

LILYDALE URBAN DESIGN REPORT

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SUMMARY

SEMBLAN

Purpose of this document

Roberts Day, on behalf of HBI Lilydale Pty Ltd, has prepared an urban design report for the former Lilydale Quarry site. This high level strategy document has been developed to support the proposed planning scheme amendment, and advances an indicative urban design framework for the site.

It is important to note that this framework is provisional in nature, and has been prepared to provide direction about how the site could be developed over the coming decades.

Due to the potentially lengthy buildout period (15+ years for some areas), the urban design approach naturally requires a level of flexibility to cater for changing or unforeseen circumstances.

Project Background

The Lilydale Quarry has played a significant role in the region's economic and cultural history. Since the decommissioning of the quarry in 2015, after 137 years of operation, the site's future capacity to continue to shape the region's future as a significant mixed-use urban infill development is unparalleled.

In 2014 the Victoria Planning Authority (VPA) recognised the site as a Strategic Urban Renewal Site in the State's Strategic Planning framework, Plan Melbourne.

In 2015 The State Government
Development Agency, Places Victoria,
with their joint partner, the quarry
operator Sibelco, in collaboration with
the Yarra Ranges Council, lodged
a planning scheme amendment to
rezone the site with a concurrent
Comprehensive Development Plan.
Extensive community engagement was
undertaken throughout that process.

In 2016 a Joint Venture between Intrapac Property, Brencorp Property and Bayport Group entered into a contract to purchase the site from Sibelco.

The vision for the re-development of the quarry, to fully unlock the potential of one of Melbourne's largest infill redevelopment opportunities has been reviewed, refined and refreshed.

Project Vision

In early 2017, Intrapac appointed a multi-disciplinary consultancy team to guide the preparation of a revised concept plan that:

- Responded to the potential for a railway station and a mixed-use Transit Orientated Development (TOD);
- Celebrated the history of the site and activated the heritage artifacts, buildings and landscape of the site;
- Contributed to the growing need for housing diversity in the region; and
- Showcased leading urban development and Environmental Sustainable Development practice.

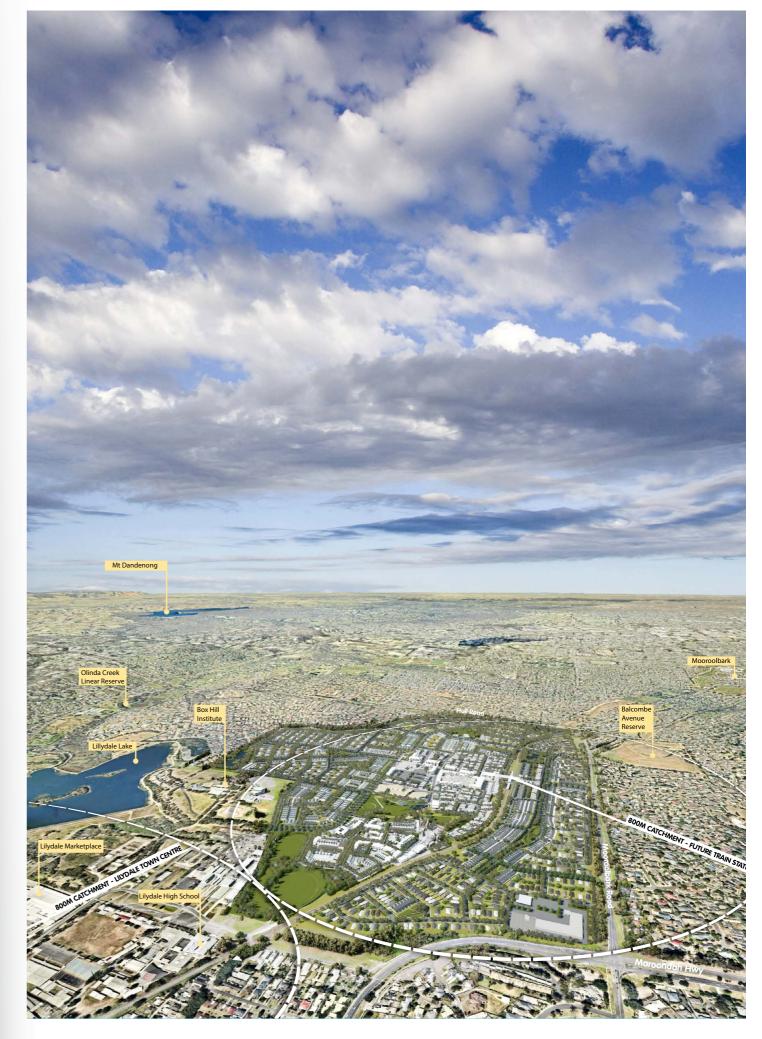
The updated concept plan documented in this report builds on the principles and structure of the 2015 Planning Scheme Amendment Application. The spatial organisation of several elements of the plan such as activation and employment, community infrastructure and housing density have been reconfigured.

East – West connectivity is improved with additional pedestrian and vehicle connections over the railway line as well as strengthened links to Lillydale Lake.

The proposed railway station presents an opportunity to introduce a unique mixed-use urban centre and transit oriented development.

The numerous and varied open spaces proposed across the development have been coordinated to create a comprehensive network of connected and meaningful places and spaces.

The design concept has resulted in a robust master plan and a walkable urban environment where a diverse community can enjoy healthy and active lifestyles in a neighbourhood that instills a sense of ownership and pride.



Key Principles

In early 2017 Intrapac convened a comprehensive Design and Visioning Forum. Key stakeholders, including elected Yarra Ranges Councillors, local and state government officers, VicRoads and Melbourne Water joined an international team of consultants to explore the new vision for the quarry. Through this collaborative process the key design principles below were explored, tested and agreed.





Walkable Urban Environments

Urban environments that are conducive to pedestrian activity and movement have been shown to create positive social and health benefits for local communities.

Places where it is safe and convenient to access education, local services and retail by foot have reduced household carbon footprints. Residents of walkable areas have higher social capital, better health and are more engaged in community life.

Open Space Stories

The rich history of the site will be woven through the landscape and place character of the development.

These landscape stories will articulate and celebrate the pre and post settlement history of the region; activate the industrial heritage artifacts, buildings and landscapes of the site; and connect the community to the history of agriculture on the site.





Housing Diversity

The housing needs of the local community are diverse and varied. Emerging demographic lifestyle trends are driving demand for a wider variety of housing opportunity across all socio-economic groups in the Melbourne community.

Urban renewal and urban infill sites in close proximity to established transport and social infrastructure like Lilydale Quarry are identified as strategic sites for medium density housing.

Place Activation

The proposed railway station creates the potential for an integrated Transit Oriented Development bringing the social, economic and sustainability benefits of mixed-use development to the region.

The walkable urban setting and activated spaces will bring people together and foster the bonds of community. A celebration of the independent food and wine industries of the Yarra Valley region on the site will make the redevelopment of Lilydale Quarry a destination in it's own right.

PROJECT LOCATION LILYDALE URBAN DESIGN REPORT

LILYDALE

SOURCE: forecast.id.com.au

16,797 people

HOMES



HOUSE

22.0% One Person

16.2% Three Persons

32.1% Two Persons

18.2% Four Person +

HOUSE TYPE /

81.0% Separate house

16.9% Medium density

AGE GROUPS

HOUSEHOLD

8.5% 10.3% 11.8%

Secondary schoolers (12 to 17)

12.4% 9.4% Young workforce (25 to 34)

Empty nesters and retirees (60 to 69) 7.7% Seniors (70 to 84)

22.5%

25.1% Couples without children 21.4% Lone person

36.5% Couples with children

11.3% One parent families

INCOME

26%

of households earned an income of \$2,500 or more 8,165 **Employed** 59.4% 33.9%

CAR OWNERSHIP

40.3% 28.6% 21.2%

own two vehicles own one vehicles

own three or more vehicles

\$800 K **MEDIAN HOUSE PRICE**

\$929 K Median Hous Price - Melbourne

\$640 K **MEDIAN UNIT PRICE** \$541 K Median U Melbourne

SOURCE: Domain.com.au corelogic.com.au walkscore .com

walkscore





very walkable

Gateway to the East

Lilydale is well-positioned to provide retail and community services for the two tourist regions it interfaces: the Yarra Valley and the Dandenong Ranges. Extending to the east and north of Lilydale, the Yarra Valley is known for its wine, agriculture and tourism industries and to the south the Dandenong ranges attracts visitors to its picturesque landscape and natural and cultural heritage.

The redevelopment of the Quarry Site can leverage and support these economic areas through short stay accommodation offers, activated hubs that showcase local produce as well as a possible gathering place and transport interchange for day trip operators.

In 2013 - 2014, the **tourism activity** in the Yarra Valley and Dandenong Ranges generated:



\$2.1 billion

in tourism output \$489 million direct and \$1.6 billion indirect tourism output



10,500 jobs

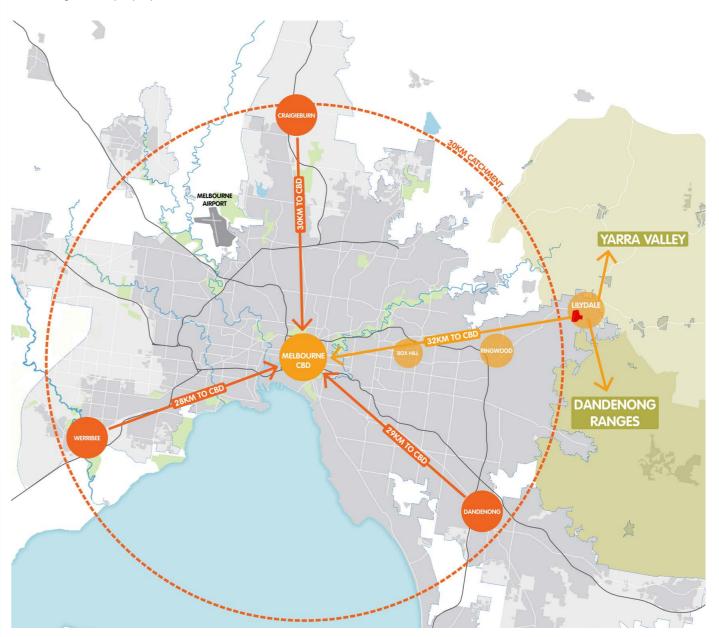
5,800 indirect jobs & 4,700 jobs employed directly by the tourism industry

Source: Tourism Victoria, October 2015



\$936 million

contribution to the state and local economies



benchmark for urban infill in Melbourne through the realisation of quality, diverse housing set in a walkable and vibrant new residential community.

Strategic Location

metropolitan Melbourne the Lilydale

Quarry presents a key urban renewal

opportunity for the Eastern region of Melbourne. Unlike all other areas of

urban infill projects will be key to the

delivery of new housing to meet the

Forming the largest single landholding infill site in Melbourne, the Lilydale Quarry is positioned to become a new

housing needs of the region.

Melbourne, the Eastern region has no

designated growth area. Consequently,

Situated in the north east of

LILYDALE URBAN DESIGN REPORT PROJECT LOCATION

Local **Context**

The Lilydale Quarry is located south of the existing Lilydale township. The metropolitan train line bisects the site with the quarry pit and related existing structures to the east. The western section of the site rises up to Mooroolbark Road.

The Lilydale station is 750m from the northern most part of the site and Mooroolbark Station is approximately 2km to the south.

The Lilydale Quarry is located centrally to the well-established residential areas of Mooroolbark, Chirnside Park and Lilydale which have been gradually developed over the last few decades resulting in residential interfaces to most boundaries of the site.

The site's northern interface includes the Box Hill Institute, an industrial area and Lilydale High School. Lillydale Lake and associated recreational amenities and playgrounds are located east of

Both Mooroolbark, to the south and Chirnside Park, to the east, have retail and commercial activity centres attracting increasing levels of growth and investment including medium density residential developments.

The landscape around the Lilydale Quarry site and its adjoining residential areas is undulating and include the foothills of the Dandenong Ranges to the south. The Yarra Valley is located immediately north of the site. The hills and wooded slopes of the Yarra hills and wooded slopes of the Yarra Ranges are located to the east of the property.

TOPOGRAPHY AND LANDFORMS

The most elevated parts of the quarry site have views to both the Dandenong Ranges and more distant Yarra Ranges and across the Lillydale Lake into the nearby hills of Mt Evelyn.

Views into the site are possible on the approach into Lilydale from the Maroondah Highway, from the higher areas of the Mooroolbark and Chirnside Park to the west and from the Lillydale Lake

environments to the east.

Lillydale Lake

Kinglake

Lillydale Lake

AMENITY AND INFRASTRUCTURE

The Lilydale Quarry site is well serviced by existing infrastructure located within Lilydale such as schools, medical services and recreational facilities. Lillydale Lake, Lilydale Station, Box Hill Institute + Lilydale Library, Lilydale High School and the Lilydale Marketplace retail centre are located within a 10 minute walk.

Other amenities within a 20-minute cycle include the Lilydale Warbuton Rail Trail, Lilydale Public Pool, Chirnside Park Shopping Centre and the neighbourhood activity centres of Mooroolbark and Mount Evelyn.

Box Hill Institute

20min Cycle

Mt Dandenong

Mooroolbark

10min Walk

SITE CONDITIONS

Site Analysis

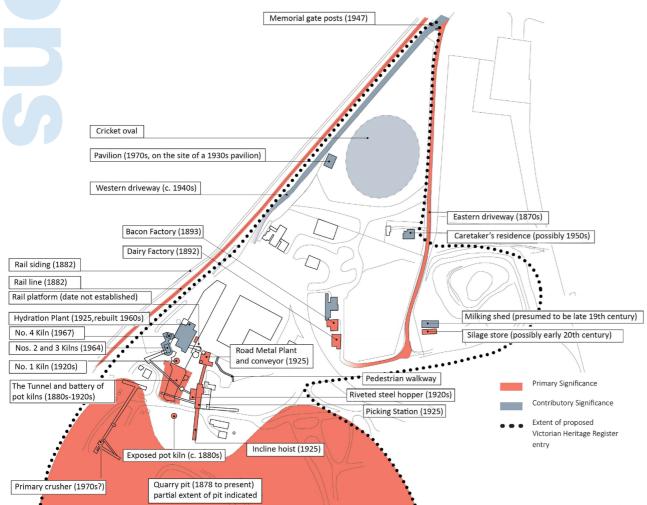
Detailed analysis of the site has underpinned the design. A number of technical surveys and reports have been collated into a constraints map shown to the right. These include Planning Overlays and Public Acquisition Overlays, Native Vegetation and Tree Surveys as well as Cultural Heritage Assessments.

The significant cultural and heritage characteristics of the site have also been carefully considered and embedded in the design. Investigations by Lovell Chen Architects identified four varied but interrelated heritage precincts clustered together north of the quarry pit.

The four precincts all relate to different initiatives and uses that one of the region's great progenitorial leaders, David Mitchell, instigated on site.

These include:

- The Industrial precinct where early examples of engineering innovation and technology advances in mining in Australia are evident;
- The Farm precinct where dairy and small goods production made a significant contribution to the local and regional economy; and
- The Arrivals Precinct where a number of community facilities including a cricket oval were managed by the Cave Hill Social Club.





Site Analysis

Consideration has been given to the clearly defined character areas within the site, the sensitive edges and interfaces along the boundaries, and a number of access and connectivity opportunities and constraints across the site.

As well as revealing a range of challenges, this urban design analysis highlighted a number of important opportunities that the redevelopment of the site could realise.

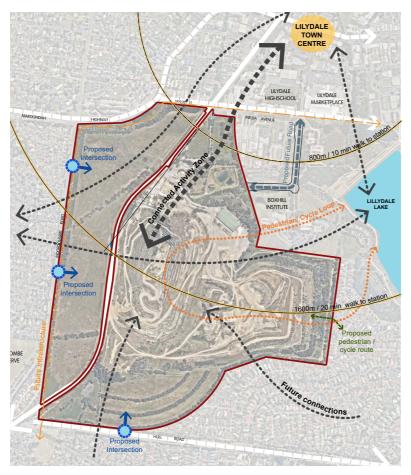
A key conclusion was the opportunity to improve the pedestrian and cycle connectivity of the surrounding areas with new links to key destinations including the Box Hill Institute, local shops and conveniences as well as the Lillydale Lake recreation areas.

The study also highlighted the need for careful consideration of the future interface to the adjoining residential areas.

Photo surveys of the local streets south and south east of the site reveal the visibility of the belt of trees along the site boundary as well as the significant height and steep slopes of the overburden stockpiles as they rise above the established housing.

ACCESS AND CONNECTIVITY

The site has become a barrier to movement in the Lilydale area restricting pedestrian and cycle access to key local destinations including the Box Hill Institute and Lillydale Lake. The location of several key vehicle connections to and through the site, identified in the previous structure plan, will be integrated in the revised proposal.





Permeability

The area can benefit from improved pedestrian and cycle permeability. Access to the Lillydale Lake and the Box Hill Institute are restricted by the site especially from the west.



Ease of Movement

Areas of the site have slopes and grades that may limit ease of movement for some members of the community. Areas are proposed to be adjusted to reduce the extend of level change.

CHARACTER AREAS

Existing features of the site, including the railway line and the legacy of the quarry operations, clearly delineate several distinct character areas. Each area has its own unique challenges and characteristics that will require tailored design responses to topography, heritage and solar orientation.



Heritage Legacy

Clusters of heritage artifacts and buildings define the northern areas of the site and relate to the varied past activities and enterprises that occurred on site.



Topography

The site has varied topography including areas of east facing slopes which fall from Mooroolbark Road to the railway line.

EDGES AND INTERFACES

The edges and interfaces of the site are varied. The eastern edge of the site has a direct interface with established low density residential lots. Portions of the site front existing infrastructure including the Maroondah Hwy and Mooroolbark Rd. Areas of the site share a boundary with the Box Hill Institute creating opportunity for future integration of community uses and connections.





Western & Northern Edges

The site is visually contained by topography forming a distinct barrier along the Western boundary of the site. The northern boundary is also contained by major roads.



Box Hill Institute & the Existing Township

There is an opportunity to integrate the site with the existing Lilydale township, forming strong connections to the town centre and the Box Hill Institute.



Transforming the Quarry

The existing quarry pit and stockpile areas east of the pit require considerable remediation to ensure the area is safe and suitable for development.

Intrapac has rigorously tested a proposal to backfill the quarry pit with on-site materials to effectively remove the pit and return the rest of the site to natural ground levels. This will create a moderately level area across the central part of the site.

The backfilling will be supervised to ensure that agreed performance specifications are met. Monitoring will take place during and after backfilling with the developer taking responsibility for achieving the agreed performance standards.

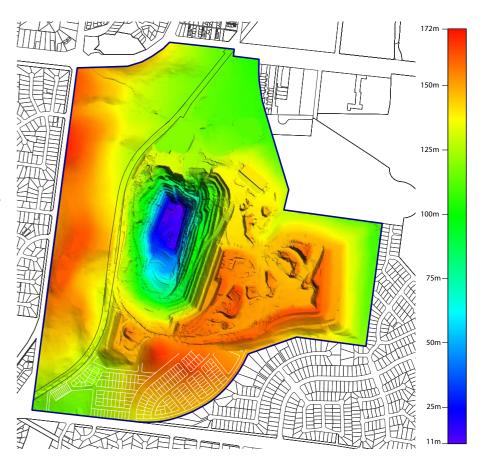
Geotechnical modelling shows that in time the area will be suitable for urban development.

BEFORE

The existing topography of the site is defined by three predominant forms:

- The natural grades to the west of the rail line with a north - south ridgeline adjacent to Mooroolbark Road and steep grades down to the railway line;
- The 120m deep quarry pit in the centre of site;
- The elevated overburden stockpiles east of the quarry where historically the excavated soil from the quarry operations have been stored.

The planted embankments of the overburden stockpiles and the ridgeline along Mooroolbark road visually contain the quarry pit from surrounding areas.

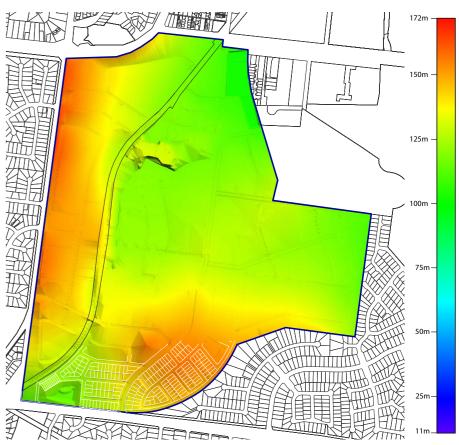


AFTER

After the quarry put has been backfilled and the overburden stockpiles returned to natural ground level the site will be characterised by extensive areas of relatively level and gently sloping land.

The eastern boundary interfaces will be improved with the steep embankments adjacent to the established residential areas removed.

Earthworks west of the rail line will reduce the steepness of the slopes and improve the accessibility and visual connectivity of the site.



MASTERPLAN

MASTERPLAN

A Mixed-used Urban Quarter

The refreshed Lilydale concept plan unlocks the potential of the quarry as one of the state's premier Transit Oriented Development sites. The integrated transport and land use approach adopted lays the foundation for a mixed-use, higher density, urban core adjacent to the proposed train station over the former quarry pit.

Complementing and underpinning this pivotal initiative are several key urban design principles that have informed the masterplan and the development's integration with the broader Lilydale area. These mutually reinforcing design pillars include:

- Fostering social life and improving community health through shaping a walkable urban setting;
- Creating a network of high quality open spaces that connect the community to the cultural and landscape history of the area;
- Responding to the varied and changing housing needs of the local community through a broad mix of housing types; and
- Designing for place activation across all areas of the masterplan to encourage social interaction, drive local economic growth and build the bonds of community.

The vision will leave an enduring legacy for Eastern Melbourne and a place people are proud to call home.

Residents will enjoy convenient connections to local and regional centres for work and leisure and be part of a wider community with strong links to the history of the area. This model neighbourhood will be delivered with a sense of character, high quality open spaces and a vibrant local heart.

ACTIVE RECREATION ----

New sporting ovals and facilities for the region in close proximity to the established Lilydale High School and Box Hill Institute.

THE HERITAGE VILLAGE ---

A hub of social and cultural activity within the development. This compact quarter is focused around an activated plaza space framed by the heritage Bacon and Dairy Factory buildings. Mixed-use medium density built form will prevail.

CREATIVE HUB & DESTINATION --

A creative industries hub and food and beverage destination activating the significant heritage buildings and industrial artifacts. This node of activity is structured around a shared plaza space.

THE ESCARPMENT PARK -

This district level park will be the signature open space for the development. Areas of landscape and heritage significance, including the escarpment face, are integrated within the park. The TOD urban core will overlook the park with the interface activated by civic and community uses including a potential urban school and civic and community facilities.

THE URBAN CORE & MAIN STREET -

The mixed-use, urban living quarter adjacent to the proposed railway station will provide higher density living in a range of apartment and townhouse forms. A mixed-use main street will form the commercial spine for this active quarter. A compact urban plaza will define the heart of the quarter.

FUTURE RAILWAY STATION -

The proposal for a railway station in the centre of the site is consistent with earlier planning applications. The station will contain one of three important pedestrian and cycle links over the railway line. Carparking will be provided within an integrated multi-deck parking structure.

HILITOP PARK ----

A major neighbourhood park to be established in an elevated position overlooking the urban core. The park will feature a landscape design that provides interpretation of the indigenous connections to landscape in this area.

EAST VILLAGE --

This quintessential compact walkable neighbourhood is structured around a central local park with converging signature boulevards including a direct link to Lillydale Lake and The Box Hill Institute.



Creating a Walkable Urban Place

Empirical research has clearly linked walkable urban environments to a range of tangible social and community health benefits.

A review of walkscore, a widely used rating tool that measures a dwelling's accessibly to key services, open spaces, transport and entertainment reveals the extent to which residential areas around the Lilydale Quarry are largely car dependent neighbourhoods.

The redevelopment of the quarry site has potential to provide far reaching community benefits by improving the walkability of surrounding areas.

Through creating a mixed-use urban core within the central and most accessible part of the site both the future residents of the development and

those in the surrounding areas will be contained within a walkable catchment of a range of services including education and community uses, employment opportunities, convenience retail and social and entertainment destinations.

The masterplan has been structured to maximise accessibility to this core both from within the site and from the adjoining areas. Strategic axial links and avenue streets and three pedestrian links over the rail line will reconnect the community.

An agreed land acquisition with the Box Hill Institute will enable a pedestrian link from the development area directly to Lillydale Lake.

INTEGRATION AND CONNECTIVITY

Pedestrian and cycle connectivity from adjoining areas encouraging integration and improving the permeability and access to amenity for both existing and new residents.

PEDESTRIAN BRIDGES AND CONNECTIONS

Three pedestrian crossing points over the railway line improving east - west permeability and connecting residents to key destinations both within and adjoining the site.

A MIXED-USE **URBAN CORE**

access to service, employment and leisure improving the walkability of the area.

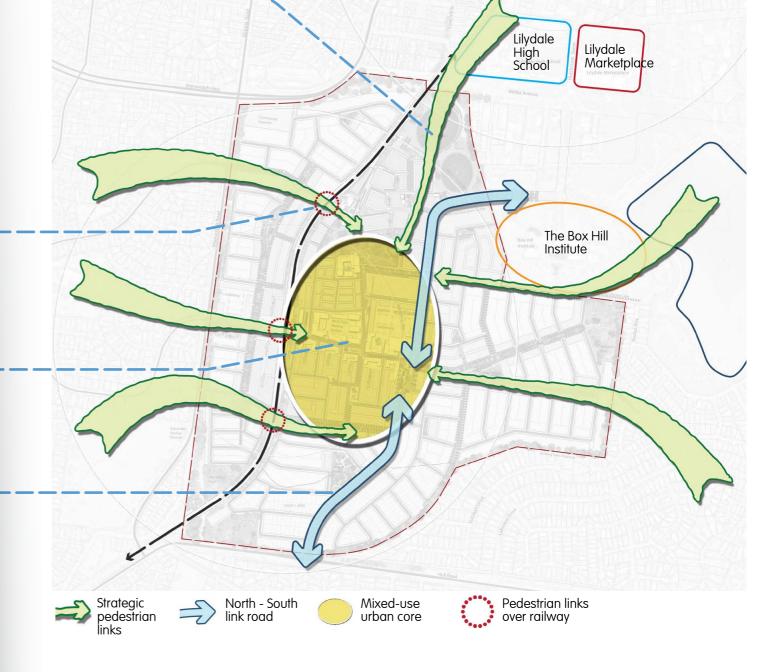
ARRIVING AT A PLACE

A marked change in the traffic conditions and link road to create the sense defining the eastern gateway

An activated core providing

character of the north south of "arriving at a place" and to the mixed-use urban core.









IMPROVING THE WALKSCORE OF THE WIDER AREA

The Walkscore that enables residents to live with **one car** ****



robertsday.com.au planning.design.place robertsday.com.au planning.design.place

Creating a Network of Landscape Stories

Coordinating and connecting the varied open spaces across the masterplan to create a network of activated and meaningful spaces has been a key design gesture.

A legible green loop of avenue and character streets interconnects the major parklands and reservations improving accessibly to open space as well as encouraging recreation activity and exercise.

As well providing for active transport and recreation this green loop creates an opportunity to tell the stories of the traditional owners relationship with the land by connecting places of significance across and beyond the site.

A number of strategic connections to adjoining areas of amenity including direct links to Lillydale Lake and the Warburton Trail will broaden the open space network beyond the site.

The open spaces within the masterplan are individual responses to the immediate topographic and urban context of each space.

As well as embracing the inherent attributes of the location, each park will play a role in telling the story of the rich traditional owner and european cultural history and values of the site and the locality.

A number of compact urban plazas create well defined centres within the urban living, higher density quarters of the masterplan. These spaces, designed for good solar penetration, ground floor activation and positioned on strategic sight-lines will be focal points for social life.

IMPROVING COMMUNITY HEALTH

70 mins

extra minutes of physical activity per week for residents of walkable neighbourhoods

Source: University of Melbourne. "Walk it out: Urban design plays key role in creating healthy cities." ScienceDaily. ScienceDaily, 7 March 2013.

ACTIVE RECREATION

New sporting ovals and facilities for the region in close proximity to the established Lilydale High School and Box Hill Institute.

SIGNATURE ESCARPMENT PARK

An activated district level park that defines the northern edge of the mixed-use urban core. This park includes the historical escarpment and connects the TOD area to the heritage quarter.

URBAN PLACES AND SPACES

Several strategically positioned urban spaces and plazas create focal points for social activity within the mixed-use urban quarters of the masterplan.

STATION PLAZA

Urban spaces and forecourt parks ensure the station is integrated into the mixeduse core. Options have been provided for bus interchange and bike facilities.

A CONNECTED GREEN LOOP OF LOCAL PARKS

The major open spaces within the masterplan have been aligned and connected to create a clearly defined green loop encouraging active transport and recreation.

CONNECTIONS TO LILLYDALE LAKE

An agreement with the Box Hill Institute will give the development area direct access to Lillydale Lake and associated passive and recreation facilities.







Defined Character Areas and Quarters

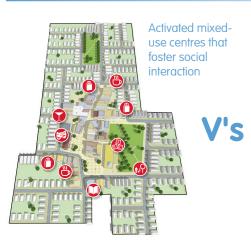
The masterplan reinforces the inherent characteristics of the site including current and proposed infrastructure; the local topography; and established edges and interfaces to create several well-defined urban quarters.

Through a place focused design approach, a distinct character and local identity for each quarter will be fostered to create diversity across the project avoiding a homogenous place outcome.

Variations in the housing mix and built form architecture, the activation of key streets and spaces, and responses to topography will reinforce these localised place identities.

The proposed individual design responses of each quarter are outlined in more detail in the following sections of this report.

THE NEED FOR MIXED-USE PLACES





Suburban homes that internalise the functions of the village

THE HERITAGE VILLAGE

A hub of social and cultural activity, this compact mixeduse quarter celebrates the heritage artifacts and built form re-purposing elements for active uses including food and beverage destinations and creative industries.

THE URBAN CORE --

The mixed-use urban living quarter adjacent to the proposed railway station will contain higher density living in a range of formats. A mixed-use main street will form the commercial and active spine of the quarter.

THE WESTERN — NEIGHBOURHOOD

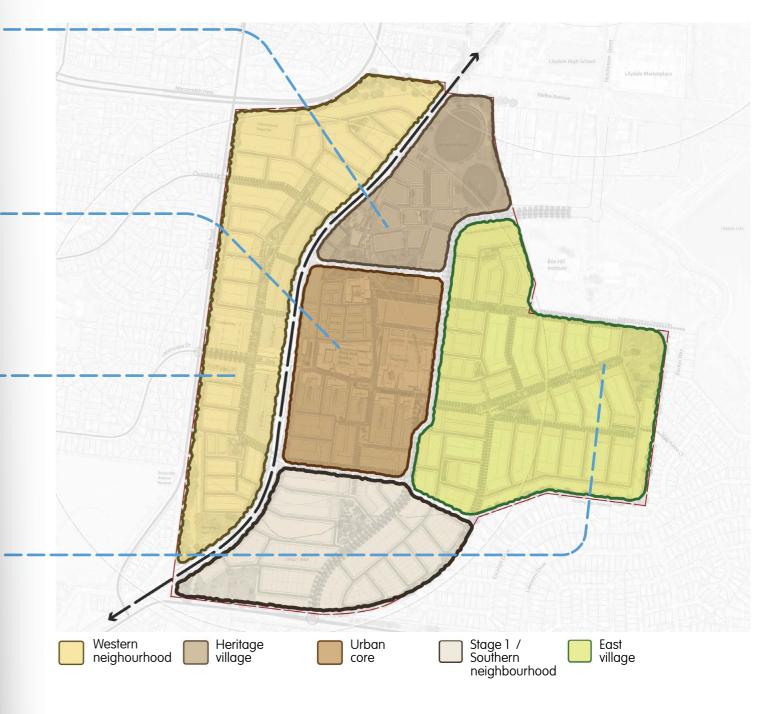
A residential quarter influenced by topography and associated views towards the foothills. A split level urban boulevard is proposed running the length of the quarter forming a linear parkland.

EAST VILLAGE

This quintessential compact walkable neighbourhood is structured around a central local park with signature connecting boulevards including a link towards Lillydale Lake.











Housing Diversity

The future housing needs of the Lilydale community are diverse and varied.

Over 50% of the current Lilydale community comprise of one or two person households. This reflects a national trend including an ageing demographic, couples having children later in life, and changing family structures resulting in diverse, non-nuclear family groupings.

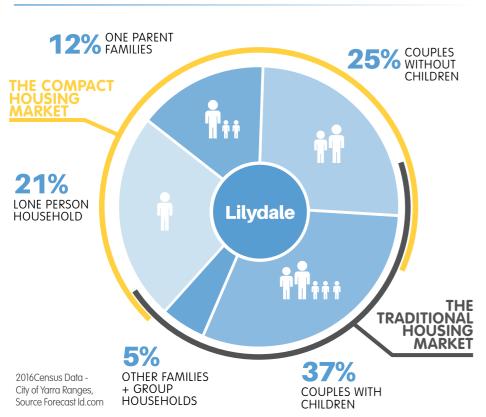
The scale, strategic location, and varied topography of the Lilydale Quarry site presents an opportunity to deliver a range of housing types from higher density living in the mixed-use urban core to larger hillside lots in areas of steeper terrain and along sensitive interfaces.

The masterplan depicts a high proportion of terrace and town houses clustered around areas of amenity and activation helping to provide much needed diversity for the broader area, as well as to meet changing household makeups.

Consideration has been given to capturing significant views from elevated locations across the site.

Design guidelines will reinforce the proposed place character of the individual quarters as well as assist the delivery of sustainability at the built form level.

THE NEED FOR HOUSING DIVERSITY



URBAN LIVING QUARTER

A mix of innovative housing and apartment forms will contribute to the place character of an activated inner urban area. Architectural forms that reflect the industrial history of the area with "converted warehouse" apartments and townhouses are proposed

HIGHER DENSITY MIXED-USE SPINE

A higher density urban core with multi-storey, ground floor activated, mixed-use apartment buildings addressing a compact main street environment. Housing options will provide for a range of household types including first home buyers, students and key workers.

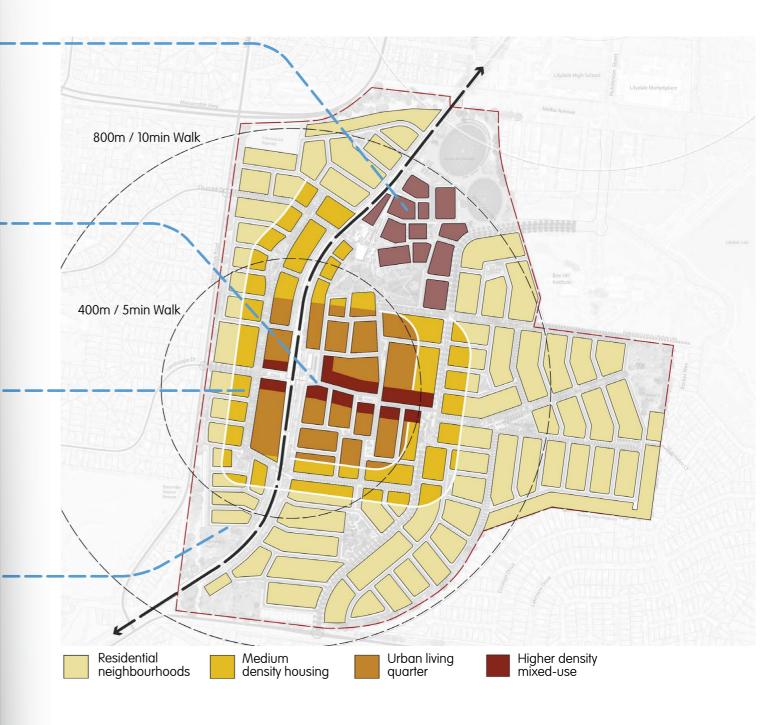
MEDIUM DENSITY TOWN HOUSES

A broad range of terrace and town house opportunities are integrated throughout the masterplan. Located in areas of high amenity or along avenue streets, these predominantly rear loaded lots offer housing options to all family types including first home buyers & down sizers.

RESIDENTIAL LOTS

A proportion of the housing lots will be conventional residential housing lots in a range of common lot configurations. The orientation and spacing of the lots has been carefully considered to respond to topography and to maximise solar performance.









MASTERPLAN

MASTERPLAN

Place Activation

The development of the site is anticipated to occur over an extended time period, potentially decades.

A place making strategy developed in concert with the urban design masterplan envisions the place activation as a staged implementation of initiatives resulting in the transition of the area from a former industrial site to a vibrant mixed-use and residential neighbourhood.

As well as the underpinning concept of a vibrant TOD development site, the proposed activation of the masterplan draws on the rich history of the site as a hub of commerce, a focal point for local agricultural production and an area of innovation in craftsmanship and mining technology.

Through this connection to the heritage of the site, a meaningful and authentic place identity can be fostered.

The central urban park and its adjoining community uses including potential civic uses, will play an important role in the activation of the neighbourhood. This will complement day to day life as well as providing a venue for special events and festivals.

A potential primary age education facility site has been allowed for in a strategic location that interfaces with The Box Hill Institute, has connector road accessibility and overlooks the proposed active recreation reservation. This has the potential to create an arc of education and sports uses from Lilydale High School to the Box Hill Institute and on to Lillydale Lake.

URBAN FARM AND CIVIC PLAZA

The re-purposing of the Bacon and Dairy Factory buildings for food and beverage uses overlooking a compact civic plaza space. A strong connection to potential complementary uses such as a small urban farm and community garden on the edge of the wetland reservation and adjunct the Silage Store building.

CREATIVE INDUSTRIES DESTINATION

A creative industries hub and food and beverage destination activating the significant heritage buildings and industrial artifacts. This node of activity is structured around a shared zone plaza space.

POTENTIAL CIVIC NODE -

Opportunity for civic uses interfacing with major escarpment parklands.

POTENTIAL EDUCATION - FACILITY

Opportunity for a potential education facility in strategic location with interfaces with Box Hill Institute and the proposed active recreation reservation.

MAIN STREET -

An activated north facing main street with specialty and local convenience retail, food and beverage and health offerings. Retail main street with good visibility from the major north south link road, carparking embedded within the urban block.

CREATING A VIBRANT LOCAL ECONOMY

85%

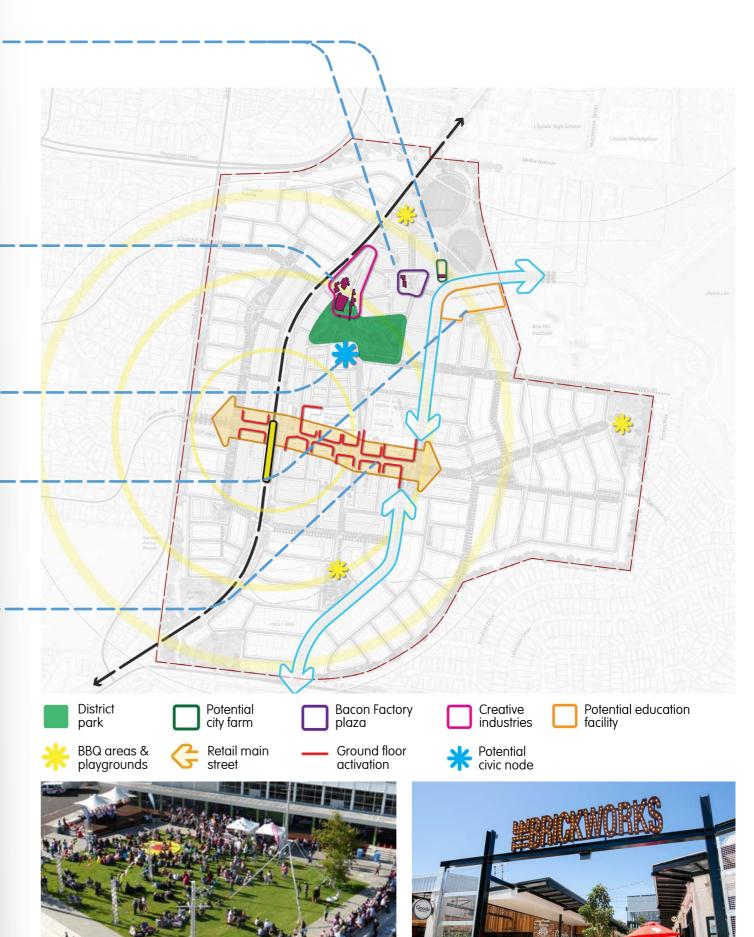


of surveyed businesses say quality of streetscape **attracts customers and tenants**

Economic benefits of good walking environments, Central London Partnership, 2003







MASTERPLAN

MASTERPLAN

Movement and Place

The refreshed masterplan improves connectivity through the site, balancing convenient vehicle connectivity with the need to create a walkable, bicyclefriendly place.

The connecting north – south link road running through the site was viewed as a potential barrier to pedestrian movement disconnecting the eastern neighbourhood from the railway station and mixed-use core.

Noting this, a conscious design initiative has been to shape the movement and place conditions of this connector at the eastern gateway to the mixed-use core introducing a discontinuity within the road alignment around a compact urban park along the route.

This will form a traffic calming function at this important convergence of pedestrian and cycle routes as well as create the sense of "having arrived at a place" for all modes of transport.

Importantly a vehicle connection over the railway line has been introduced in the masterplan improving accessibly from the west. A dense grid of cycle paths has been integrated throughout the masterplan.

The mixed-use activated streets are designated pedestrian priority zones with streetscape design initiatives to ensure the maximum convenience and safety of pedestrians.

A CONTEMPORARY URBAN BOULEVARD

A tree lined boulevard street that accommodates pedestrian and cycle movement as well as passenger vehicles.

CYCLE PATH NETWORK

A comprehensive network of safe and convenient cycle paths throughout the site and adjoining areas. Connects to existing cycle network and includes links to Lillydale Lake.

PEDESTRIAN -- PRIORITY ZONES

Activated mixed-use streets designated as pedestrian priority zones to maximise pedestrian convenience and safety.

EAST - WEST CONNECTOR

Strategic east – west link over railway line to Mooroolbark Rd.

THE RAIL TRAIL

A major regional cycle path connects through site and links the wider area to the train station and mixed use centres.

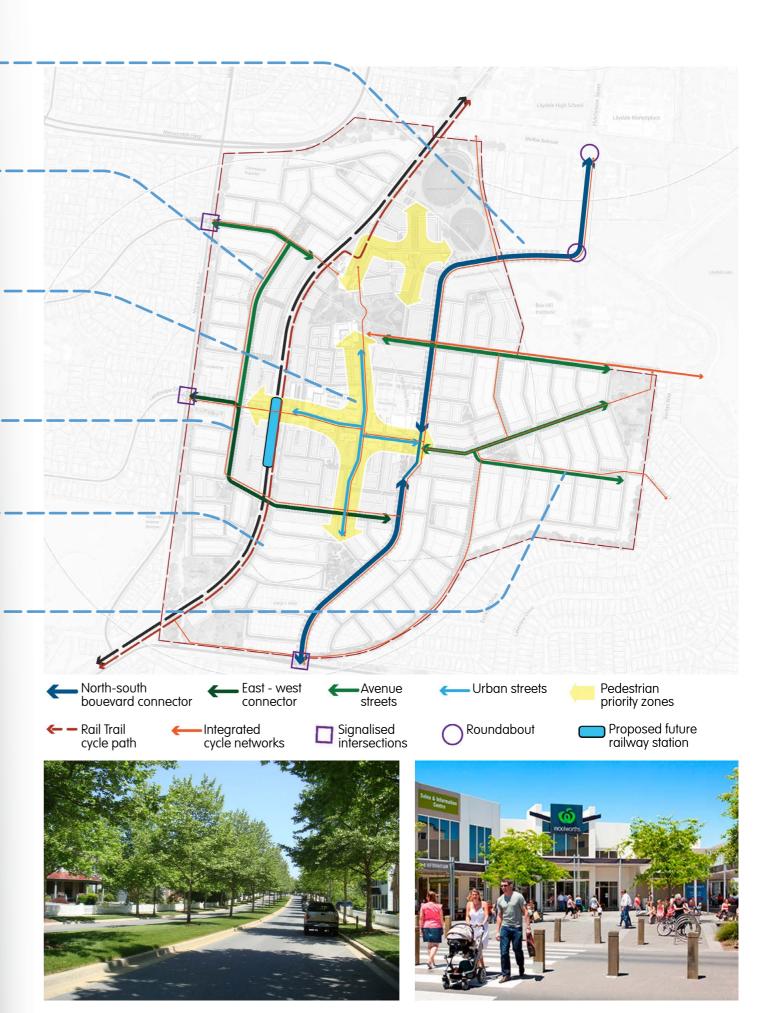
URBAN AVENUES

Strategic avenue streets with widened verges or medians to increase the tree coverage and character of streets that link major green spaces and key destinations.









Integrated ESD

A Sustainability Framework has been prepared for the project. This framework is structured around Lilydale Quarry Destination 2035 objectives that have been used to define a Sustainable Vision for the Lilydale Quarry in 2035 when redevelopment activities may be reaching its final stages.

The outcome based nature of this framework will provide both flexibility and focus to the sustainability objectives from which development options can be evaluated.

The framework is designed to respond to four interrelated dimension of the urban fabric including:

- The built form;
- The public domain;
- Utilities and services;
- Transport and mobility.

The Lilydale Quarry Destination 2035 vision is described as 7 key objectives .

- Low environmental impact and climate positive place with secure, emissions-free energy
- Water neutral place with secure, safe, potable water
- 3. Climate safe place to heat, flood & sea-level
- 4. Amenable, Liveable & Healthy place
- 5. Habitat that enhances local biodiversity and human joy
- 6. Frictionless, affordable access and mobility
- Community engagement and relationship to surroundings – creating a "Human Habitat"

POTENTIAL COMPLIANCE AND PLANNING PATHWAYS TO SUSTAINABILITY

Buildings

NatHERS +10%
SDA/ BESS/ Green Star
Better Apartment
Design Standard

Public Domain

Envirodevelopment
Green Star Communities
Climate change resilience
Fibre to building and
public realm wifi
Urban green spaces
and WSUD
Design for active transport

Transport

Car and cycle share spaces
Electric charging stations
Ride share pick up zones
Public transport provisions
Smart parking & parking with a
second use

Utilities

Precinct stormwater management
Smart technology
(street lighting, energy demand management,
waste management, water management)
Ground source cooling









The Urban Core

The place vision for the proposed mixed-use urban core is to create a diverse urban environment and a contemporary interpretation of the cherished inner neighbourhoods of Melbourne.

The railway station, food and beverage and the convenience retail offering of the compact main street and north facing urban plaza will be reinforcing generators of activity and social life.

The structured street pattern will be nuanced with a number of small incidental green spaces, terminated vistas and with subtle discontinuities within the street pattern to create a dynamic and immersive place.

Higher density urban living options will define the urban core with a range of apartment buildings, rear loaded terraced streets and mews courtyards.

All modes of connectivity to the future train station will be accommodated including a bus interchange, bike share node and a multi-deck carpark embedded within an urban block and screened by mixed-use development.

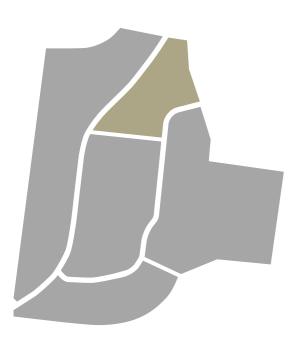
The retail main street will benefit from high accessibility and visibility from the north-south Link road.







PLACE ACTIVATION



The Heritage Village

The heritage village will be a unique quarter that blends the activation of significant heritage elements with premium medium density housing and tourism and retail uses within a distinct setting surrounded by parks and wetlands.

The major heritage elements will be framed within defined urban public spaces and adapted for active uses such as local food and beverage destinations, creative industries workshops and co-working spaces.

The associated connection to the major escarpment park will see this space act as an important link between the TOD urban core and the heritage village.

The Bacon and Dairy Factory will address a compact urban plaza with clear visual connection to the proposed active recreation reservation and sports ovals to the north.

This activated space will have a strong link to the Silage Store Urban Farm adjacent the north – south boulevard street bringing to life the agricultural history of the area.

The unique heritage values of this area will be reflected through urban, mixed use built form outcomes as well as through bespoke streetscape design and public spaces.





PLACE ACTIVATION



West Neighbourhood

The western residential neighbourhood will comprise a mix of traditional and medium density housing with urban design responses tailored to the sloping topography.

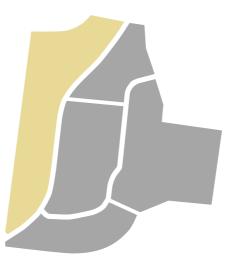
A linear green corridor and signature avenue street will form a legible spine through the neighbourhood, weaving together the northern, central and southern areas with a shared landscape identity.

This linear corridor will provide considerable amenity for the residential housing while also performing a functional role by responding to significant level changes.

The western neighbourhood will also provide vital connectivity across the railway line and provide three pedestrian links including:

- A pedestrian integrating within the proposed railway station;
- A pedestrian footbridge at the extension of Churchill Drive linking to the heritage quarter and Escarpment Park; and
- A third link associated with the connector road link over the railway line in the south of the site.

The northern edge of the neighbourhood provides opportunities for a commercial mixed-use gateway development that capitalises on the Maroondah Highway frontage.





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PLACE ACTIVATION



East Village

The Eastern village will form a model walkable urban neighbourhood with a mix of traditional and medium density housing focused around a defining central park and transecting signature avenue streets.

A distinctive boulevard street will run centrally through the neighbourhood alongside a shared east-west cycle and pedestrian trail which will extend to establish a safe, off-road connection that directly links the new Quarry Park to the existing Lillydale Lake and Warburton Trail.

Sensitive interfaces with adjoining residential areas will be integrated into the neighbourhood with deeper lots backing onto the rear boundaries of adjoining residential homes.

Medium density housing will be encouraged at the interface with the Urban Core to the west to maximise the number of residents within a comfortable walkable catchment of the rail station and commercial and retail amenities concentrated in the Urban Core.

This quarter will enable direct pedestrian and cycle connections to the Box Hill Institute. An avenue street will straddle the boundary of the development area and the Box Hill Institute creating a direct link to the mixed-use urban core and the signature escarpment park improving the accessibility of the Institute to public transport, food and beverage, recreation and open space.





