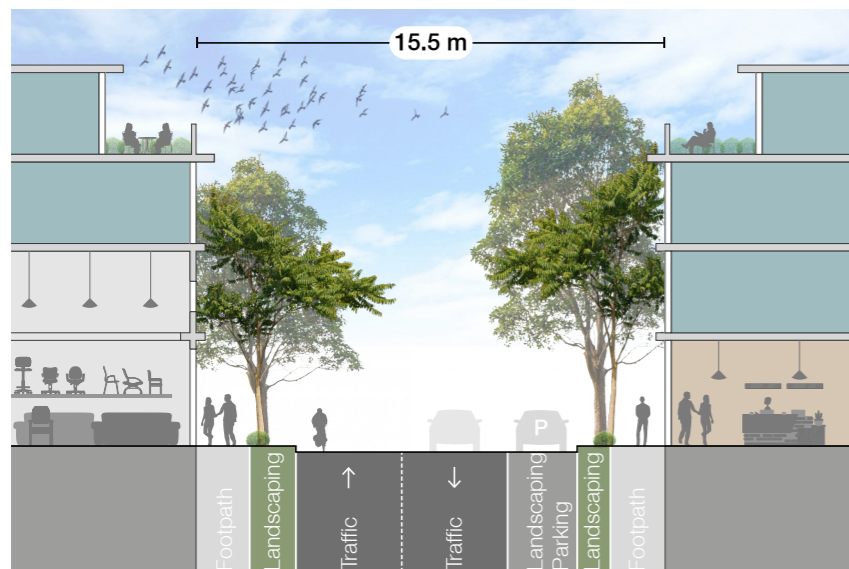


Figure 41: Area 2 - Typical Street with Parking on One Side

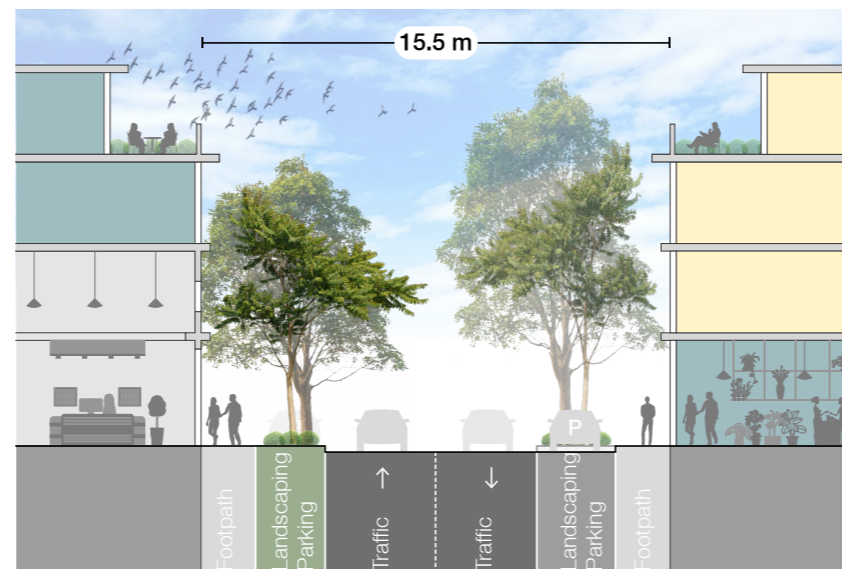


Figure 43: Area 2 - Typical Street with Parking on Both Sides

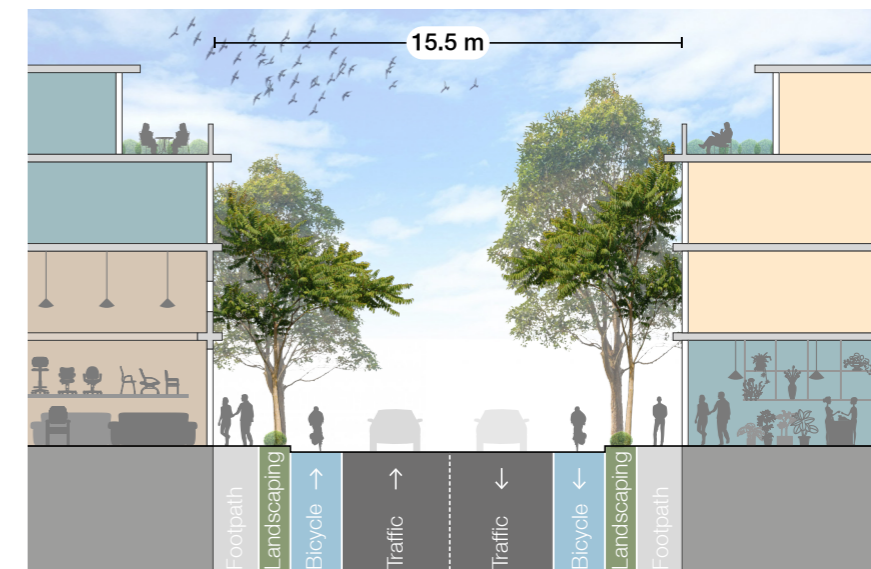
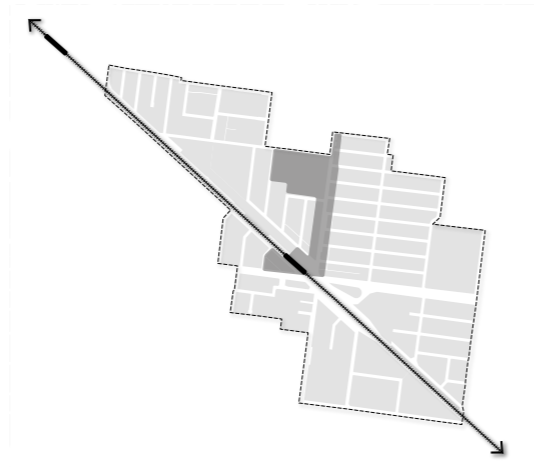


Figure 44: Area 2 - Typical Cycling Street

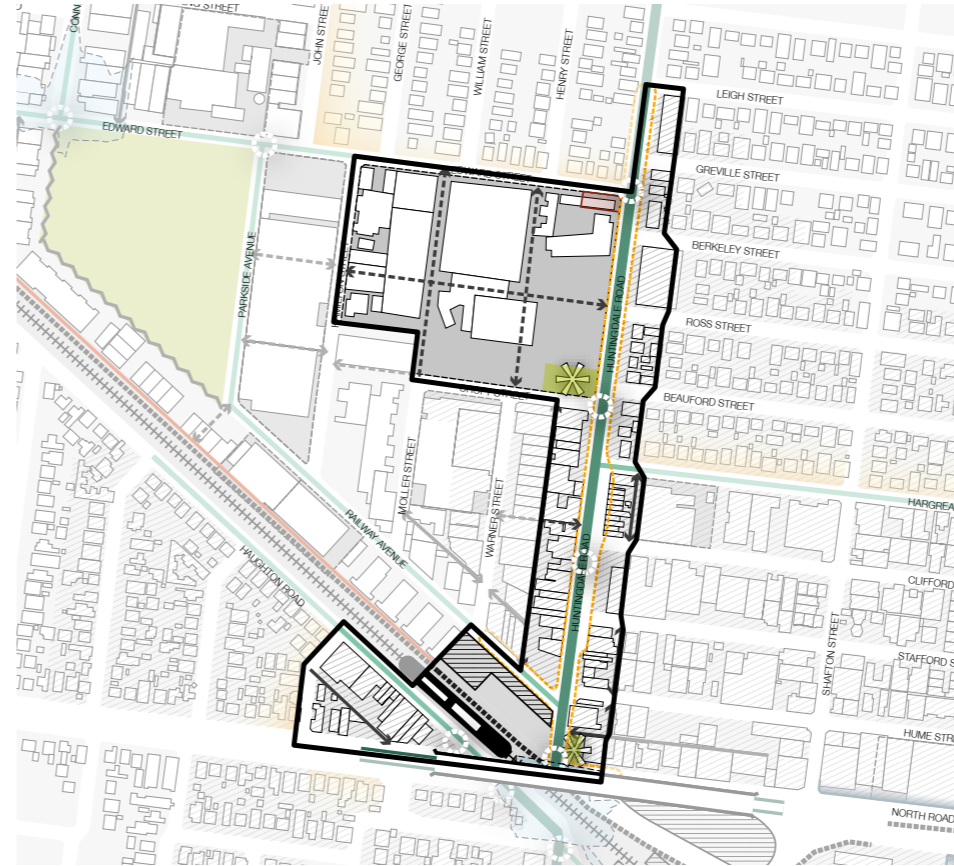
Activity Area 3

Activity Area 3 is the heart of Huntingdale. A vibrant, mixed use main street provides a variety of speciality stores and larger retail offerings allowing people to live, work and play within their own community. Huntingdale Road emphasises the village feel through design details such as canopies over the footpath and opportunities for street side dining, while upper levels provide space for residential and commercial uses contributing to life on the street. Built form is higher and densities greater ensuring people are in the neighbourhood throughout the day and night. The Area is also likely to be home to catalytic development such as anchor retail, a multi-purpose civic hub and sessional day care.



Challenges & Opportunities

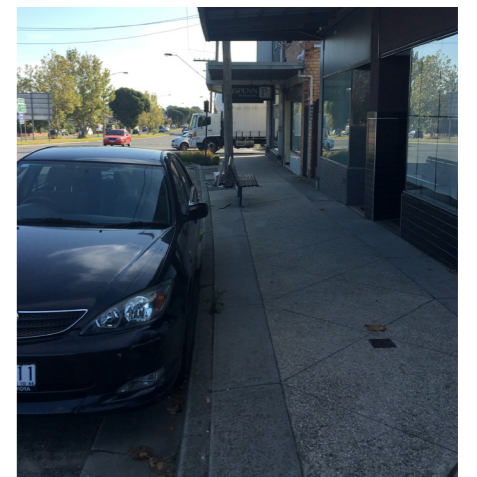
- Narrow allotments require consolidation for improved development opportunities and outcomes.
- Maintain fine grain character and human scale of streetscape through articulated architecture and enhance street level activity.
- Widen access laneways through built form setbacks.
- Pedestrian underpass and lack of safe crossings.



- Sub Precinct
- Special Building Overlay
- Heritage Overlay
- Rail Corridor / Shared Path Interface
- Station Trail
- Priority Pedestrian & Cycling Streets
- Residential Streetscape Interface
- Residential Direct Interface
- Existing Laneway Widening
- New Street / Laneway
- Lots > 4,000sqm
- Improve Pedestrian Crossing Experience
- Potential New Open Space
- Outside 400m Open Space Catchment
- Huntingdale Rd Public Realm Upgrade
- At Grade Station Car Parking

Scale 1:8,000

Figure 45: Area 3 - Challenges & Opportunities



Activity Areas

Mix

- Commercial
- Retail
- Residential
- Student Accommodation
- The Huntingdale Road main street is proposed to extend further north along Huntingdale Road.
- Supporting the retail and residential growth along the corridor, transitioning to commercial uses to the east and west of Huntingdale Road.
- Longer term the Assa Abloy site will present a large mixed-use redevelopment opportunity.

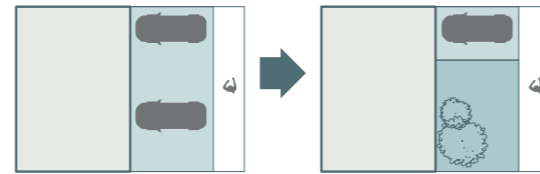
Access

- Widen laneways (minimum 6 metres) and ensure properties fronting Huntingdale Road are accessed from side streets or rear laneways to prioritise safety and pedestrian movement.
- Modify street design to decrease speed and pedestrian priority on Huntingdale Road
 - Lowering vehicular speeds
 - Narrowing road lanes
 - Providing separated cycle lanes
 - Minimising crossovers
 - Widening footpaths
 - Introducing new crossing points
 - Improving the quality of streetscape materiality, furniture and landscaping
 - Reconfiguring on street car parking
- Introduce raised thresholds at intersections with Huntingdale Road. Threshold treatments provide a level surface for pedestrians and slow traffic.

Place

Streetscape Setbacks

- Provide setbacks responsive to streetscape character (existing and desired). Setbacks where provided are to include at least 60% garden landscaping:
 - 0 metres / built to boundary: Huntingdale Road (between North Road and Ross Road intersection), Warner Street, Croft Street, Haughton Road, Moroney Street, Clifford Street, Stafford Street, Hume Street, Shafton Street and North Road.
 - Minimum 3 metres: Hargreaves Street, Clarendon Avenue
 - Minimum 5 metres: Huntingdale Road (north of Ross Street)



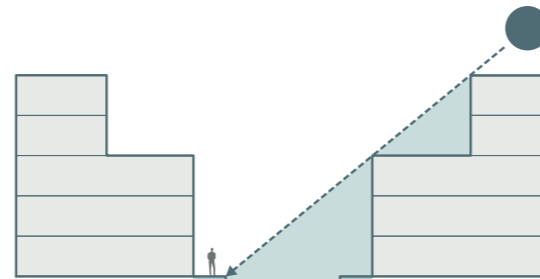
Ground setbacks must have at least 60% garden landscaping

Upper Level Setbacks

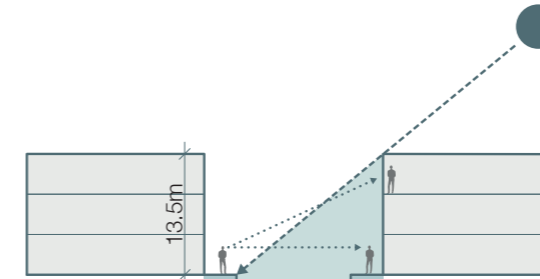
- Maintain human scale, maintaining a street wall height of 3 storeys with upper level setbacks that maintain solar access to the streetscape.

Overall Building Heights

- Height variance across Sub Precinct, ranging from 4-8 storeys.



Levels above street wall must be set back to avoid overshadowing of opposite footpath at specified times.



Maintain human scale with a 3/4-storey (13.5m) street wall that allows solar access to the streetscape.



Figure 46: Area 3 - Framework Plan

Activity Areas

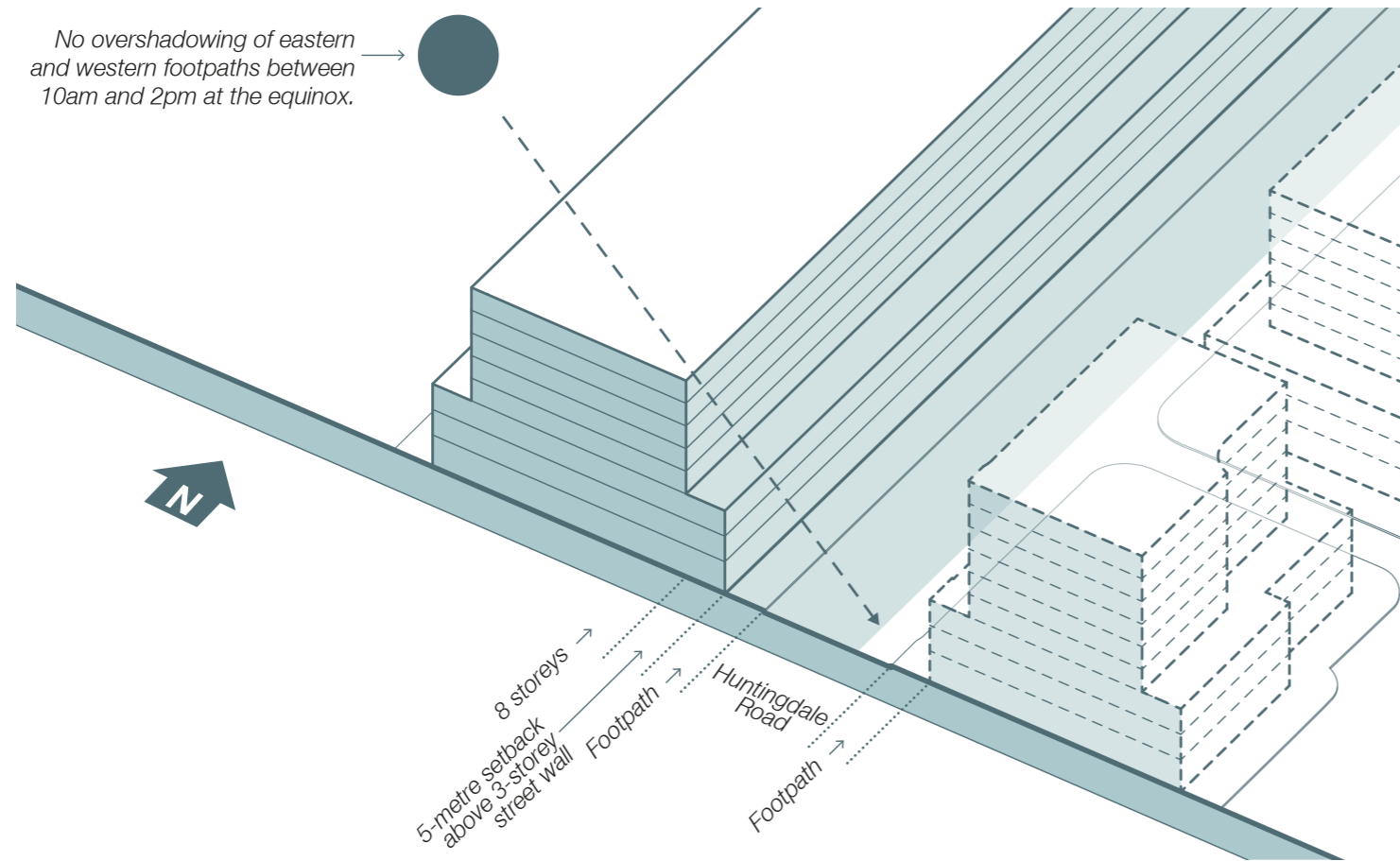


Figure 47: Solar Access on Huntingdale Road



Figure 49: Area 3 - Potential Huntingdale Road Section

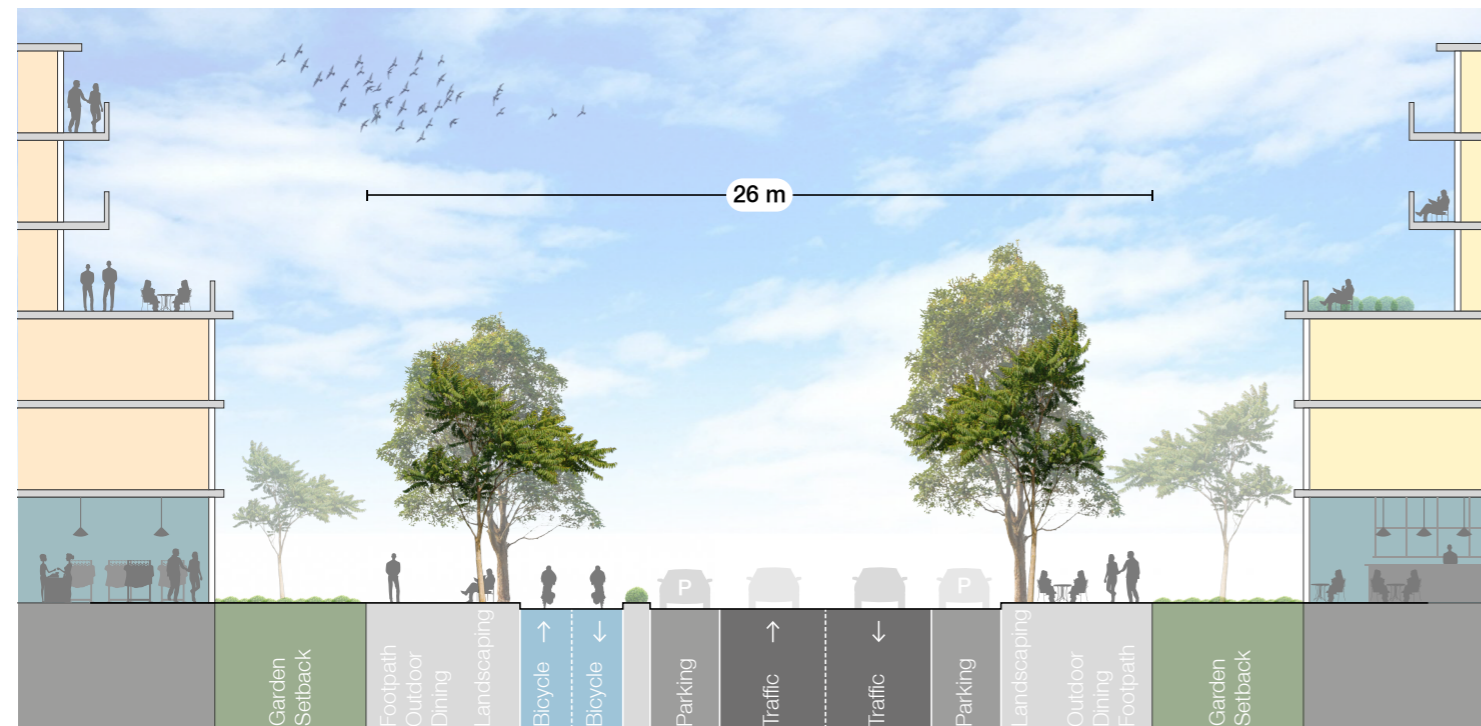


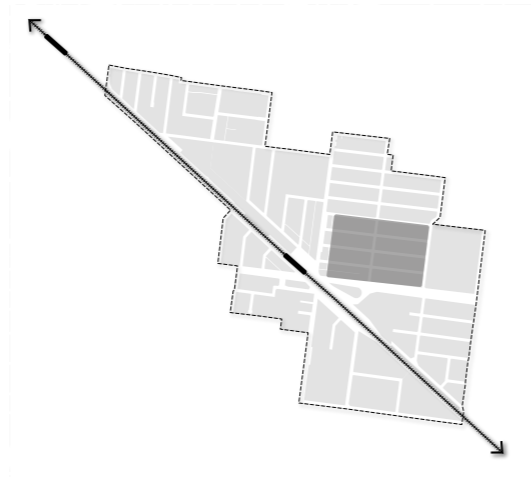
Figure 48: Area 3 - Potential Huntingdale Road Section



Figure 50: Area 3 - Potential Huntingdale Road Section

Activity Area 4

Activity Area 4 is a mixed use neighbourhood that transitions density and uses from the Precinct Core surrounding Huntingdale Road to the eastern Activity Area. Featuring distinctive warehousing and industrial buildings, Area 4 has a valued, robust character that will be retained and enhanced. Reuse of existing buildings and new infill structures will provide space for co-working, research, innovation and centres of excellence as well as retail opportunities and some limited residential. Located close to the Precinct heart, these uses are expected to extend the traditional working week and contribute to the life and vibrancy of the Precinct.



Challenges & Opportunities

- Streetscape residential interfaces (Hargreaves Street)
- Setbacks where provided utilised for at grade car parking
- Poor pedestrian priority at roundabouts
- Built to boundary corner conditions
- Profile and access to North Road
- Streetscape widths 15-16metres
- Large strategic redevelopment opportunities



Figure 51: Area 4 - Challenges & Opportunities



Activity Areas

Mix

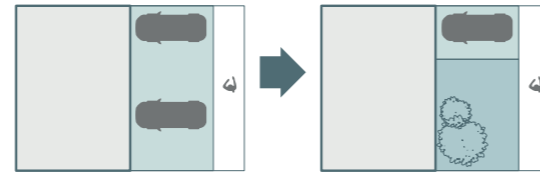
- Commercial – including health and knowledge industries
- Retail
- Wholesale
- Warehousing
- Residential (limited)

Access

- Minimise crossovers along east west streets to allow clear and easy access through to the Precinct Core.
- Modify street design to decrease speed and pedestrian priority on Huntingdale Road
 - Lowering vehicular speeds
 - Narrowing road lanes
 - Providing separated cycle lanes
 - Minimising crossovers
 - Widening footpaths
 - Introducing new crossing points
 - Improving the quality of streetscape materiality, furniture and landscaping
 - Reconfiguring on street car parking

Place

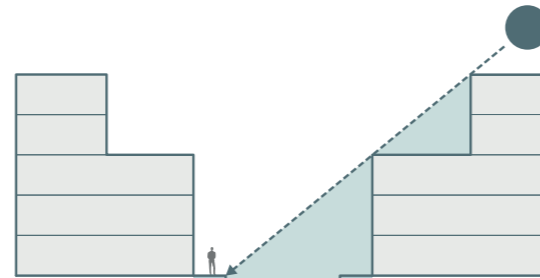
- Provide setbacks responsive to streetscape character (existing and desired). Setbacks where provided are to include at least 60% garden landscaping:
 - 0 metres / built to boundary: North Road Service Lane, Shafton Street, Clifford Street (west of Shafton), Stafford street (west of Shafton), Hume Street (west of Shafton), corner allotments with frontages to Shafton and EW streets built to boundary on both streetscapes for a length of approximately 20 metres on EW streetscapes.
 - Minimum 3 metres: Hargreaves Street, Clifford Street (east of Shafton), Stafford Street (east of Shafton), Hume Street (east of Shafton), Fenton Street
 - Minimum 5 metres: North Road



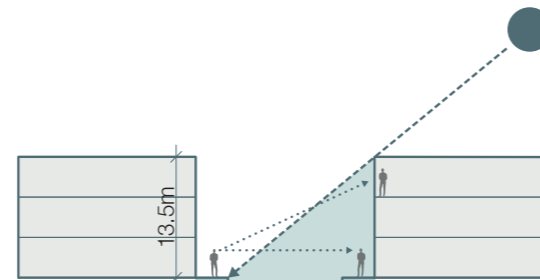
Ground setbacks must have at least 60% garden landscaping

Building Heights & Upper Level Setbacks

- Height variance across Sub Precinct, ranging from 4-6 storeys
- Maintain human scale, maintaining a street wall height of 3 storeys with upper-level setbacks that maintain solar access to the streetscape



Levels above street wall must be set back to avoid overshadowing of opposite footpath at specified times.



Maintain human scale with a 3/4-storey (13.5m) street wall that allows solar access to the streetscape.

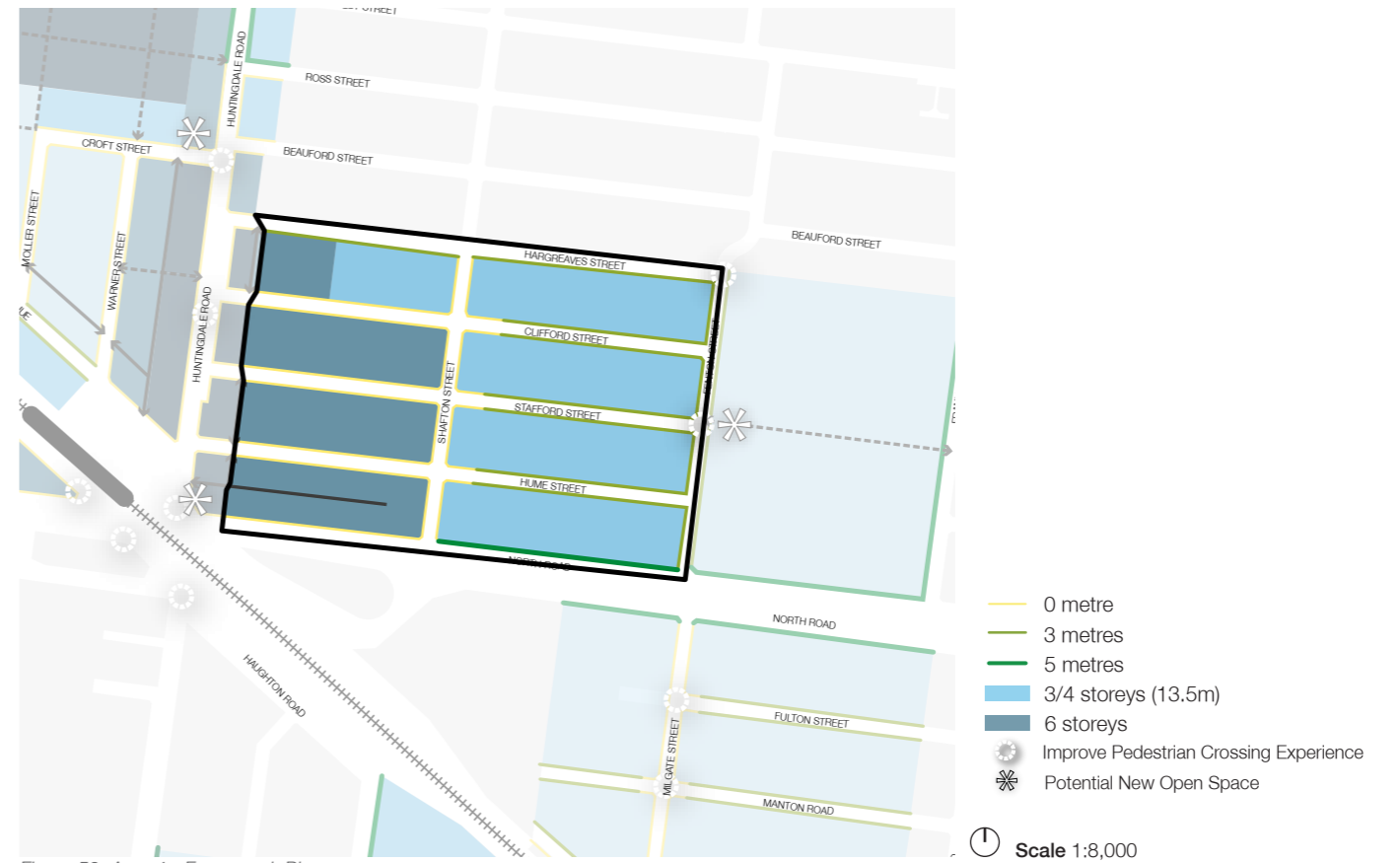


Figure 52: Area 4 - Framework Plan

Activity Areas

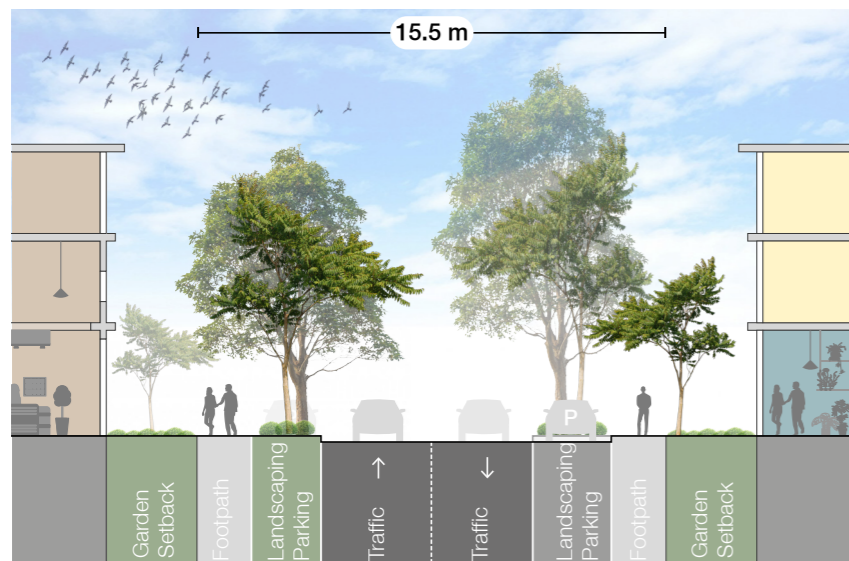


Figure 53: Area 4 - Typical Street with Parking on Both Sides

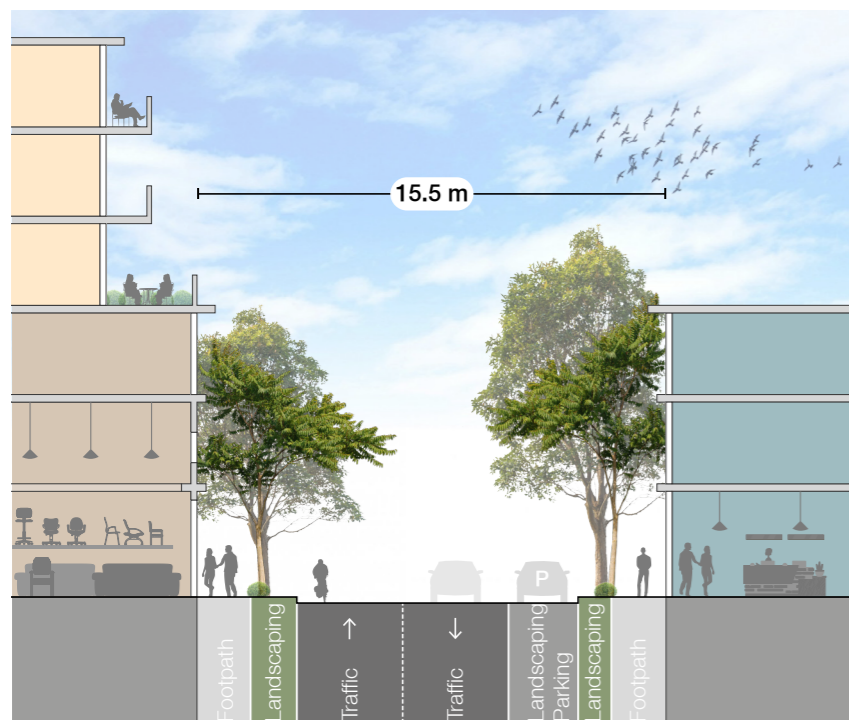


Figure 54: Area 4 - Typical Street with Parking on One Side

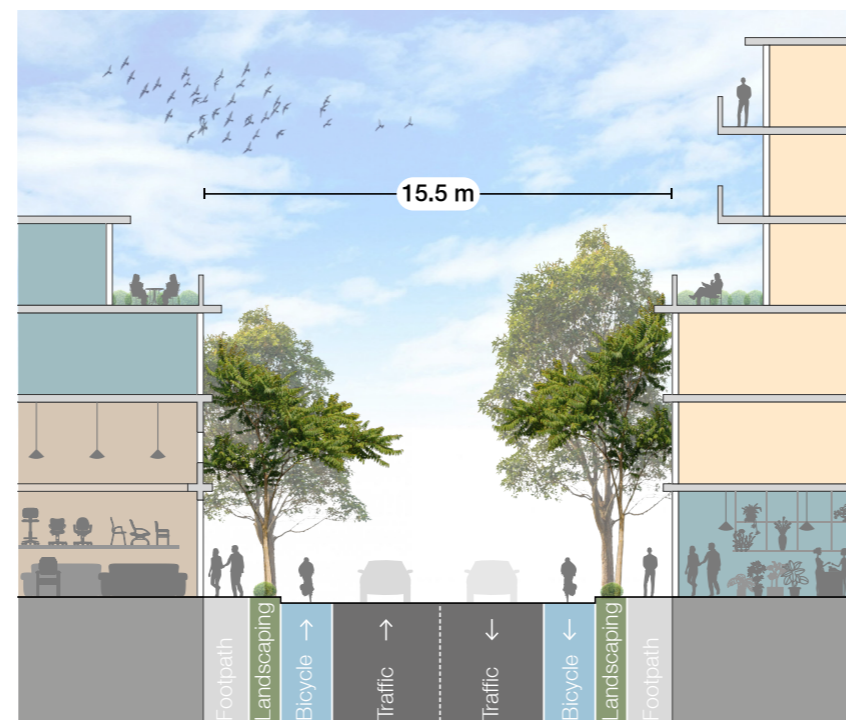
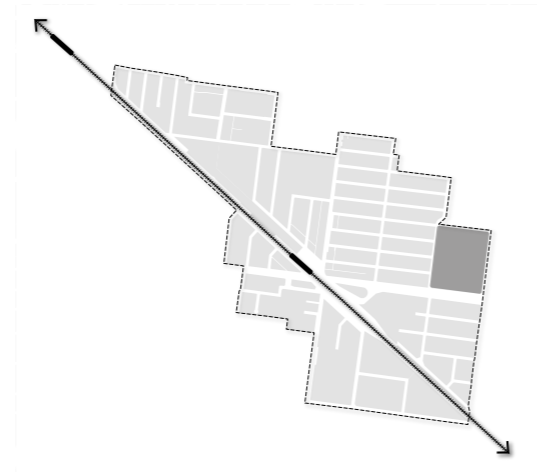


Figure 55: Area 4 - Typical Cycling Street

Activity Area 5

Activity Area 5 is a neighbourhood focused on employment opportunities in clean industry, warehousing and associated commercial sectors with excellent frontage to North Road. The larger lots will provide through-site links improving connectivity and built form will be set back from sensitive residential uses and include generous landscape buffers. A new open space will contribute to the amenity of the area and landscape setbacks will allow for increased tree planting and canopy coverage.



Challenges & Opportunities

- Direct and streetscape residential interfaces (Franklyn Street)
- Setbacks where provided utilised for at grade car parking
- Built to boundary conditions along Franklyn
- Profile and access to North Road
- Streetscape widths 15-16metres
- Large strategic redevelopment opportunities



Figure 56: Area 5 - Challenges & Opportunities



Activity Areas

Mix

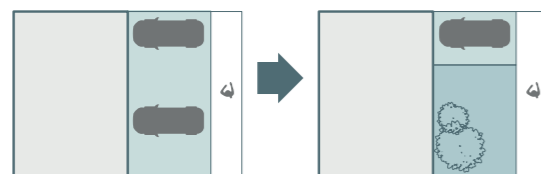
- Industrial
- Wholesale
- Warehousing

Access

- New through site links
- Fenton Street key NS cycling connection.

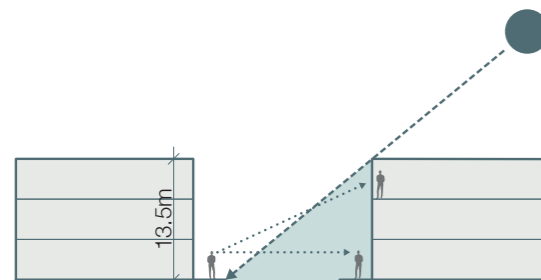
Place

- New open space.
- Provide setbacks responsive to streetscape character (existing and desired). Setbacks where provided are to include at least 60% garden landscaping:
Minimum 3 metres: Fenton Street
Minimum 5 metres: North Road and Franklyn Street



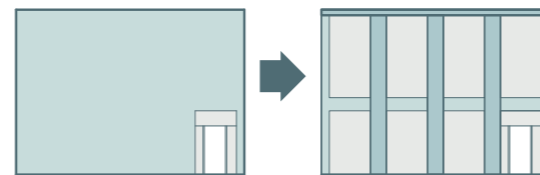
Ground setbacks must have at least 60% garden landscaping

- Preferred maximum height of 4 Storeys (or 13.5 metres – to allow for 3 floors at 4.5m floor to floor heights)



Maintain human scale with a 3/4-storey (13.5m) street wall that allows solar access to the streetscape.

- Administrative and office components to be located at the street frontage/s for improved access, streetscape activation and engagement with the public domain.
- Long or large-footprint buildings should incorporate articulation in their facades, such as expressed recesses or protruding elements.



Avoid plain large/long facades.

Articulate large/long facades.

- Vehicle crossovers should be minimised and located separate to main pedestrian routes to building entries, to reduce conflict with pedestrians.
- Locate car parking and loading to the side and rear of the building.



Activity Areas

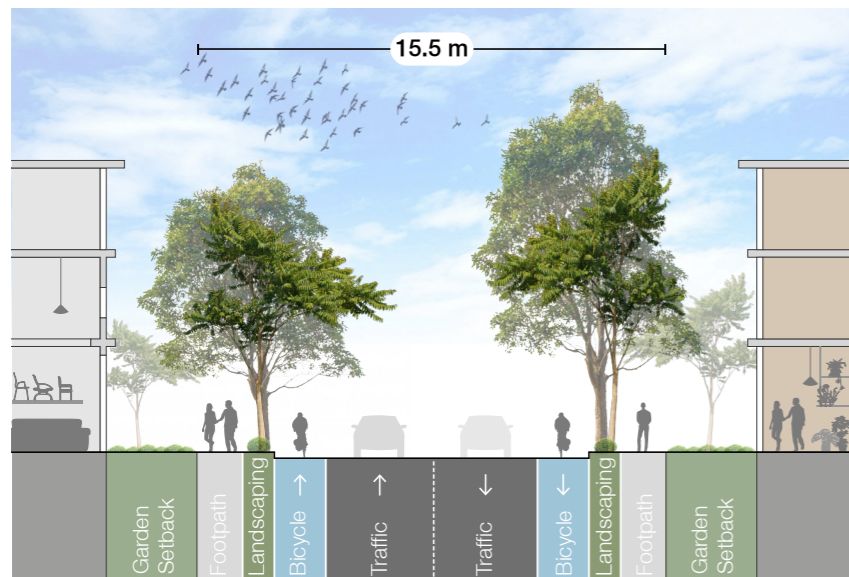


Figure 58: Area 5 - Typical Cycling Street

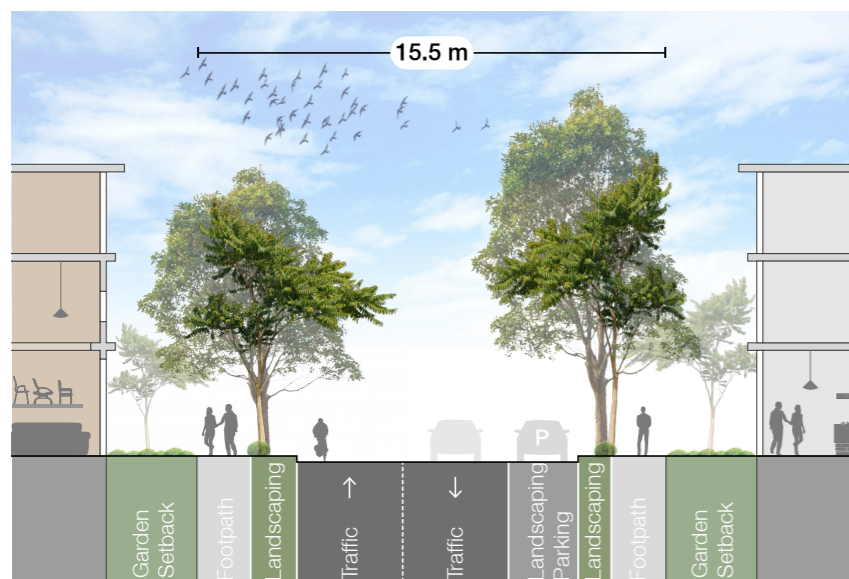


Figure 59: Area 5 - Typical Street with Parking on One Side



Figure 60: Area 5 - Typical Street with Parking on Both Sides

Activity Area 6

Activity Area 6 is predominately a clean industrial and warehousing neighbourhood with some wholesaling. With a defined streetscape grid and distinctive chamfered corners at its round-a-bout intersections it capitalises on its connections to North Road. The reuse of existing structures, including brick buildings with saw tooth roofs can contribute to an emerging character with improved cycle and pedestrian amenity to enhance active transport use. Building heights minimise the impact on direct residential interfaces and landscape setbacks on east-west streets contribute to greater amenity along these routes.



Challenges & Opportunities

- Setbacks where provided utilised for at grade car parking.
- Narrow allotments (<12m) adjacent to rail corridor.
- Limited access to Station Trail due to properties fronting Carinish Road.
- Poor pedestrian priority at roundabouts.
- Built to boundary corner conditions.
- Profile and access to North Road.
- Streetscape widths 15-16metres.
- Large strategic redevelopment opportunities.
- Built to boundary corner conditions.

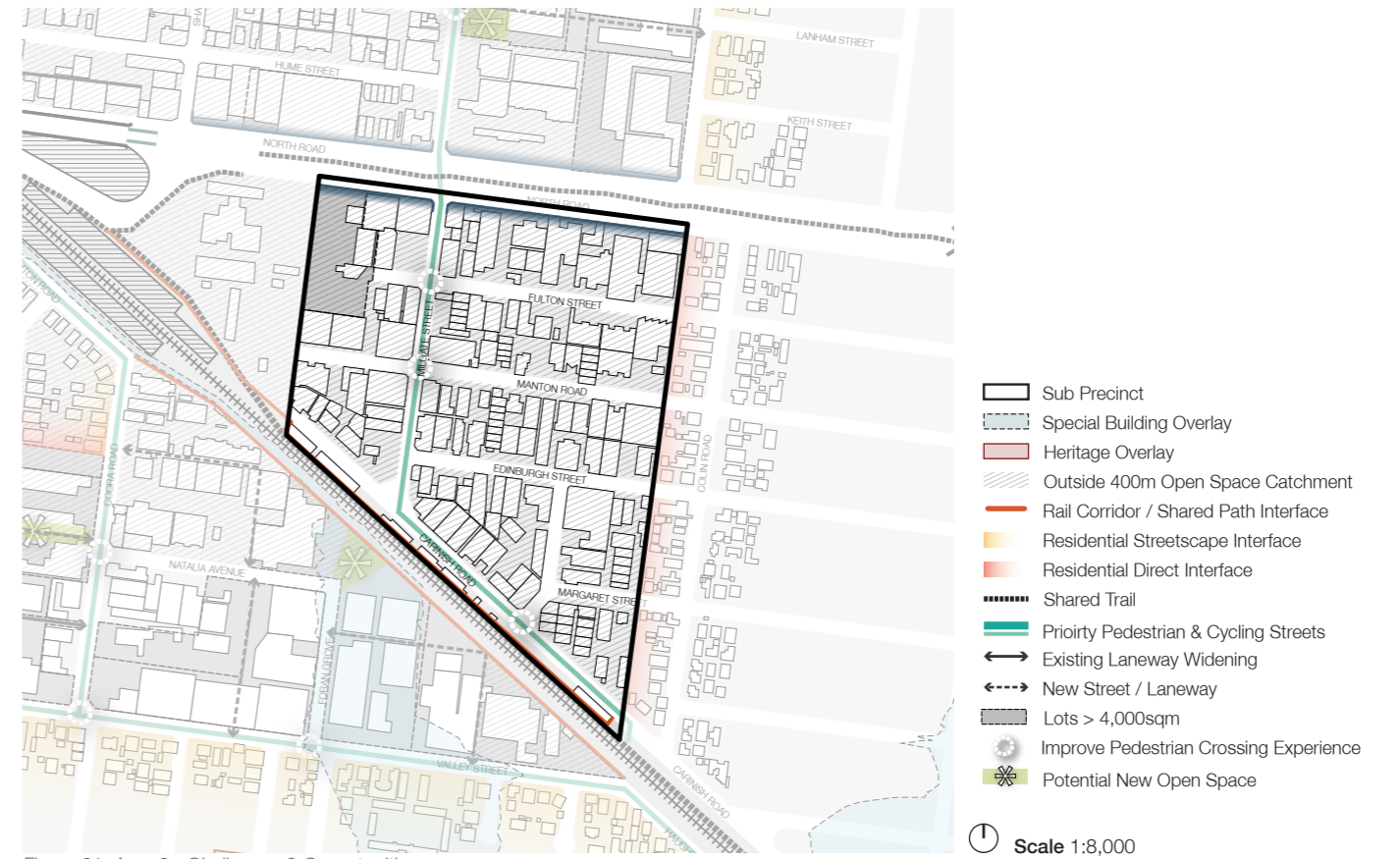


Figure 61: Area 6 - Challenges & Opportunities



Activity Areas

Mix

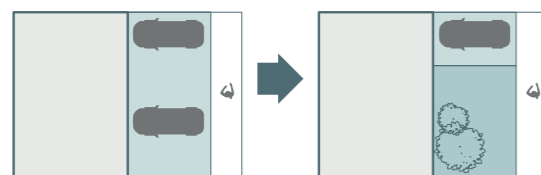
- Industrial
- Wholesale
- Warehousing

Access

- Provide increased connections to the Station Trail to allow greater access to designated bike routes.

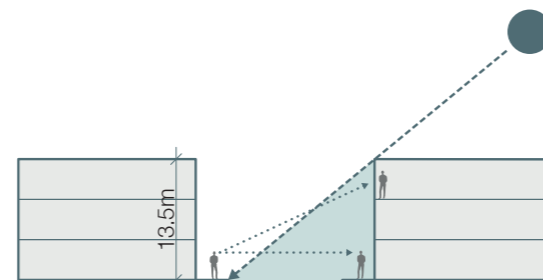
Place

- Provide setbacks responsive to streetscape character (existing and desired). Setbacks where provided are to include at least 60% garden landscaping:
 - 0 metres / built to boundary: Milgate Street, Carinish Road (southern side)
 - Corner allotments with frontages to Milgate Street and EW streets built to boundary on both streetscapes for a length of approximately 20 metres on EW streetscapes
 - Minimum 3 metres: Fulton Street, Mahton Road, Edinburgh Street, Margaret Street, Price Street, Carinish Road (northern side)
 - Minimum 5 metres: North Road



Ground setbacks must have at least 60% garden landscaping

- Preferred maximum height of 4 Storeys (or 13.5 metres – to allow for 3 floors at 4.5m floor to floor heights)



Maintain human scale with a 3/4-storey (13.5m) street wall that allows solar access to the streetscape.

- Administrative and office components to be located at the street frontage/s for improved access, streetscape activation and engagement with the public domain.
- Long or large-footprint buildings should incorporate articulation in their facades, such as expressed recesses or protruding elements.



Avoid plain large/long facades.

Articulate large/long facades.

- Vehicle crossovers should be minimised and located separate to main pedestrian routes to building entries, to reduce conflict with pedestrians.
- Locate car parking and loading to the side and rear of the building.



Figure 62: Area 6 - Framework Plan

Activity Areas

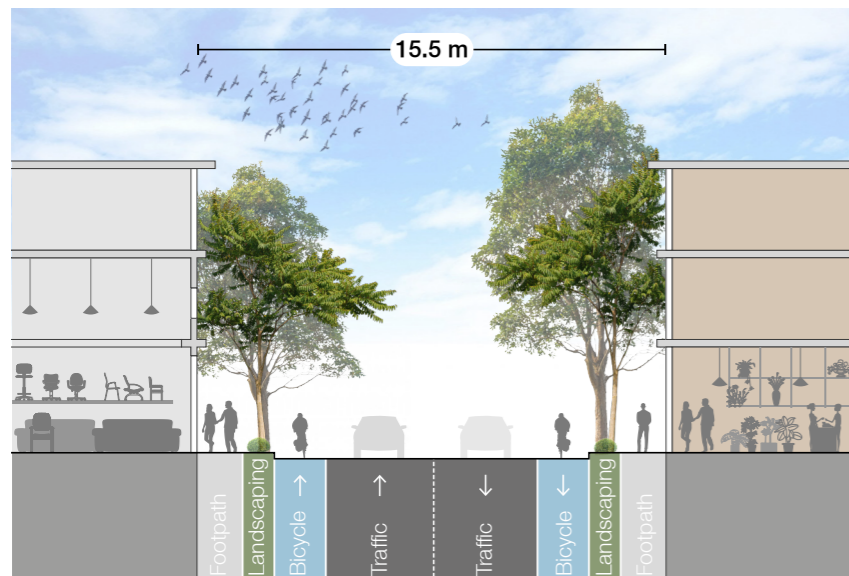


Figure 63: Area 6 - Typical Cycling Street

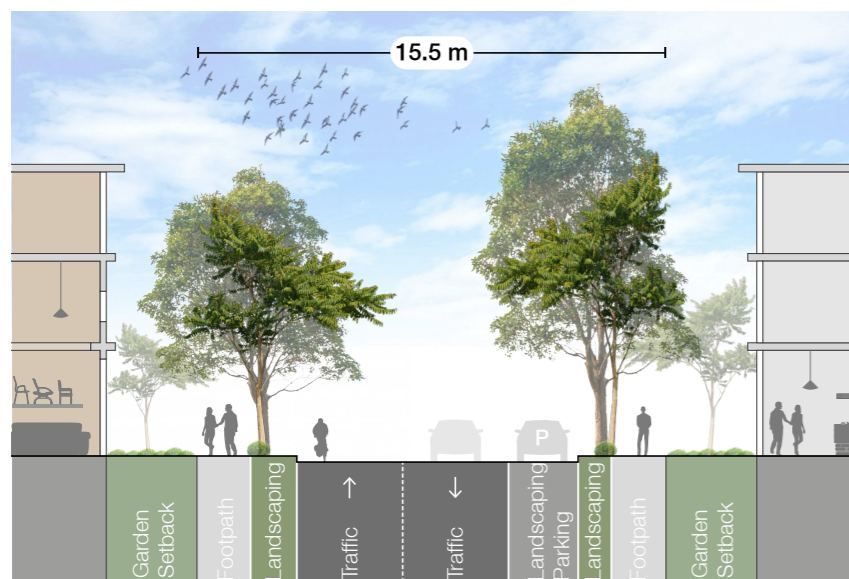


Figure 64: Area 6 - Typical Street with Parking on One Side

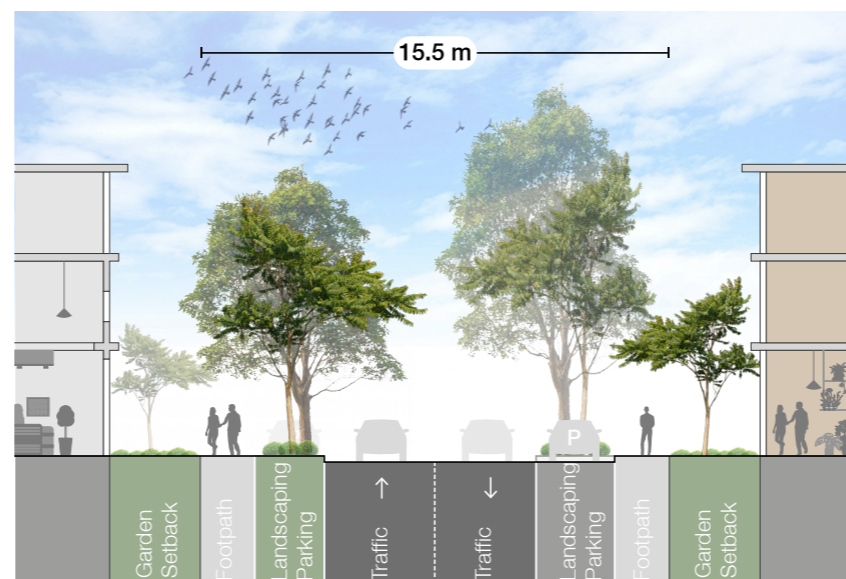
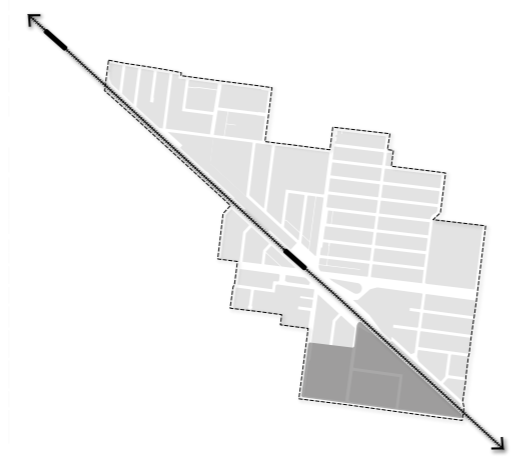


Figure 65: Area 6 - Typical Street with Parking on Both Sides

Activity Area 7

Activity Area 7 is predominately a clean industry employment neighbourhood. Increased permeability through the neighbourhood from surrounding residential areas is achieved by introducing new streets and laneways in combination with designated pedestrian and cycle priority streets. New public open spaces provide amenity opportunities for workers and residents.



Challenges & Opportunities

- Direct residential interfaces to the north and indirect to the south (Valley Street)
- Railway line and North Road present significant access barriers to Huntingdale Station and Activity Centre
- Streetscapes lack pedestrian infrastructure (Valley Street, Coora Road and Foran Grove)
- Wider industrial local collector roads; Coora Road (19.5m) and Valley Street (18.5m)

- Access to open spaces to the South, including Davies Reserve and Robinson Street Reserve
- Access to Clayton Activity Centre via Haughton Road (approximately 1km)
- Route 704 bus services Coora Road and Valley Street
- Large portion of the Sub Precinct outside 400m walkable catchment of existing public open space
- High levels of impermeable surfaces and lack of vegetation

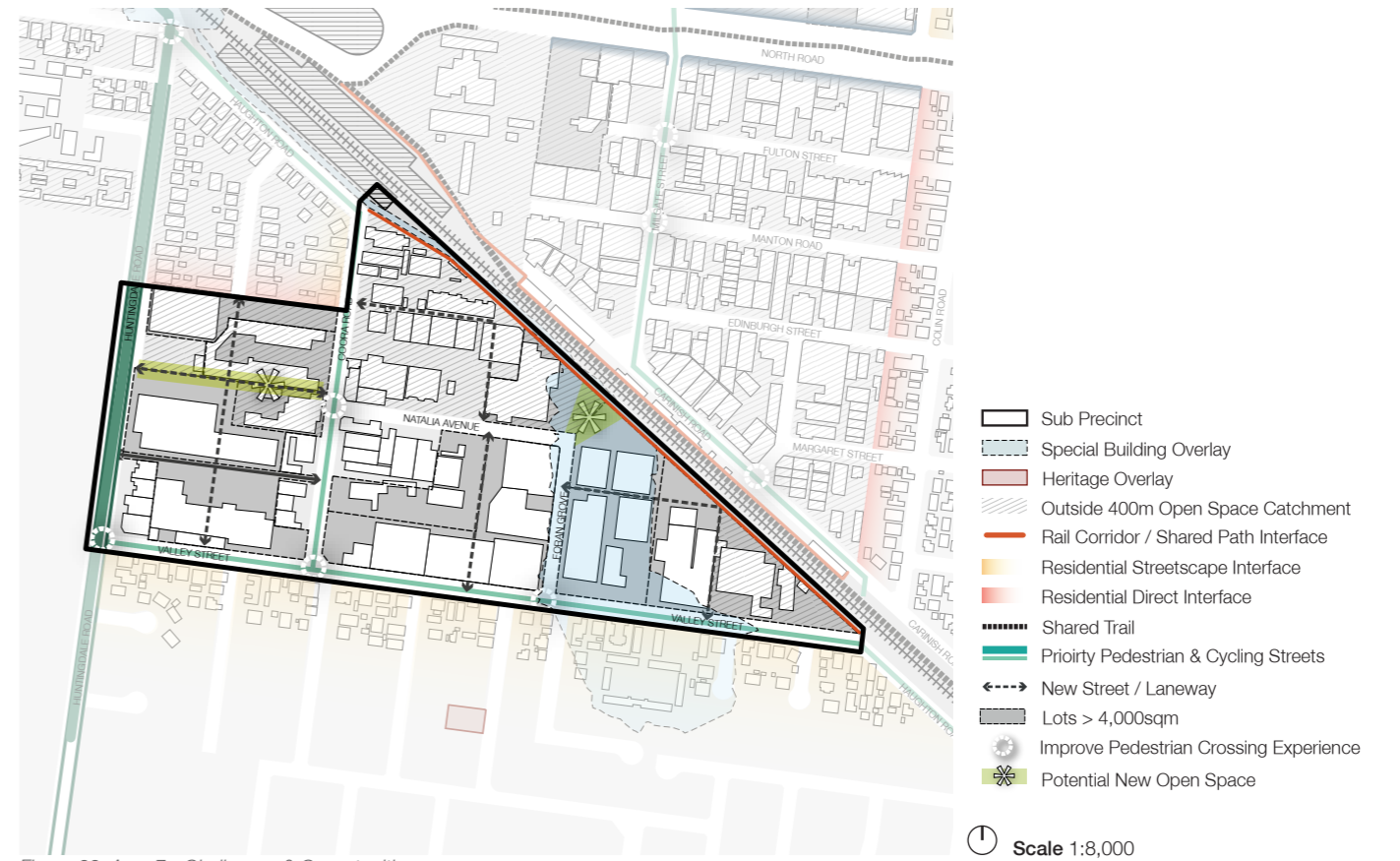


Figure 66: Area 7 - Challenges & Opportunities



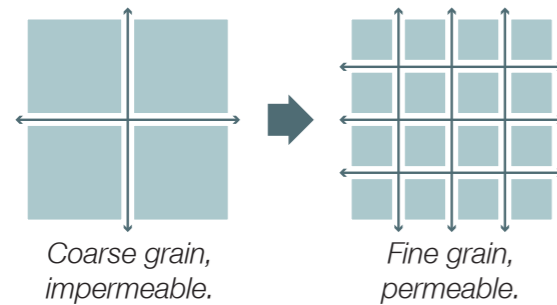
Activity Areas

Mix

- Industrial

Access

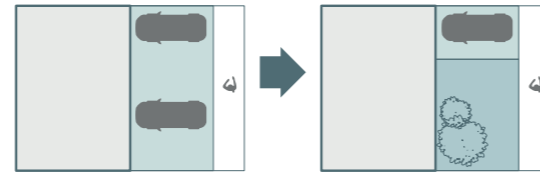
- Introduce an expanded street network through the creation of new streets and laneways. Ensuring adequate access and creation of allotments conducive to town house and apartment residential development.



- Huntingdale Road potential to accommodate a two-way cycle track
- School safety
- Limited vehicle conflicts along Golf Course
- Two-way cycle track 3.7m (minimum 2.5m)

Place

- Provide setbacks responsive to streetscape character (existing and desired). Setbacks where provided are to include at least 60% garden landscaping:
 - 0 metres / built to boundary: Milgate Street, Carinish Road (southern side).
 - Minimum 3 metres: Natalia Avenue and Foran Grove
 - Minimum 5 metres: Coora Road
 - Minimum 7 metres: Huntingdale Road & Valley Street



Ground setbacks must have at least 60% garden landscaping

- Allow for heights between 3-4 storeys across the Sub Precinct, with taller forms focused along the railway corridor, and central to the Sub Precinct.
- Provide of new open space to serve existing and proposed residential population. Potential to integrate WSUD into new open space and streetscapes to mitigate the overland flooding issues. in the south east portion of the Sub Precinct.
- To minimise the visual and physical dominance of vehicles, car parking surfaces and service areas.



Figure 67: Area 7 - Framework Plan

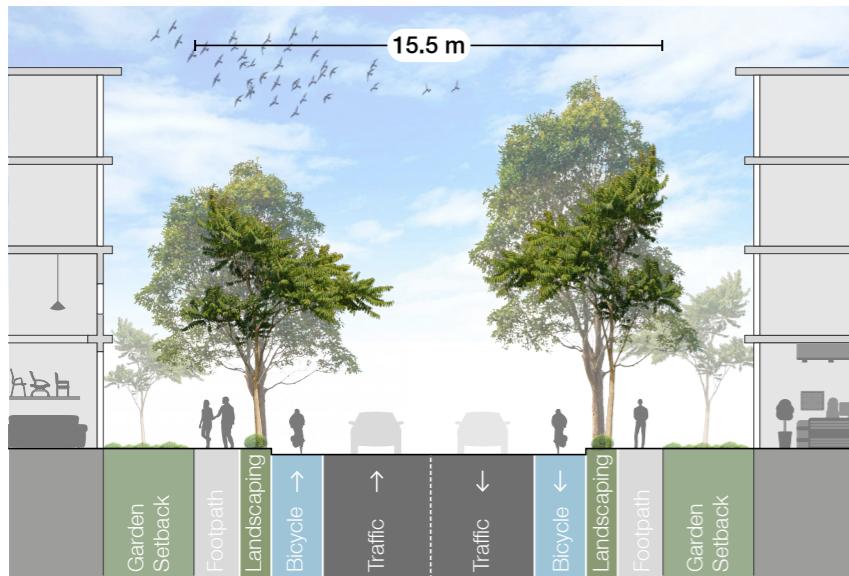


Figure 68: Area 7 - Typical Cycling Street

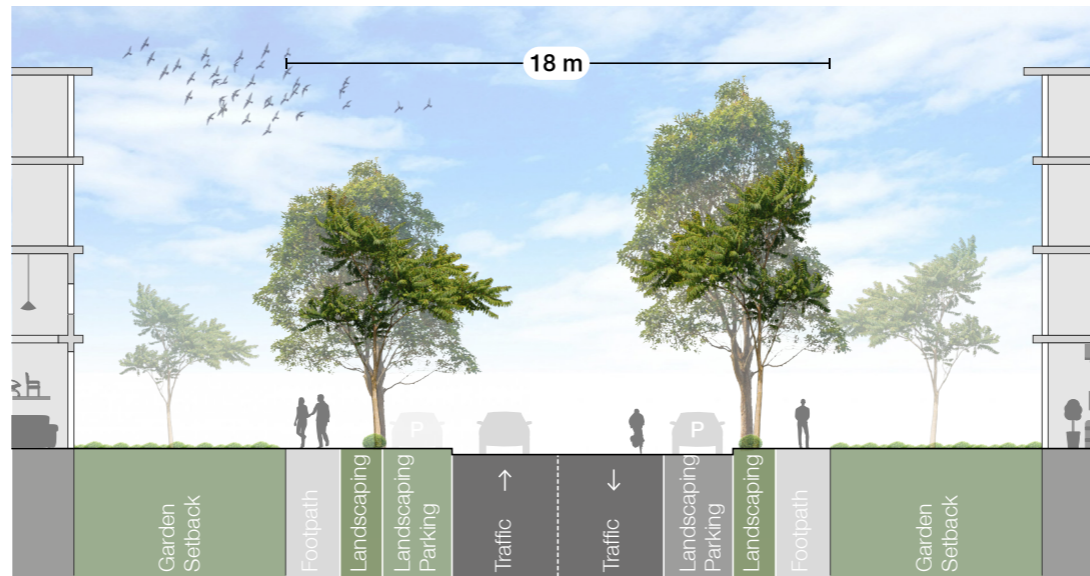


Figure 71: Area 7 - Proposed Street Section Coora Road

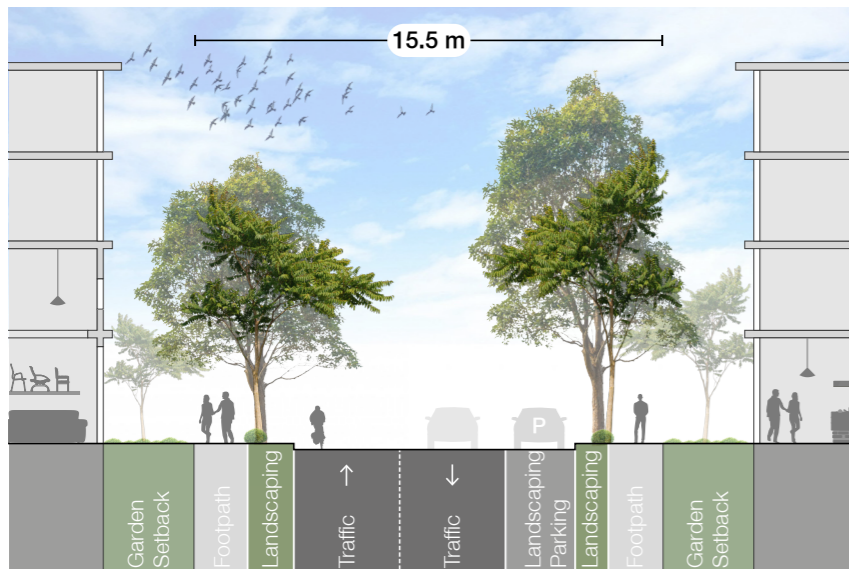


Figure 69: Area 7 - Typical Street with Parking on One Side

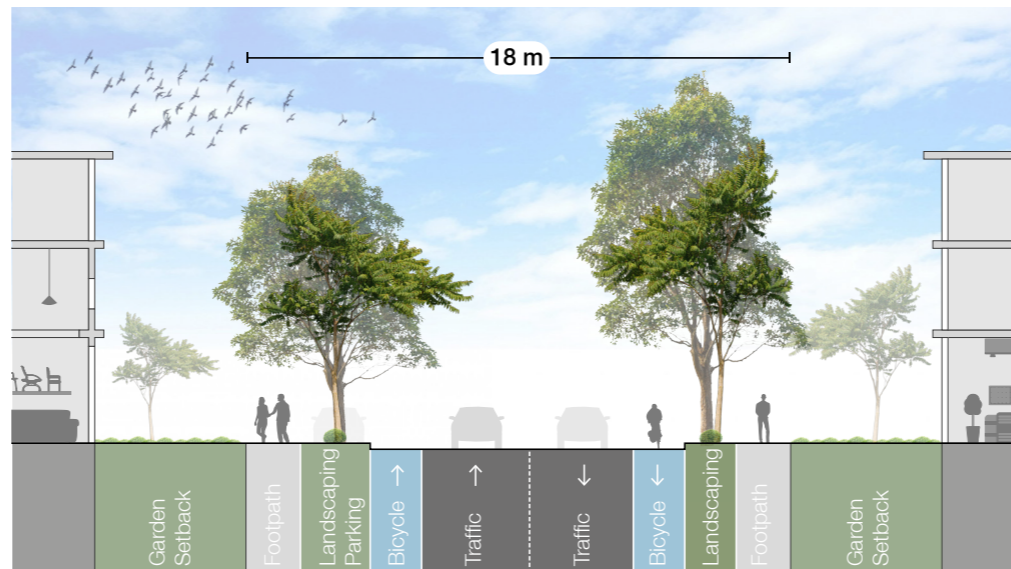


Figure 72: Area 7 - Proposed Street Section Valley Street

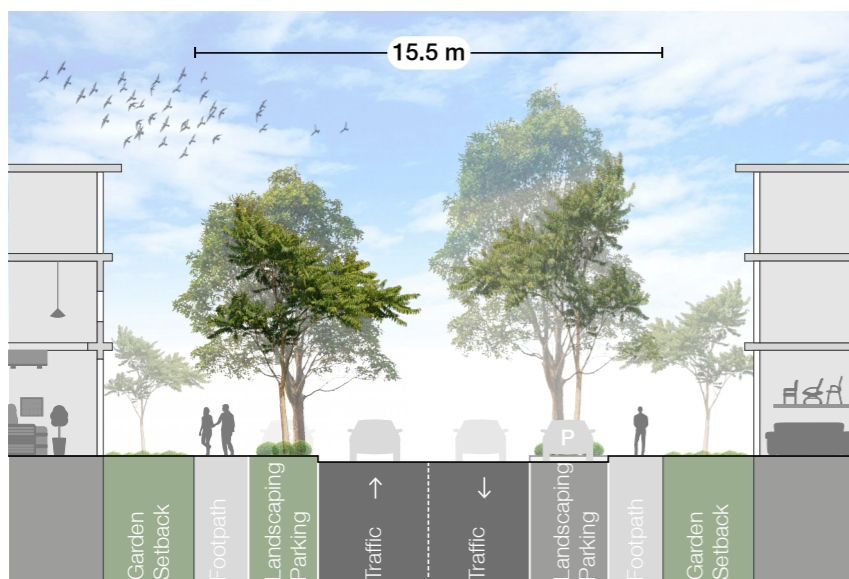


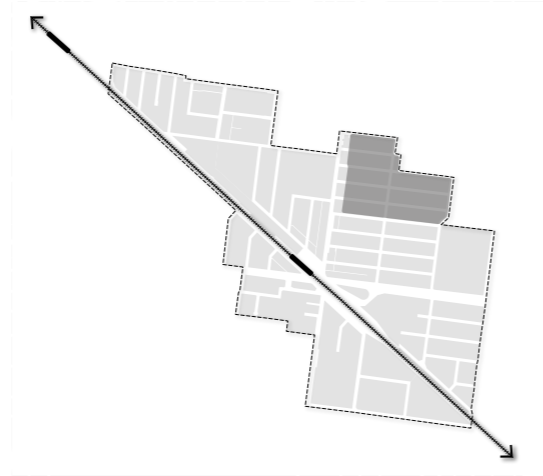
Figure 70: Area 7 - Typical Street with Parking on Both Sides



Figure 73: Area 7 - Proposed Street Section Huntingdale Road

Activity Area 8A

Activity Area 8A is a predominately established residential area dominated by stand-alone dwellings with the ability for further subdivision and densification through townhouses, apartments and dual occupancy. Proximity to transport, the proposed activity on Huntingdale Road and increased community amenity and employment diversity will encourage a diversity of residents. Retained front landscape setbacks will encourage greenery and provide a distinct neighbourhood character.



Challenges & Opportunities

- Direct interface with Huntingdale Road activity to the west
- Indirect residential interfaces to the north and east
- Indirect industrial interfaces to the south (Hargreaves Street)
- Portion of the Sub Precinct outside 400m walkable catchment of existing public open space
- Access to Princes Highway Reserve via Beauford Street and Clovis Street
- Route 704 bus services Huntingdale Road

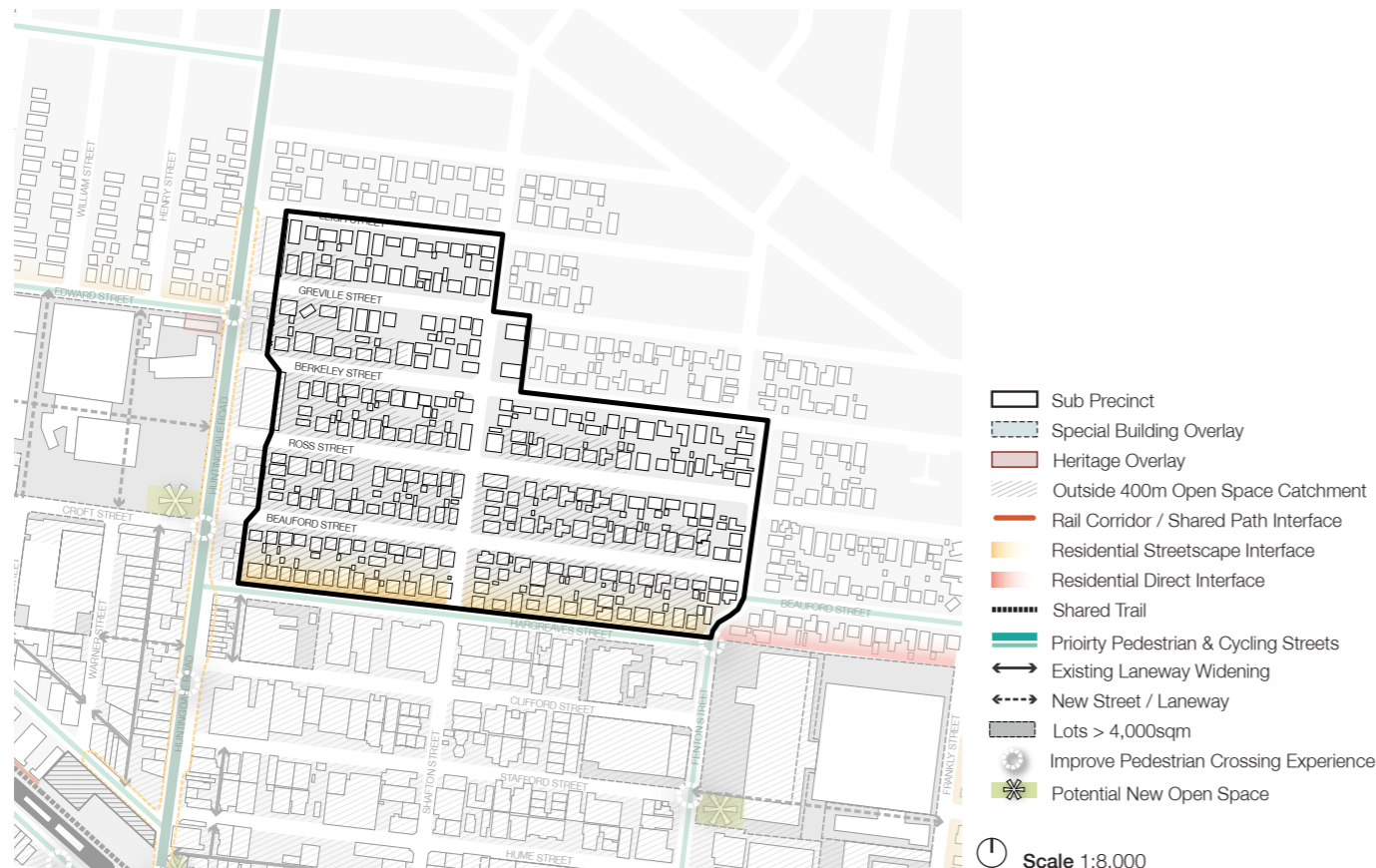


Figure 74: Area 6 - Challenges & Opportunities

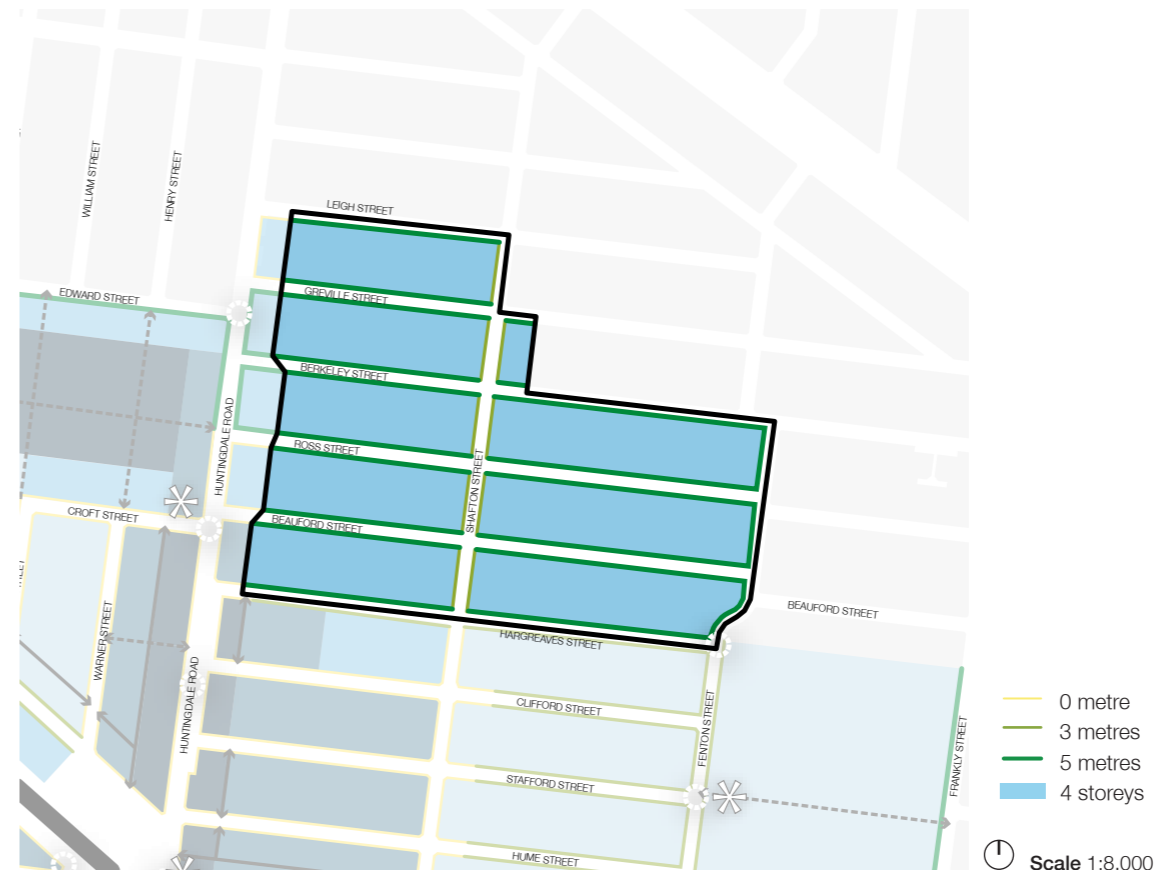


Figure 75: Area 6 - Framework Plan

Activity Areas

Mix

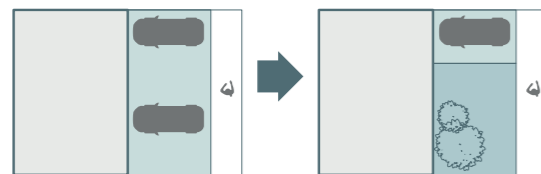
- Residential

Access

- School safety
- Two-way cycle track 3.7m (minimum 2.5m)

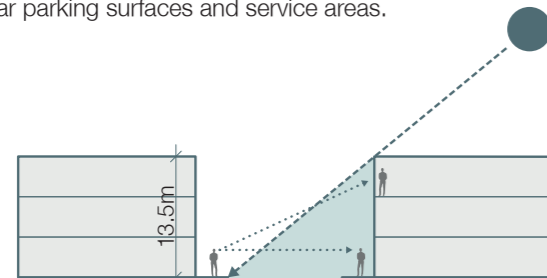
Place

- Retain existing setbacks responsive to streetscape character. Setbacks are to include at least 60% garden landscaping:
 - Minimum 3 metres: Shafton Street
 - Minimum 5 metres: Leigh Street, Greville Street, Berkeley Street, Ross Street, Beauford Street and Hargreaves Street



Ground setbacks must have at least 60% garden landscaping

- Allow for heights between 3-4 storeys across the Sub Precinct.
- Potential to integrate WSUD into streetscapes to mitigate the overland flooding issues.
- To minimise the visual and physical dominance of vehicles, car parking surfaces and service areas.



Maintain human scale with a 3/4-storey (13.5m) street wall that allows solar access to the streetscape.

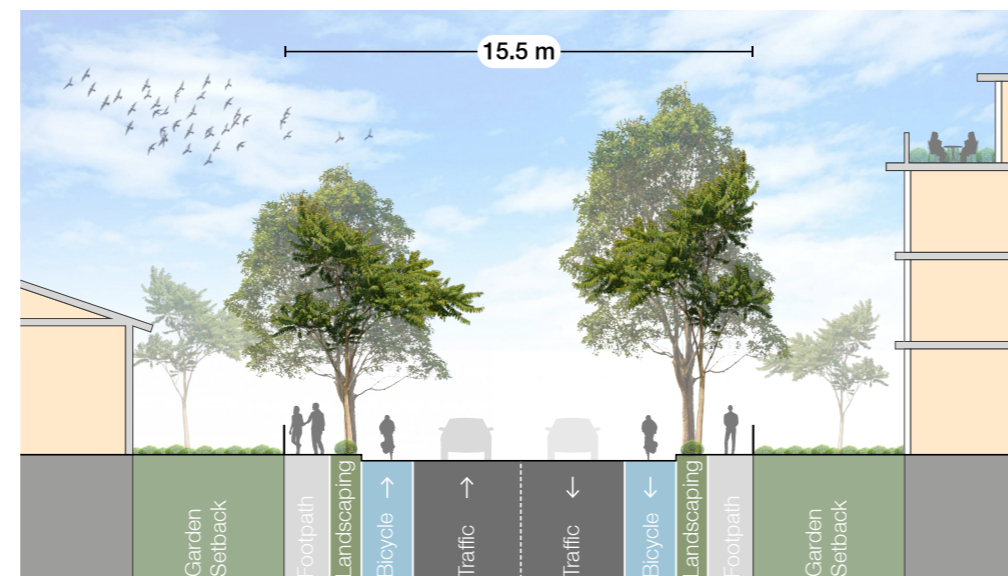


Figure 76: Area 6 - Typical Cycling Street

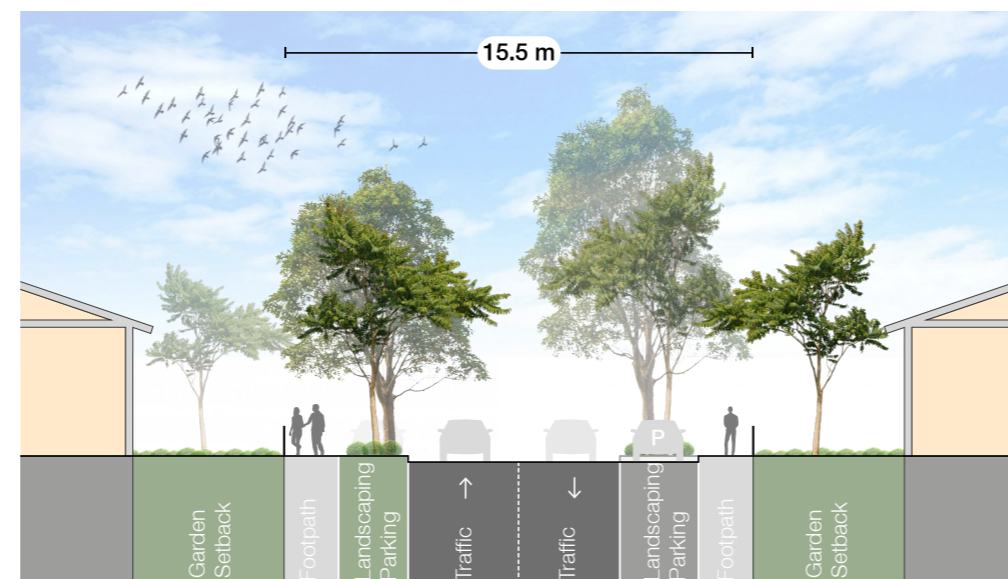


Figure 77: Area 6 - Typical Street with Parking on Both Sides

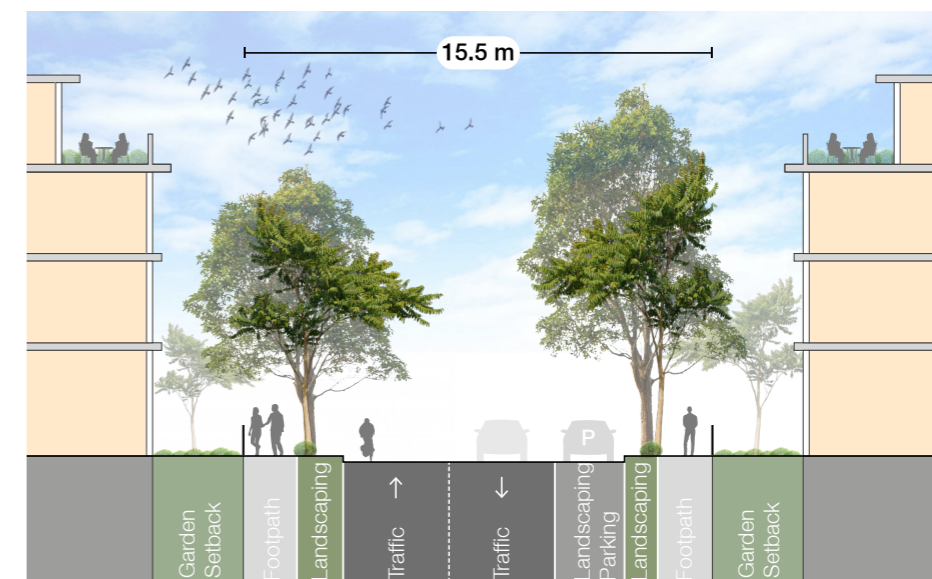
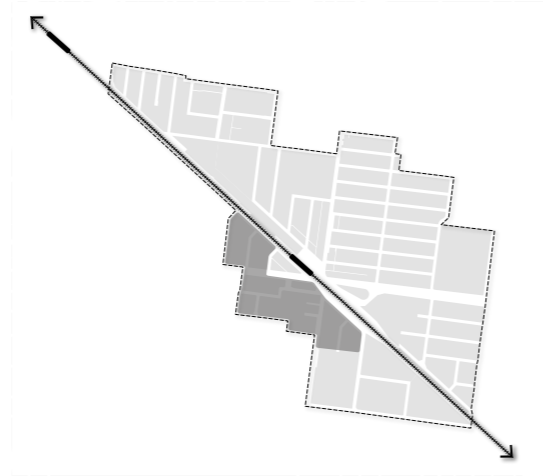


Figure 78: Area 6 - Typical Street with Parking on One Side

Activity Area 8B

Activity Area 8B is a predominately established residential area dominated by stand-alone dwellings with the ability for further subdivision and densification through townhouses, apartments and dual occupancy. Proximity to transport, the proposed activity on Huntingdale Road and increased community amenity and employment diversity will encourage a diversity of residents. Retained front landscape setbacks will encourage greenery and provide a distinct neighbourhood character.



Challenges & Opportunities

- Direct and indirect residential interfaces
- Railway line and North Road present significant access barriers to Huntingdale Station and Activity Centre
- Route 630 bus services North Road
- Large portion of the Sub Precinct outside 400m walkable catchment of existing public open space
- High levels of impermeable surfaces and lack of vegetation



Figure 79: Area 6 - Challenges & Opportunities

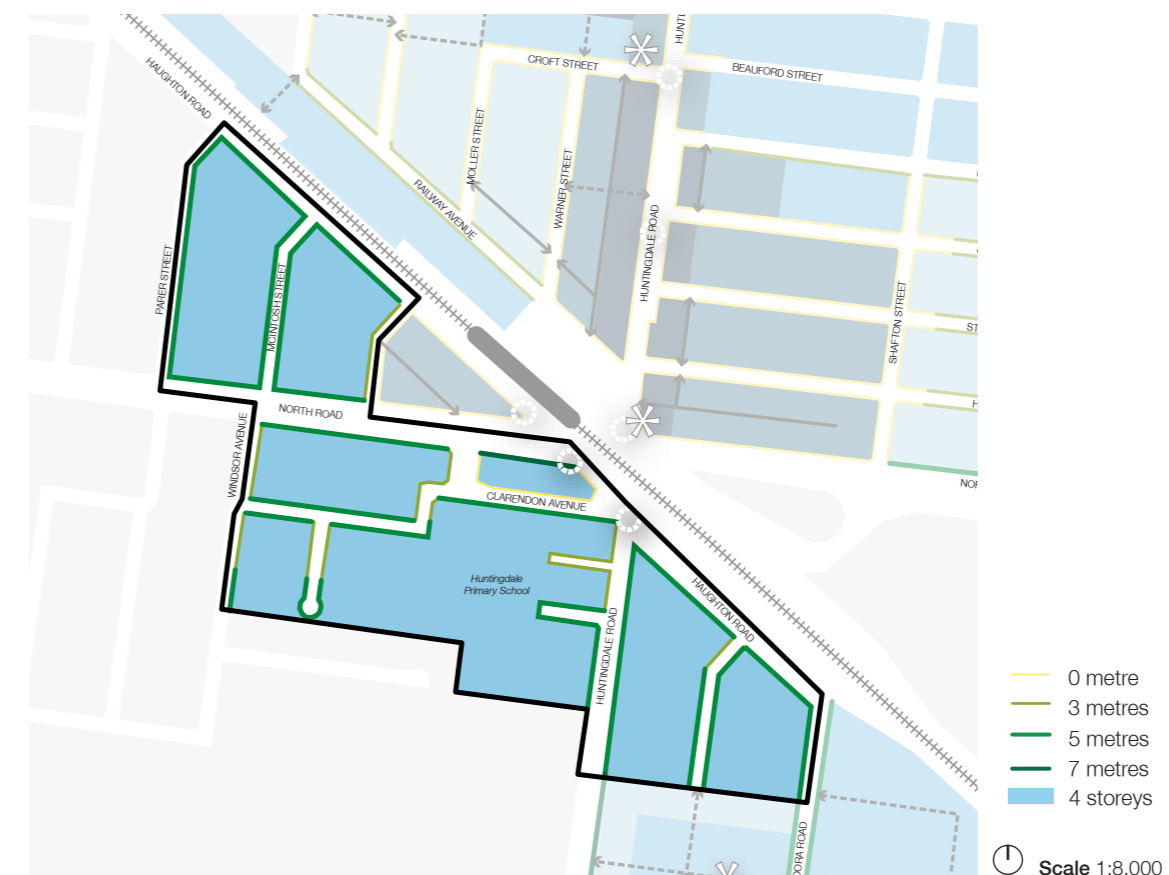


Figure 80: Area 6 - Framework Plan

Activity Areas

Mix

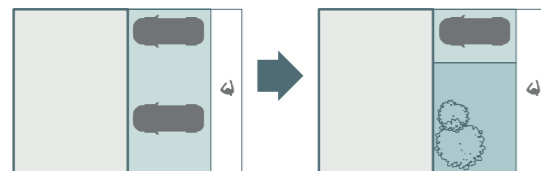
- Residential

Access

- Huntingdale Road potential to accommodate a two-way cycle track
- School safety
- Two-way cycle track 3.7m (minimum 2.5m)

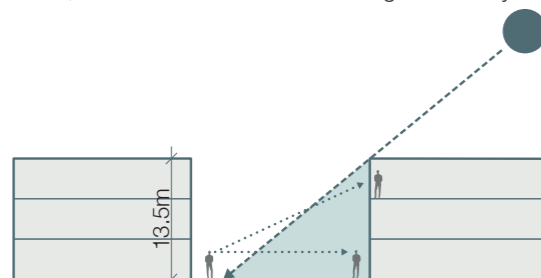
Place

- Retain existing setbacks responsive to streetscape character. Setbacks are to include at least 60% garden landscaping:
 - 0 metres / built to boundary: Clarendon Avenue (northern side on east end)
 - Minimum 3 metres: Windsor Avenue and Moroney Street
 - Minimum 5 metres: Parer Street, McIntosh Street, North Road, Clarendon Avenue, Huntongdale Road, Houghton Road and Stradbroke Street
 - Minimum 7 metres: North Road Service Road



Ground setbacks must have at least 60% garden landscaping

- Allow for heights between 3-4 storeys across the Sub Precinct, with taller forms focused along the railway corridor.



Maintain human scale with a 3/4-storey (13.5m) street wall that allows solar access to the streetscape.

- Potential to integrate WSUD into streetscapes to mitigate the overland flooding issues in the south east portion of the Sub Precinct.
- To minimise the visual and physical dominance of vehicles, car parking surfaces and service areas.

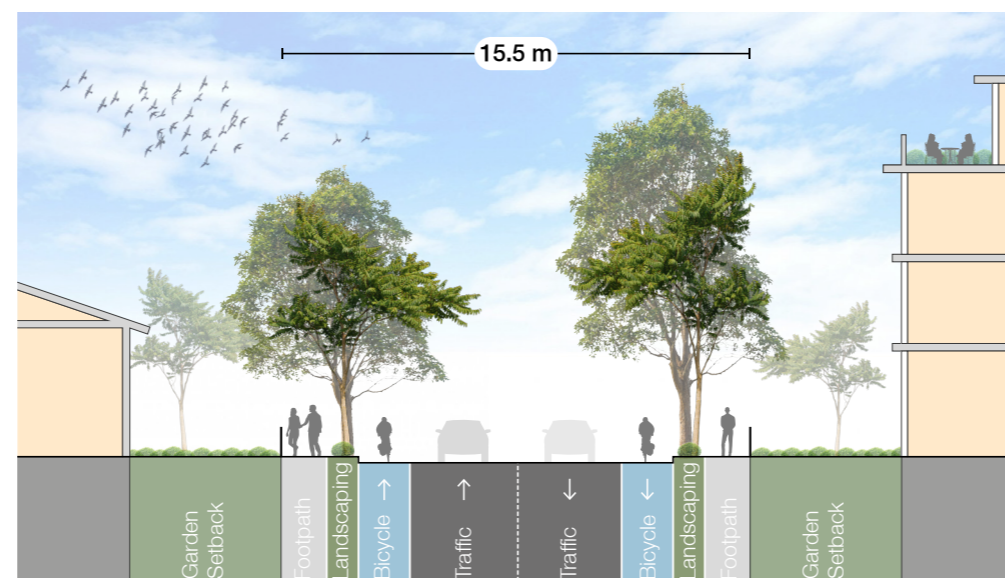


Figure 81: Area 6 - Typical Cycling Street

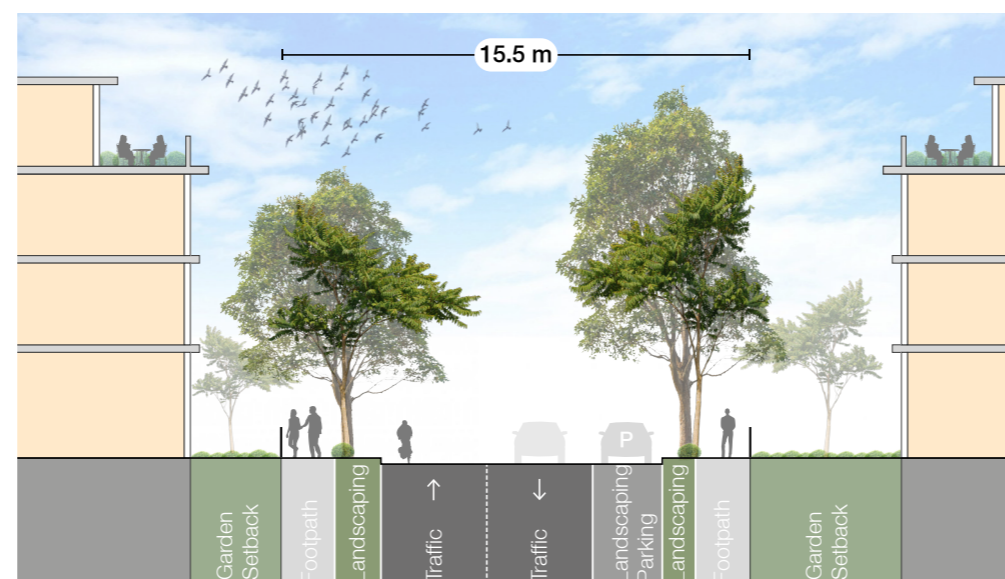


Figure 82: Area 6 - Typical Street with Parking on One Side

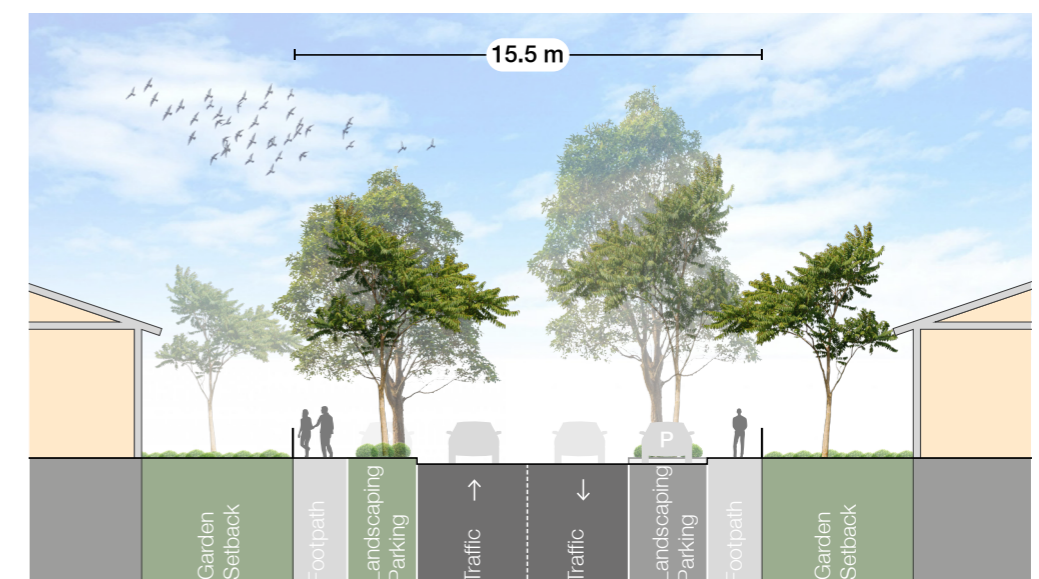


Figure 83: Area 6 - Typical Street with Parking on Both Sides

6

Conclusion

Conclusion

Conclusion

The transformation of Huntingdale into a diverse urban village providing a range of employment, commercial, recreation and residential opportunities will require ongoing coordination between the City of Monash, VicTrack, VicRoads, PTV, lands owners and other stakeholders to achieve:

- Attraction of catalytic tenants and community uses that support the Vision of a mixed use, employment focused village.
- Public realm upgrades that support walkability, street life and streetscape character.
- Increased open space provision.
- Sustainable and appropriate redevelopment of large strategic sites in line with the desired future Vision.
- Ongoing advocacy for the realignment of North Road connecting both sides of the rail and North Road to create a walkable, cohesive town centre.
- Innovative re-use and adaptation of existing built form and transformation to clean industry uses.
- High quality mixed use outcomes including residential diversity to support increased retail and activity within the town centre.



SJB Urban

sjb.com.au

We create spaces people love.
SJB is passionate about the
possibilities of architecture,
interiors, urban design
and planning.
Let's collaborate.

Level 5, 18 Oliver Lane
Melbourne VIC 3000
Australia
T. 61 3 9699 6688
urban@sjb.com.au
sjb.com.au