SUBURBAN RAIL LOOP EAST

Artist's impression

SRL East Background Report Monash

More Homes For Victorians

VICTORIA State Government

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1. Introduction

1.1. Overview

Suburban Rail Loop (SRL) will transform Melbourne's rail network, change how people move around the city and contribute to reshaping Melbourne into a 'city of centres' – with vibrant centres outside the inner city providing high-quality jobs and more housing choices in well-designed and well-connected neighbourhoods.

As Melbourne grows to a population of 9 million by the mid-2050s, planning for the city's future must cater for growth in ways that maintain the city's liveability, deliver more homes where people want to live and give households access to jobs, services and opportunities. SRL will help to manage this growth by establishing a connected corridor of centres across the city that can host more people, more jobs and more services, and provide new housing choices and affordable living options in attractive, highly accessible urban areas.

SRL East extends from Cheltenham in Melbourne's south east to Box Hill in the east, with new underground stations at Cheltenham, Clayton, Monash, Glen Waverley, Burwood and Box Hill. These centres will help meet population and employment growth demands in a sustainable manner. Planning for SRL East considers how these centres can leverage the improved access and convenience delivered by the project to catalyse opportunities for residents, workers, communities and businesses.

Draft Structure Plans have been prepared to guide growth and change in the areas surrounding each SRL East station. The Draft Structure Plans set out a Vision for each area, with objectives, strategies and actions to achieve the Vision.

This Background Report supports the Draft Monash Structure Plan. It sets out the context of the SRL station at Monash and summarises the policies, technical investigations and assessments that informed the Draft Monash Structure Plan. Future directions to achieve the Vision for Monash are described.

Statistics and other numbers in this Background Report are generally approximate and have been rounded out. This means some numbers may vary across the different Technical Reports summarised for this report.

1.2. Suburban Rail Loop

SRL establishes a networked corridor of centres outside Melbourne's central business district (CBD) and links every major metropolitan railway line from the Frankston Line to the Werribee Line. Three transport super hubs at Clayton, Broadmeadows and Sunshine will connect with regional rail services, so passengers outside Melbourne no longer have to travel through the CBD to reach destinations in the suburbs.

SRL is an integrated transport and land use program that will extend over 30 years. The program has four discrete rail projects, as shown in Figure 1:

1. SRL East – Cheltenham to Box Hill
2. SRL North – Box Hill to Melbourne Airport
3. SRL Airport – Melbourne Airport to Sunshine, being delivered as part of the Melbourne Airport Rail Project by the Victorian Infrastructure Delivery Authority (VIDA)
4. SRL West – Sunshine to Werribee.

The SRL concept route is reflected in State Planning Policy and *Plan Melbourne 2017–2050: Addendum 2019* and underpinned by the *Suburban Rail Loop Act 2021* (Vic) (SRL Act).

SRL East rail, stations and associated infrastructure were the subject of a comprehensive Environment Effects Statement (EES) assessment process under the *Environment Effects Act 1978* (Vic) and subsequent approval under the *Planning and Environment Act 1987* (Vic). This included an Inquiry and Advisory Committee hearing into the environmental effects of the project and consideration of the draft Planning Scheme Amendment exhibited with the EES. The Inquiry and Advisory Committee's report dated 23 June 2022 together with the EES were considered by the Minister for Environment and Climate Action (who jointly administered the Environment Effects Act with the Minister for Planning) culminating in the Minister's assessment report dated 5 August 2022.

The Minister's assessment provided recommendations about the design, construction and operation of the SRL East rail, stations and associated infrastructure and the management of potential environmental effects and impacts. The Minister's assessment also made a number of recommendations and observations in relation to precinct planning.

The Minister for Planning subsequently approved the Planning Scheme Amendment for SRL East with regard to the Minister's assessment of the EES. More information on the SRL East project approvals and how the relevant recommendations or observations from the Minister's assessment were considered or addressed in the preparation of the Draft Monash Structure Plan is provided in Appendix A.

Information about SRL is provided at Victoria's Big Build: Suburban Rail Loop.

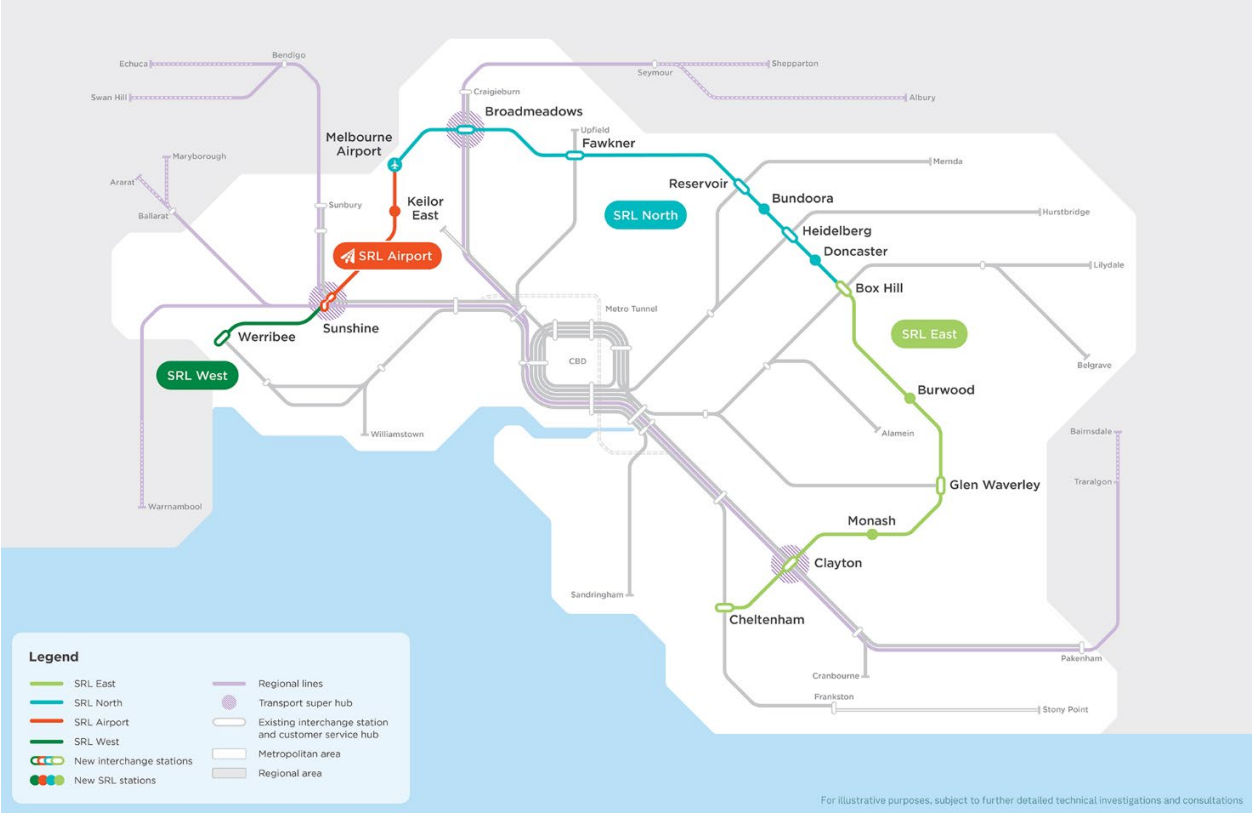


Figure 1 Suburban Rail Loop

1.3. Planning for SRL East

The SRL Act facilitates the planning and delivery of SRL and associated developments. The SRL Act establishes the Suburban Rail Loop Authority (SRLA) and provides SRLA with the functions and powers it needs to plan, deliver and manage SRL and associated developments.

The SRL program objectives at section 5 of the SRL Act includes to integrate the new rail line with existing and planned public transport and road networks and 'facilitate sustainable population growth, urban renewal and improved liveability'. These objectives are to be achieved alongside other objectives such as coordinated delivery of transport and non-transport infrastructure and 'facilitating greater employment activity and investment throughout Victoria'.

In December 2023, the Minister for SRL declared a Planning Area surrounding each SRL East station under the SRL Act. The Planning Areas generally extend 1.6-kilometres around each SRL East station. Under the Planning and Environment Act, SRLA is a planning authority for these Planning Areas.

The Structure Plan Area is a smaller area within each declared Planning Area and is where the most change and development is expected to occur over the next decades. The approach to defining the Structure Plan Area is described in Guideline 2 of *Planning for SRL East Precincts: Guidelines for the preparation of Structure Plans*. Guideline 2 provides specific guidance for the preparation of the SRL East Structure Plans, including in respect of strategic context, the Structure Plan Areas, population and employment projections, and the Vision for each SRL East Planning Area.

Figure 2 shows the Structure Plan Area and the Planning Area for Monash.

This Background Report outlines relevant local issues and planning policies, key constraints and opportunities and describes how these have influenced the direction and content of the Draft Monash Structure Plan. The accompanying technical assessments provide expert analyses of environmental, social and economic influences relevant to the area. The key findings of these assessments have been considered alongside existing planning strategies and community and stakeholder feedback in identifying implications and key directions for the Draft Monash Structure Plan.

The Draft Monash Structure Plan is accompanied by a Draft Implementation Plan that sets out all actions within the Draft Monash Structure Plan and outlines the pathway, timing and responsibilities for delivering each action. The Draft Implementation Plan also identifies key projects planned for the Structure Plan Area and outlines the manner in which the projects will be delivered.

The Draft Monash Structure Plan, Draft Monash Implementation Plan and the Technical Reports referenced in this Background Report are available at https://engage.vic.gov.au/suburban-rail-loop

1.4. Housing and jobs for a growing population

SRL will be a catalyst for growth and change in Monash by leveraging the presence of the station and positioning Monash for the future as a thriving town centre and employment region with significant housing opportunities.

Planning for the Monash Structure Plan Area considers population and employment growth projections to 2041, as the first steps in long-term change stimulated by SRL East. The Monash Structure Plan Area is envisaged to accommodate:

- Population growth from approximately 10,000 in 2021 (ABS 2021 Census) to 17,900 in 2041
- Nearly double the number of dwellings, from approximately 3,900 in 2021 to 8,300 in 2041 – helping to achieve the housing target to 2051 for Monash (72,000) established by the Victorian Government
- More higher density housing and more housing diversity to provide more suitable (and more affordable) housing for workers, student housing, aged care and housing for residents to age in place
- A projected increase in jobs from approximately 20,900 in 2021 to 50,000 in 2041. This will need significant additional floorspace with the greatest demand expected in education and office floorspace, ideally close to the new Monash Town Centre around the SRL East station
- More than triple the number of professional services jobs – from 4,600 in 2021 to 15,700 in 2041 (representing 31 per cent of all jobs), with education remaining a dominant employer
- Planning for over 36,000 additional trips to, from and within the Structure Plan Area during the morning peak period to support the combination of population and jobs growth to 2041
- Changes in the urban environment to provide adequate facilities and services for future residents and workers,

More detail about projected housing and employment floorspace growth in relation to setting future directions in the Draft Monash Structure Plan is provided in Section 5. These projections also informed the technical assessments undertaken to support preparation of the Draft Monash Structure Plan.

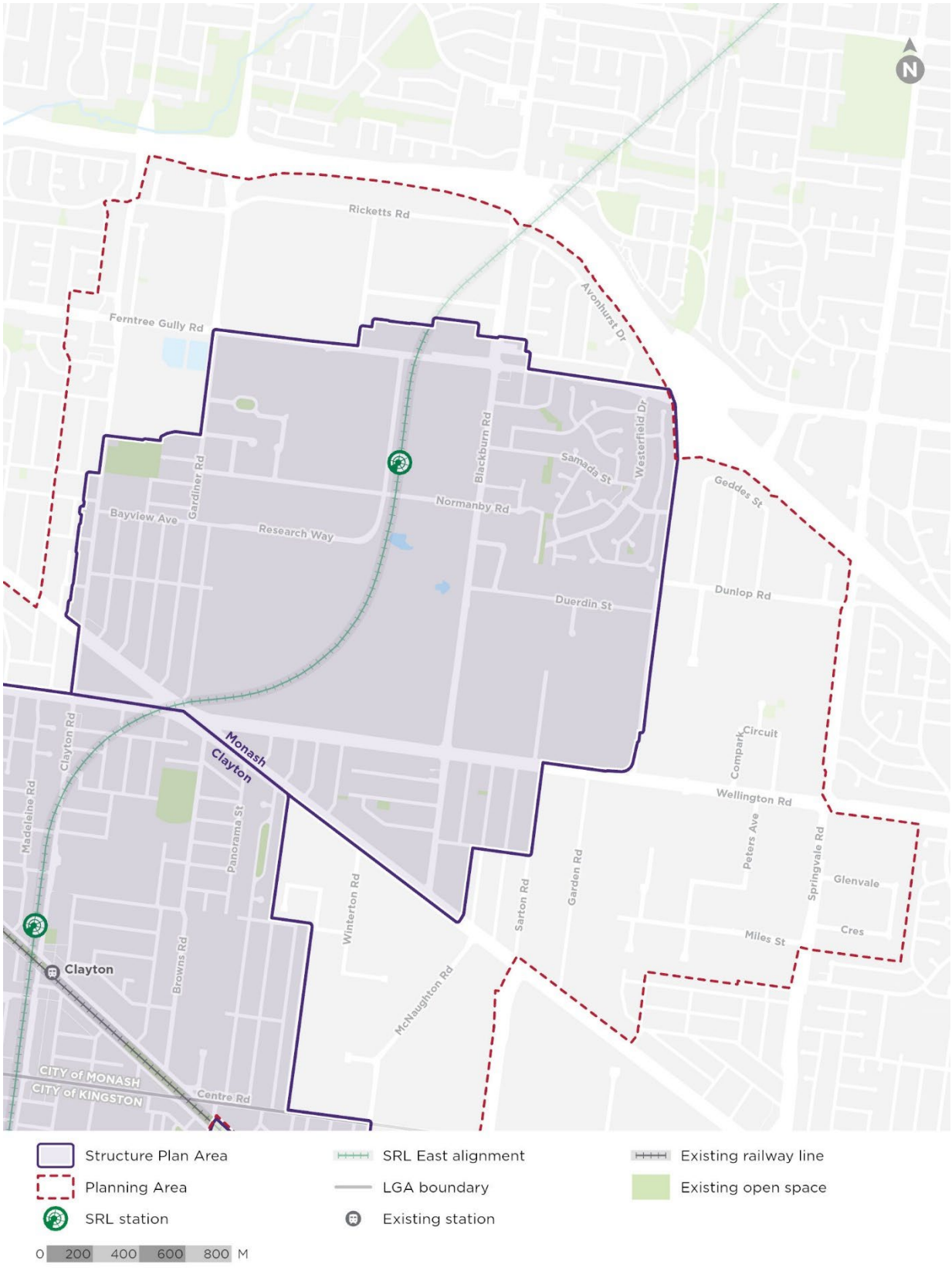


Figure 2 Monash Structure Plan Area and Planning Area

More homes, more choice in Melbourne's sought-after suburbs

As Australia's biggest housing project, SRL is helping to deliver more homes where they're needed, next door to jobs, services and public transport.

As Melbourne's population continues to grow, more housing is needed – and a greater choice in housing is required to meet the needs of the changing population.

Over the decade to June 2023, Melbourne experienced strong population growth of 1.8 per cent per annum. While the COVID-19 pandemic saw a short-term pause in population growth, the high rate of growth has resumed – reaching 3.3 per cent over the year 2022 to 2023. Within a decade, Melbourne is projected to officially be Australia's largest city and by the 2050s, almost 9 million people are expected to be living in Melbourne.

Victoria's Housing Statement (May 2024) aims to deliver 80,000 new homes each year across Victoria – building more affordable homes across the city and in places closer to where people work, with good access to transport options, shops, schools and health and community services.

The Housing Statement recognises that Melbourne's ongoing liveability depends on increasing housing supply while reducing urban sprawl. A growing population does not have to lead to more suburbs on the city fringes where the cost of new infrastructure is high and people must travel further to jobs and services.

'Unlocking' new spaces in established suburbs can provide more affordable housing – such as townhouses and apartments – in higher density communities.

Housing needs assessments prepared for the areas surrounding the SRL East stations have identified potential for an extra 24,600 new homes by 2041 – and more than 70,000 new homes over the next 30 years.

Monash is well suited for housing growth, with multiple activity centres within walking distance of the SRL station or nearby and access to jobs, education, services and open space.

The Monash community has helped develop a Vision for Monash, and more high-quality housing with more affordable choices is at the heart of this vision. Housing will drive the transformation of Monash into a vibrant inclusive connected community over the coming decades.

More information on housing is provided in Section 5 of this report and in the *Housing Needs Assessment – Monash*.

Victoria's Housing Statement is provided at www.vic.gov.au/housing-statement.

1.4.1 Establishing a shared vision

A Draft Vision was prepared for the Monash Planning Area that identified the long-term aspirations for the broader area to guide planning and change over the coming decades. Community and stakeholder feedback helped refine the Vision and it was finalised in December 2024.

The Vision for Monash outlines the long-term ambition to make the most of SRL opportunities and benefits – and how to accommodate the anticipated population growth over the coming decades. The Vision for Monash builds on the ambitions set in the SRL Business and Investment Case (2021).

The Draft Monash Structure Plan provides a detailed land use and built form planning framework so that planning decisions are consistent with the Vision for Monash and support future community needs.

1.5. Engagement with the community

Community and stakeholder engagement helped inform the Vision for Monash, the Draft Monash Structure Plan and this Background Report. The engagement included face-to-face consultations as well as online surveys and other activities.

1.5.1 Structure Plan consultation

SRLA consulted with the community and stakeholders at each phase in the preparation of the Draft Monash Structure Plan and this Background Report. The consultation helped identify what matters most to people about their local area and the issues and opportunities they see for the future.

The first phase of consultation comprised two parts. The first part from 29 August to 24 October 2023 sought input on ambition statements and priority outcomes for the neighbourhoods surrounding the SRL station. The second part from 3 December 2023 to 3 March 2024 sought feedback on the Draft Vision. This consultation helped refine SRLA's understanding of opportunities and challenges in the area, and explored place-shaping criteria based on values and needs.

The second phase of the consultation from April to May 2024 sought stakeholder and community feedback on proposed Key Directions to help achieve the Vision for Monash. The proposed Key Directions aimed to address current and emerging challenges and meet the demand for greater housing choice and the needs of a growing population.

The two consultation phases helped identify economic and employment opportunities in the Monash Structure Plan Area and determine current and future needs for housing, services and community infrastructure. The consultation also helped identify where and when development should occur, and in ways that respond to community values and needs as Monash grows and changes over time.

Discussions were held with the City of Monash on matters such as land uses, built form (such as maximum building heights), transport and community infrastructure. These matters are described more in the relevant sections of this Background Report.

SRLA also convened seven Community Panels – one for each SRL station and one Youth Panel. This engagement explored the topics of transport, housing and community infrastructure in more detail, and how SRLA can deliver future precincts and neighbourhoods that reflect the needs and aspirations of local communities.

Relationships with Registered Aboriginal Parties and the Aboriginal community were established and their feedback on the Draft Visions and Key Directions was sought. This provided a valuable opportunity to expand the conversation and seek feedback on the structure planning process.

More information on the engagement is provided in the *SRL Structure Planning Engagement Report* at https://engage.vic.gov.au/suburban-rail-loop

Aerial view of the Monash Structure Plan Area and surrounds, looking north west towards Melbourne Central Business District

2. Monash context

This section discusses the existing regional and local context, community profile, and site characteristics and attributes of the Monash Structure Plan Area.

2.1. Regional context

The Monash Structure Plan Area is located on the traditional lands of the Wurundjeri Woi Wurrung and Bunurong people of the Kulin Nation. The Bunurong Land Council Aboriginal Corporation is the appointed Registered Aboriginal Party for most of the Monash Structure Plan Area. The Wurundjeri Woi Wurrung Cultural Heritage Aboriginal Corporation is the Registered Aboriginal Party for the north-western area of the Structure Plan Area.

Monash is located in the south-eastern section of the SRL East alignment. The Monash Structure Plan Area is located approximately 18 kilometres south east of the Melbourne CBD in the City of Monash.

Monash plays a key role in metropolitan Melbourne, with world-leading education, health, research and commercial activities forming the core of the Monash National Employment and Innovation Cluster (NEIC). The region's specialised role in knowledge-based industries aligns the Structure Plan Area strategically with other Melbourne-based NEICs at Dandenong, La Trobe, Parkville, Fishermans Bend, Sunshine and Werribee.

The Monash Structure Plan Area is near several designated major activity centres, including the Clayton, Brandon Park, Glen Waverley and Oakleigh Major Activity Centres. The Monash Structure Plan Area is also supported by a range of services in nearby neighbourhood activity centres, including the Huntingdale and Pinewood Neighbourhood Activity Centres, which provide convenience shopping and community services to meet local needs.

The Monash Structure Plan Area abuts the north-eastern edge of the Clayton Structure Plan Area. The Clayton Major Activity Centre and Monash Medical Centre form the centre of the Clayton Structure Plan Area, and there is an existing strategic relationship between the education assets and health facilities of the Monash Structure Plan Area and the health assets of the Clayton Structure Plan Area. Increased growth in each Structure Plan Area offers opportunities to strengthen connections between these assets and reinforce the importance of their roles at the heart of the Monash NEIC.

The regional context of the Monash Structure Plan Area is shown in Figure 3.

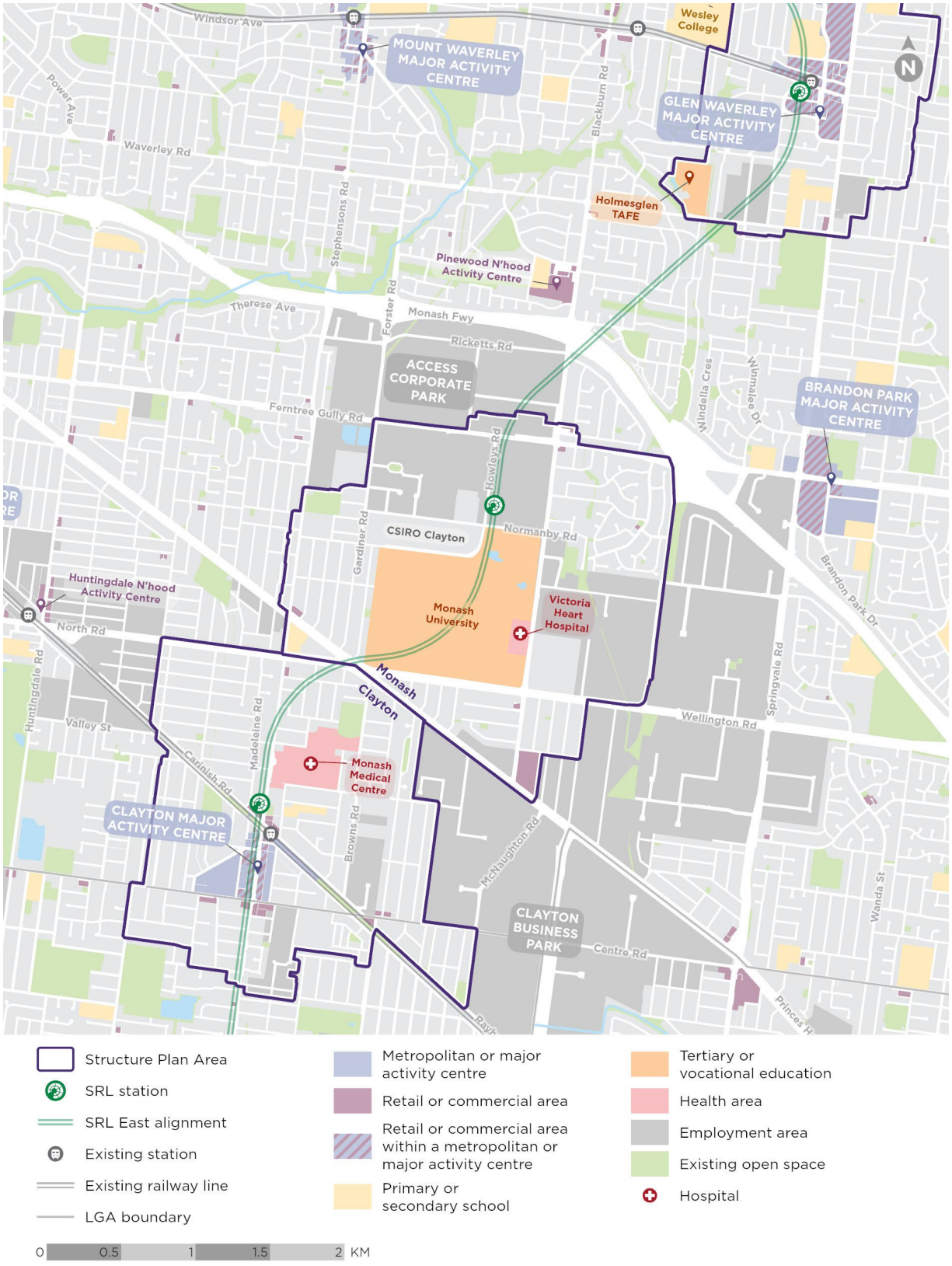


Figure 3 Regional context plan

2.2. Local context

The Monash Structure Plan Area is located on the axis of Blackburn Road and Ferntree Gully Road, which are principal north–south and east–west road corridors respectively. Blackburn Road and Ferntree Gully Road connect to Victoria's state road infrastructure network, including Monash Freeway. Princes Highway runs through the Structure Plan Area to the south west, providing a direct connection to Melbourne's CBD. The Structure Plan Area incorporates state-significant facilities that form part of the Monash Technology Precinct, including Monash University, the Australian Synchrotron and CSIRO Clayton. This cluster of high-technology, research and development industries provides direct links between the Monash Structure Plan Area and regional health facilities located at the Monash Medical Centre to the south.

Surrounding these areas are more traditional commercial areas and residential precincts in Notting Hill in the north east of the Monash Structure Plan Area.

The local context of the Monash Structure Plan Area is shown in Figure 4.

2.2.1 Land use and built form

Health, education and research

Monash University is the largest landholding within the Structure Plan Area, occupying an area of over 1 square kilometre between Normanby Road, Blackburn Road and Wellington Road. Monash University comprises key tertiary education and research anchors. The Clayton campus educates more than 24,000 students on campus each year and houses several thousand in student housing. The campus also provides sports and recreation facilities and landscaped open space used by the surrounding general community. Monash University's buildings range in height from two storeys to the 12-storey Menzies Building.

CSIRO Clayton is located on Commonwealth land at the northern edge of Monash University on Normanby Road. The facility provides leading scientific and industrial research and education facilities. The facility is three storeys high and is typically industrial in appearance.

On the eastern side of Blackburn Road is the Australian Synchrotron, a world-class research and development facility that drives innovation in the science and technology sectors. The Australian Synchrotron building is two-storeys high and has a spherical warehouse form.

The Victorian Heart Hospital is located on the western side of Blackburn Road on the edge of the Monash University campus. The hospital provides specialist cardiac care, as well as research and education. The Heart Hospital is a contemporary eight-storey building at a prominent location on Blackburn Road.

Victorian Heart Hospital

Figure 4 Local context plan

Business parks

Large-scale industrial anchors and business parks along Blackburn Road and Ferntree Gully Road provide significant land dedicated to research, innovation, medical and manufacturing industries. The combined scale of the educational facilities, research institutions and business parks create a commercially-focused character with secondary residential uses. Buildings in business park areas are typically two to five-storeys high and feature large, landscaped front setbacks and open carparking.

Local businesses on Normanby Road, Notting Hill

Established and emerging residential areas

The residential neighbourhoods of Notting Hill, Clayton North and Clayton surround education and business areas and typically support low-density, detached dwellings. The built form in these areas ranges between one to three storeys on lots of 400 to 800 m^2.

Student housing along Blackburn Road opposite the Monash University campus rises to six storeys, providing a contrasting form and alternative housing typology to lower-scale residential areas.

Low-rise residential neighbourhood in Notting Hill

Student accommodation on Blackburn Road

M-City

M-City is a contemporary 12-storey development in the south-east corner of the Monash Structure Plan Area. It is the area's major retail destination and comprises a mix of retail, commercial and residential uses, as well as the Park Royal Hotel. Over 14,000 m^2 is dedicated to retail use, including discount department stores, a full line supermarket, food court, specialty shops, cinema complex and associated service uses such as office, medical practices, real estate and a childcare centre.

M-City, Clayton

2.2.2 Natural features and public open space

The Monash Structure Plan Area features a significant downward slope to the south east and north west, with the business parks to the north at the highest point. These elevated areas drain towards the Monash University lake and the Mile Creek Drainage Reserve in the east. The terrain slowly descends further southward toward Clayton.

The Monash University campus provides a range of open spaces and recreation spaces that support a strong tree canopy coverage. Residential areas also have a strong tree canopy coverage, with employment areas displaying gaps due to the dominance of impervious surfaces without vegetation.

Public open space in the Monash Structure Plan Area includes Carlson Reserve and a series of small parks in Notting Hill. Carlson Reserve provides a multi-purpose public park while Finch Street and Samada Street Reserve along the Mile Creek Drainage Reserve provide linear open space.

Large-scale open spaces, including Jock Marshall Reserve, are part of Monash University and serve students and staff, with restricted use for the general community. Large buildings and industrial areas across the Monash Structure Plan Area limit the availability of open space and create large catchment gaps.

2.2.3 Community infrastructure

Existing community infrastructure in the Monash Structure Plan Area is limited. The area accommodates Clayton North Primary School, three childcare centres, a neighbourhood house and indoor and outdoor sports courts facilities. Monash University provides several recreational assets on campus, including a swimming pool and sports courts, which are available for community use and hire.

2.2.4 Movement and access

Public transport in the Monash Structure Plan Area is provided primarily by the bus network intermittently across residential areas, employment precincts and Monash University. The Monash University bus interchange is located in the south of the Structure Plan Area, with a shuttle running to the existing Huntingdale Station with relatively high frequency. There is currently no train service in the Monash Structure Plan Area. Most of the Structure Plan Area is beyond the existing public transport walkable catchment, including large employment areas north of Ferntree Gully Road and east of Blackburn Road that will be important enablers of future business and jobs growth in the area.

Key arterial roads connect the area with Monash Freeway and adjoining suburbs. Travel within, to and from the Monash Structure Plan Area is primarily by private car.

Pedestrian and active transport infrastructure is generally limited. Pathways along the Mile Creek Drainage Reserve and on the Monash University campus provide limited cycling infrastructure due to restricted access. Active travel is also constrained by poor lighting and footpath infrastructure, and a lack of pedestrian crossing facilities.

Carlson Reserve, Clayton

2.3. Existing community context

2.3.1 Population and housing

The Monash Structure Plan Area has a population of approximately 10,000 people (ABS 2021 Census) with a higher annual population growth rate in recent years compared with Greater Melbourne. The Monash Structure Plan Area supports a higher proportion of overseas-born residents compared to Greater Melbourne. The population skews to younger age groups. Household composition in the Monash Structure Plan Area is generally characterised by higher proportions of couple families without children, group households and lone persons.

There were approximately 3,900 dwellings in the Monash Structure Plan Area in 2021, with a higher proportion of high density dwellings compared to Greater Melbourne. Medium density living including units, townhouses and villas comprises approximately one third of the dwellings in the Monash Structure Plan Area.

2.3.2 Employment

Monash's economy is defined by its role and function as part of the Monash NEIC, a concentration of businesses and institutions that mark the Structure Plan Area as a place for high value employment, education, innovation, leading-edge technology and research.

The Monash Structure Plan Area accommodated approximately 21,000 workers in 2021, with health and education industries (such as health care, social assistance and professional, scientific and technical services) employing the largest number of workers. Workers in the health and education sector, population services and knowledge-intensive industries have been increasing while workers in the industrial sector have been declining since 2011.

3. Strategic policy context

This section summarises Victorian and local government strategies and other documents relevant to land use planning and development in the Monash Structure Plan Area.

3.1. State policy and strategies

3.1.1 Plan Melbourne 2017–2050

Plan Melbourne 2017–2050 (Plan Melbourne) is the Victorian Government's metropolitan planning strategy to guide land use and development across Greater Melbourne to 2050.

The Monash Structure Plan Area is identified in Plan Melbourne as located within the Monash National Employment and Innovation Cluster (NEIC), as shown in Figure 5. The NEIC contains a concentration of knowledge-based businesses and institutions focused on innovation and leading-edge technology and research. The NEIC will be developed as a place with linked business and institutions, providing a major contribution to Victoria's economy. The NEIC will also have excellent transport links, and potential to accommodate growth in jobs and housing.

Monash University is identified as a state-significant health and education precinct where Plan Melbourne seeks to stimulate innovation and create employment. Health and education precincts are fundamental to the emerging knowledge economy and their surrounding communities. They are ideally supported by good public transport access and provide opportunities for ancillary services, retail, commercial and accommodation uses alongside their core economic functions.

The *Plan Melbourne Addendum 2019* updated Plan Melbourne with the most recent population and employment projections, and acknowledged further development of the government's long-term infrastructure agenda. The Plan Melbourne Addendum updated the 2050 spatial framework map to include the SRL concept route, as shown in Figure 6 (No. 5 on the map). The Monash Structure Plan Area aligns with the SRL concept route.

The following Plan Melbourne outcomes are relevant to planning for the Monash Structure Plan Area. A full list of outcomes and directions relevant to the Structure Plan Area is provided in Appendix B.

Outcome 1: Melbourne is a productive city that attracts investment, supports innovation and creates jobs
Outcome 2: Melbourne provides housing choice in locations close to jobs and services
Outcome 3: Melbourne has an integrated transport system that connects people to jobs and services and goods to markets
Outcome 4: Melbourne is a distinctive and liveable city with quality design and amenity
Outcome 5: Melbourne is a city of inclusive, vibrant and healthy neighbourhoods
Outcome 6: Melbourne is a sustainable and resilient city

Ministerial Direction No. 9 under the *Planning and Environment Act 1987* (Vic) requires a planning authority to have regard to the Metropolitan Planning Strategy (*Plan Melbourne 2017–2050* and the *Plan Melbourne Addendum 2019*) when preparing a Planning Scheme Amendment. This includes ensuring the Planning Scheme Amendment is consistent with the directions and policies in Metropolitan Planning Strategy documents.

As a planning authority for land within the Monash Planning Area, SRLA is required have regard to Ministerial Direction No. 9 when preparing Planning Scheme Amendments for land within the Planning Area, including the Monash Structure Plan Area.

Planning for the Monash Structure Plan Area, including preparation of the Planning Scheme Amendment, supports Plan Melbourne's ambitions by planning for vibrant and connected neighbourhoods that leverage Monash's competitive advantages in health and education, and as a location for business and knowledge innovation.

The Draft Monash Structure Plan promotes more housing opportunities and increased housing diversity, and more jobs and community services within high amenity neighbourhoods where people can access most of their daily needs locally.

The Draft Monash Structure Plan also includes initiatives to contribute to the long-term sustainability and resilience of the Monash Structure Plan Area.

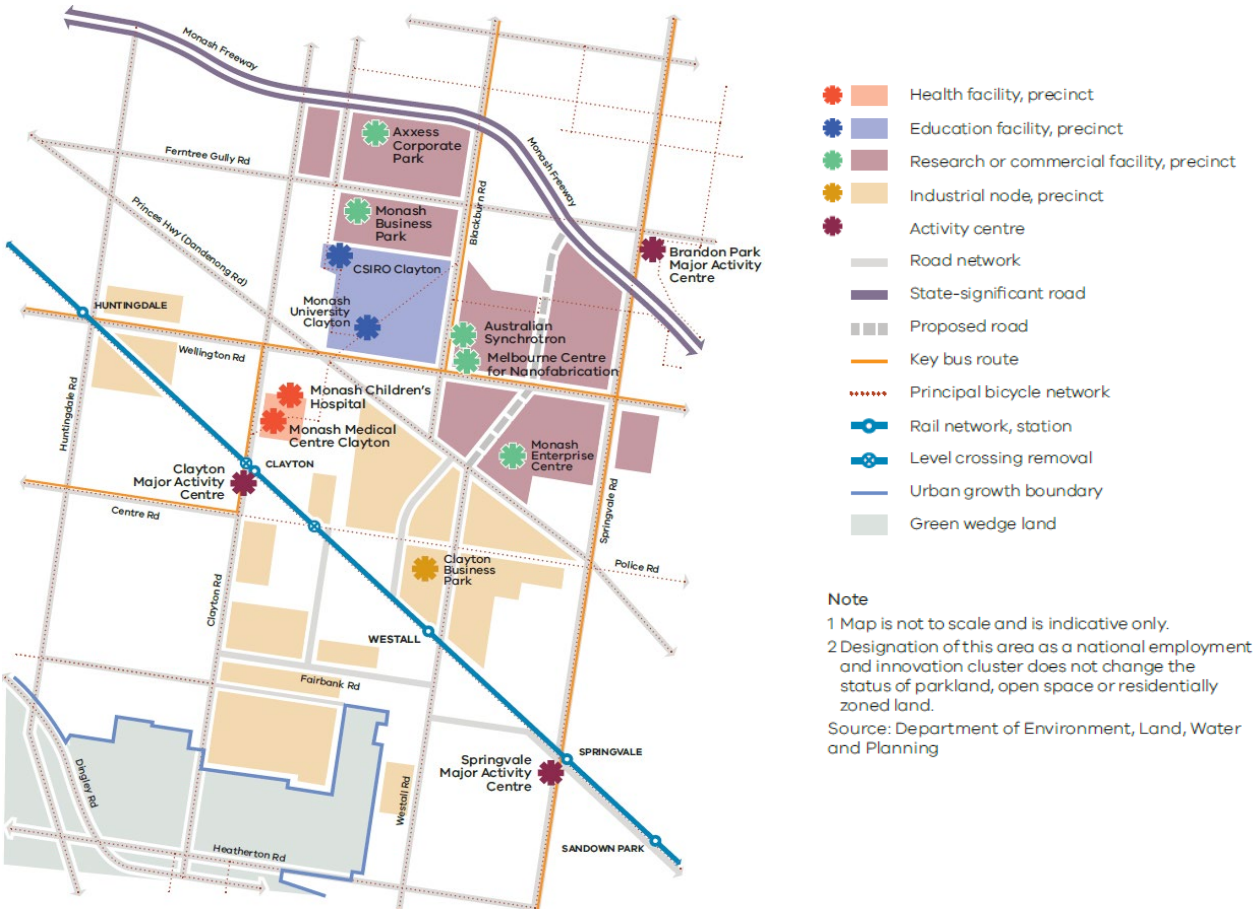


Figure 5 Monash National Employment and Innovation Cluster – Map 5 (Plan Melbourne)

Source: Plan Melbourne 2017–2050

Figure 6 Melbourne 2050 spatial framework

Source: Plan Melbourne Addendum 2019

3.1.2 Victoria's Housing Statement 2024–2034

Victoria's Housing Statement: The Decade Ahead 2024–2034 focuses on five key areas to address housing supply and affordability in the state. The Housing Statement aims to deliver 80,000 new homes each year across Victoria. Three key areas and actions are relevant to planning for the future of the Monash Structure Plan Area:

Key area 1: Good decisions, made faster

- Increase housing choice in activity centres

Key area 2: Cheaper housing, closer to where you work

- Support institutional investment
- Unlock surplus government land
- Strengthen design standards to ensure high-quality builds
- Give growing communities the local infrastructure they need
- Keep making precincts about people and places

Key area 5: A long-term housing plan

- Plan Melbourne update
- Planning Regulation Reform.

Structure planning for SRL East has a focus on increasing the supply of housing across Melbourne's middle suburbs, helping to achieve the targets of *Victoria's Housing Statement* by making room for more than 70,000 extra homes across the six SRL East Structure Plan Areas over the next 30 years.

A new rail connection at Monash provides a significant opportunity to boost housing supply, improve housing diversity and choice, and facilitate affordable housing. A focus of the Draft Monash Structure Plan is to provide the greatest densities of housing in a new centre of activity adjoining the SRL station and near Monash University and the CSIRO neighbourhood. In time, these areas will have the highest level of access to goods and services and transport.

3.1.3 Plan for Victoria

In late 2023 the Victorian Government announced it would update and expand Plan Melbourne to cover the entire state. *Plan for Victoria* will build on *Victoria's Housing Statement* to address the state's housing and land use needs to 2050. The consultation brochure 'Big Ideas for Victoria's Future' (July 2024) identifies five priorities for Victoria:

- Leafy green streets with trees, parks and open space
- Better public transport, walking and cycling connectivity
- Affordable homes for everyone
- Protecting the valuable land where our food is grown
- Vibrant and social places for people to connect and thrive.

Plan for Victoria will set out strategies to support jobs growth, protect the environment and ensure Victoria is more resilient to climate change.

The Vision for Monash aligns with the priorities of *Plan for Victoria* by making use of new public transport accessibility and providing opportunities for increased housing diversity and affordability as part of new placemaking. Proposed canopy tree targets, public open space upgrades and climate change initiatives will respond to the desire for green streets and open spaces.

3.1.4 Melbourne Industrial and Commercial Land Use Plan (MICLUP)

The *Melbourne Industrial and Commercial Land Use Plan* (MICLUP) provides an overview of industrial and commercial land use needs across metropolitan Melbourne. It establishes a planning framework to inform future strategic directions around these land uses.

The Monash Structure Plan Area is located in the MICLUP eastern region, which is projected to support an estimated 87,000 more jobs by 2031. Industries anticipated to experience the biggest jobs growth are health care and social assistance, education and training, retail trade, professional, scientific and technical services, and construction.

Commercial and industrial land supply within and surrounding the Monash Structure Plan Area is shown in Figure 7. The MICLUP identifies the Monash NEIC and designates most employment land within the Structure Plan Area (and those extending south and east) as Regionally Significant Industrial Land. There are smaller pockets of Local Commercial Areas; for example, M-City.

Industries anticipated to experience the biggest growth in the MICLUP eastern region are health care and social assistance, education and training, retail trade and construction.

Most of the existing employment land within the Monash Structure Plan Area is classified as Regionally Significant Industrial land in the MICLUP. The MICLUP sets a broad direction that Regionally Significant Industrial Land should be retained for employment uses over time, although these uses may diversify.

Core to the Vision for the Monash is to create a new centre of activity around the SRL station, and attract jobs, investment and housing that bring day and night-time activity into the Structure Plan Area. Achieving the Vision for Monash as a globally significant place for innovation requires investment from business and enterprises, which seek out these high-quality places with access to amenities and services.

Building on this concept and the Victorian Government's enterprise precinct policy *Unlocking Enterprise in a Changing Economy (DELWP 2018)*, the MICLUP recognises the importance of establishing high amenity places within a wider employment area. Amenities include retail and hospitality, sustained by workers and local residents.

Housing is a critical component of the Monash Structure Plan Area and new housing is required to attract jobs and sustain a centre of activity near the SRL station. Supporting ongoing jobs growth includes extending housing opportunities, including in strategically located mixed-use environments near M-City.

To support these ambitions, SRLA will work with the Department of Transport and Planning to amend the MICLUP, removing the Regionally Significant Industrial Land classification within the Monash Structure Plan Area from the policy.

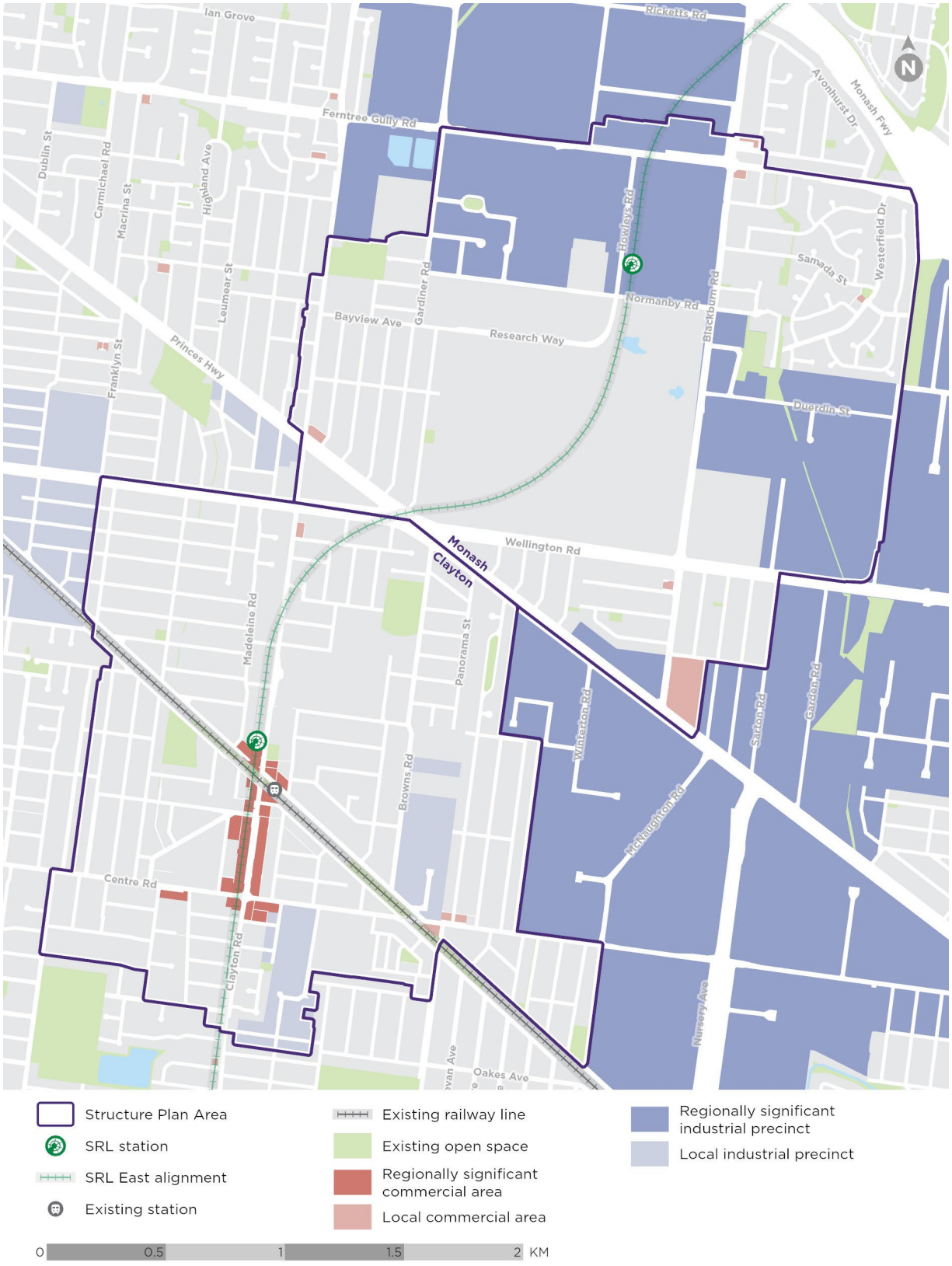


Figure 7 Commercial and industrial land supply (MICLUP 2020)

3.2. Monash Planning Scheme

3.2.1 Existing zones and overlays

The Monash Structure Plan Area is subject to the Monash Planning Scheme.

Residential zones are located towards the north-eastern and southern parts of the Structure Plan Area. Large portions are covered by a Special Use Zone (identifying employment land of the Monash Technology Precinct) or a Public Use Zone – Schedule 2 (which identifies Monash University).

The Monash Structure Plan Area is affected by a limited number of planning overlays. A Design and Development Overlay (DDO1) identifies building and landscape guidelines for commercial land. DDO controls also apply around the Victorian Heart Hospital to protect helicopter flightpaths. A Heritage Overlay (HO) applies selectively on the Monash University campus and a number of other isolated properties while a Special Building Overlay (SBO) (identifying potential overland flood risk) runs through the centre of the Structure Plan Area. A Specific Controls Overlay (SCO) also applies to some land within the Structure Plan Area.

Zones and overlays applying in the Monash Structure Plan Area are shown in Figure 8 to Figure 11. A complete list of these zones and overlays and their descriptions is provided in Appendix C.

The Draft Monash Structure Plan aims to support and leverage the opportunities the SRL station at Monash and new town centre will generate. Land use patterns were considered when identifying future land uses and development.

Monash will experience a significant change with the creation of a new centre of activity in place of existing industrial land (zoned Special Use). The balance of future land use will reflect existing land uses but with potential significant changes in planned building types.

Overlays that identify environmental constraints within the Structure Plan Area (such as flood overlays or design and heritage identification and direction) were considered when preparing the Draft Monash Structure Plan. This includes DDO17 and DDO18, which identify helicopter flightpaths associated with the Victorian Heart Hospital and impact permitted building heights. These are discussed in Section 4 and Section 5.

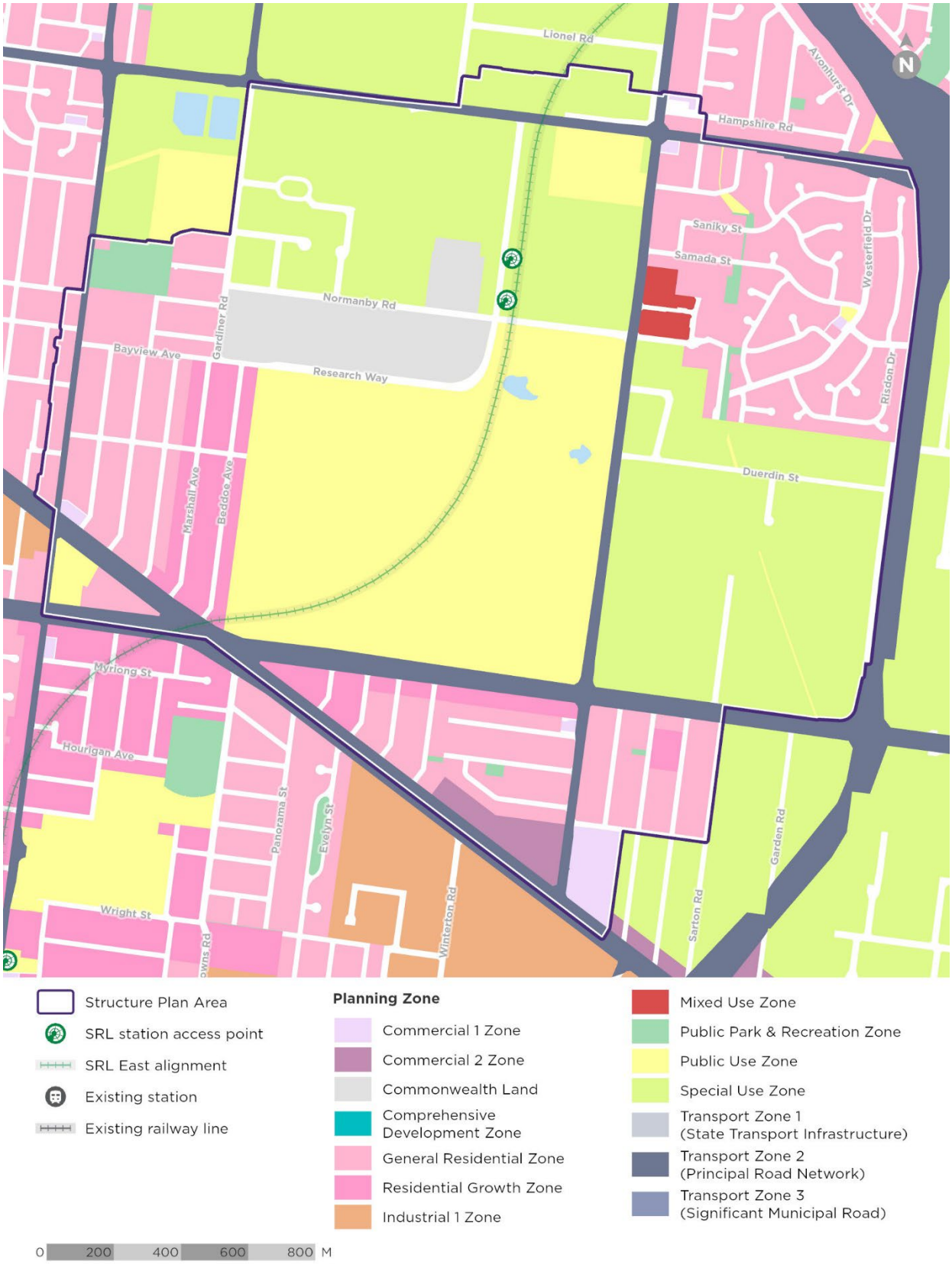


Figure 8 Monash existing planning zones

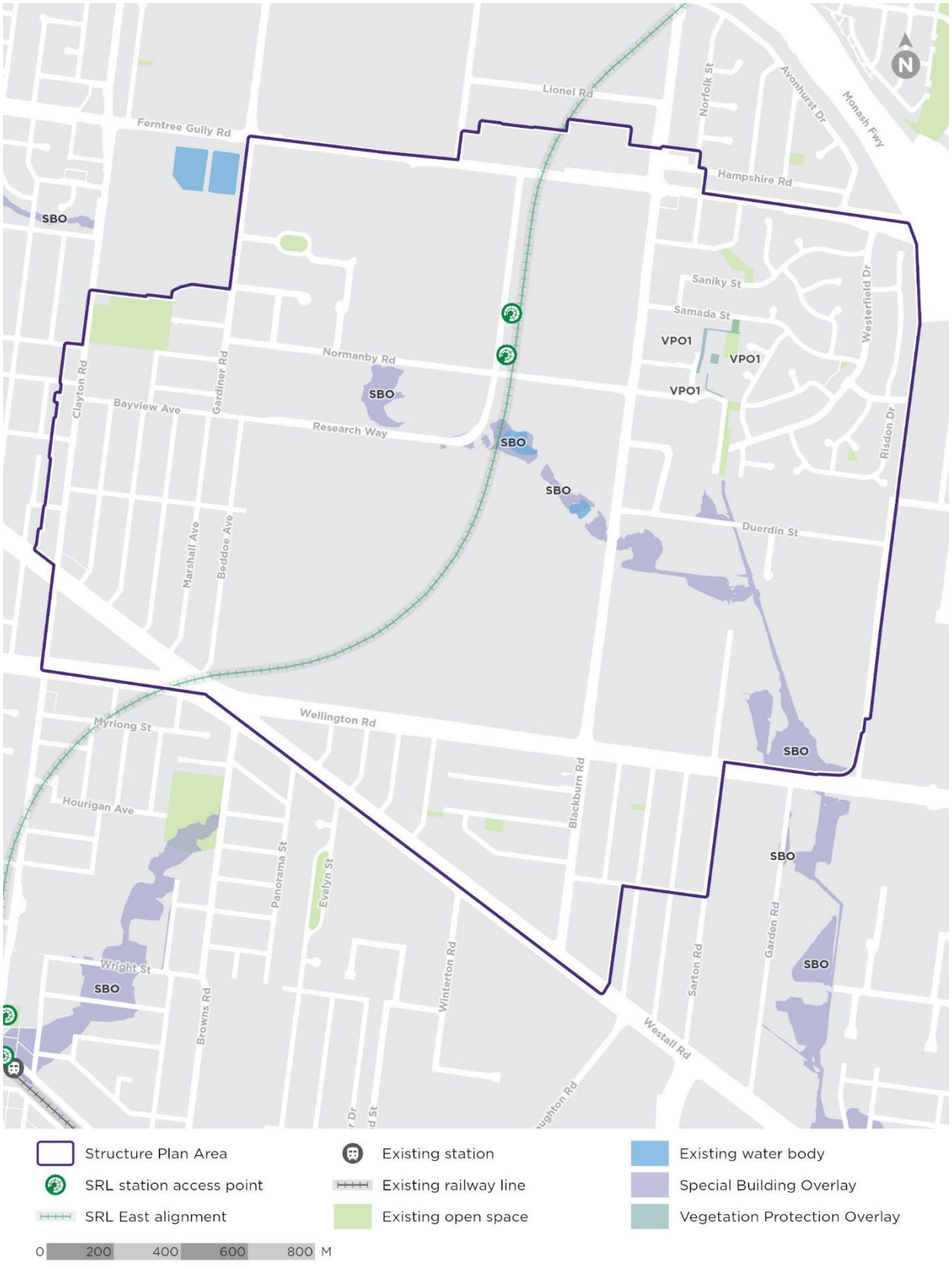


Figure 9 Monash planning overlays – environment and landscape

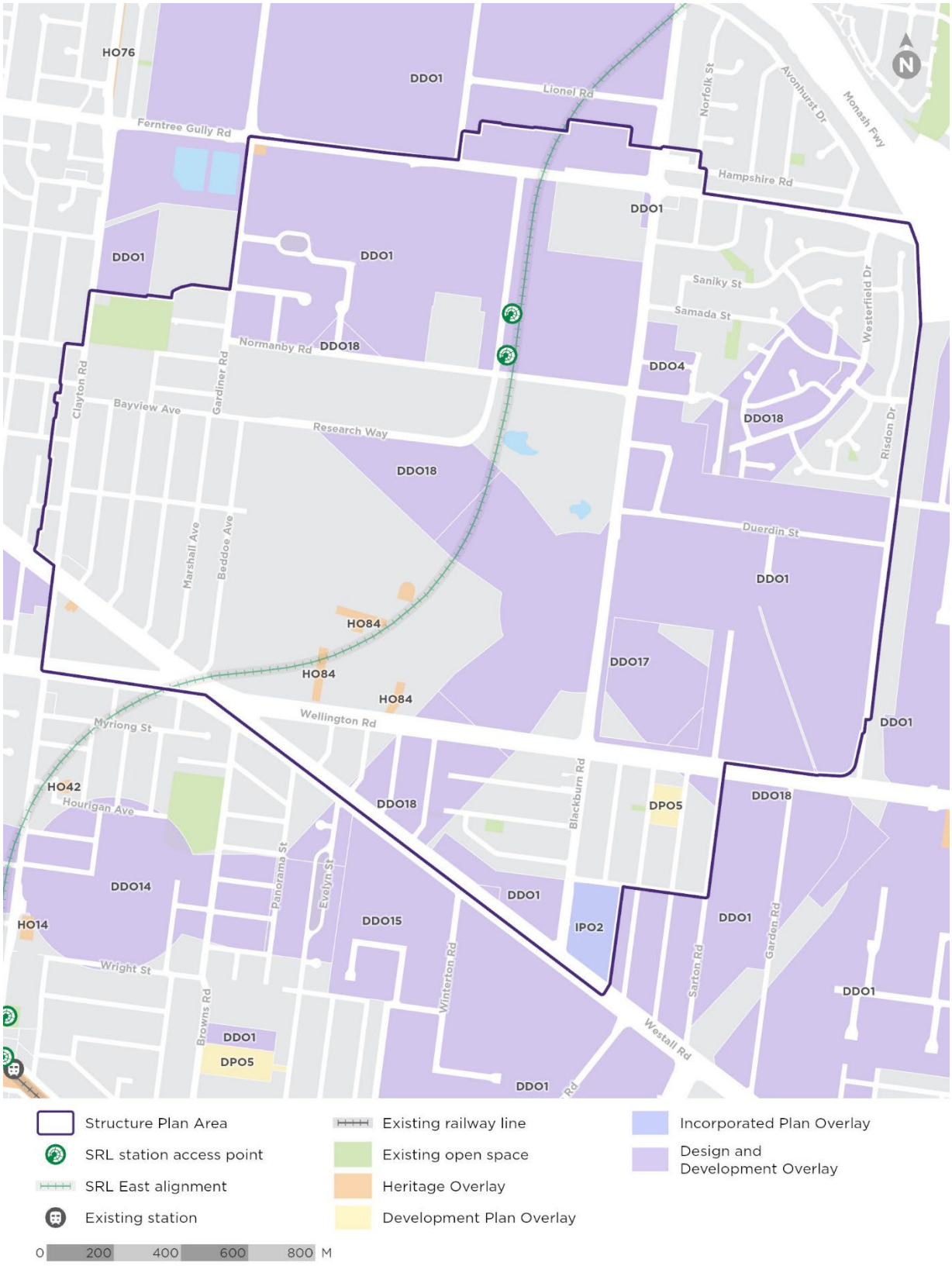


Figure 10 Monash planning overlays – heritage and built form

Figure 11 Monash planning overlays – other land management

3.2.2 Planning Policy Framework – state and regional

The Planning Policy Framework (PPF) guides land use planning in the City of Monash. Key clauses of the PPF relevant to the Monash Structure Plan Area are summarised below. A complete list of PPF objectives and strategies relevant to the Monash Structure Plan Area is provided in Appendix D.

Land use and transport integration

Regional strategies of the PPF seek to develop SRL through Melbourne's middle suburbs to facilitate substantial growth and change in major employment, health and education precincts (such as Monash NEIC) (clause 11.01-1R). State strategies seek to integrate land use and transport to facilitate the efficient movement of people and goods to social, cultural and economic opportunities (clauses 18.01-1S and 18.01-2S).

Housing and economic development

State policy requires that planning for urban growth considers opportunities for redevelopment and intensification of existing urban areas, while facilitating integrated and diverse housing (including more affordable housing options near existing infrastructure, services and transport) to meet community needs (clauses 11.02-1S, 16.01-1S and 16.01-2S). State policy seeks to ensure that sufficient commercial, retail and industrial land is available to meet forecast demand in accordance with the MICLUP (clause 11.02-1S).

Infrastructure

The PPF seeks to facilitate orderly, economic and sustainable development in urban areas through structure planning (clause 11.02-2S), including appropriately managing water resources and stormwater, delivering timely, efficient and cost-effective infrastructure and providing an integrated transport system (clauses 18.01-2S, 19.03-2S and 19.03-3S). Tertiary education facilities are to be located within or adjacent to activity centres (clause 19.02-2S).

Urban design and open space

State and regional planning policy seeks to create urban environments that are safe, healthy and functional, and contribute to a distinctive liveable city with quality design and amenity in metropolitan Melbourne (clauses 15.01-1R and 15.01-1S). State and regional planning policy also seeks to strengthen and improve an integrated network of public open spaces to meet the needs of the community (clauses 19.02-6S and 19.02-6R).

Hazards

State planning policy seeks to ensure that potentially contaminated land is used and developed safely, and that planning adapts to the impacts of climate change through risk-based planning, such as flood mitigation (clauses 13.01-1S, 13.03-1S and 13.04-1S). The relationship between industrial land uses and other more sensitive uses is to be considered in future planning (clause 13.07-1S).

Heritage

State planning policy seeks to ensure the protection and conservation of places of Aboriginal cultural heritage significance and to ensure the conservation of places of post-contact heritage significance (clauses 15.03-1S and 15.03-2S).

The Draft Monash Structure Plan is supported by and responds to the planning policies summarised in this section.

The Draft Monash Structure Plan seeks to utilise the infrastructure investment and greater connectivity delivered through SRL East to generate more opportunities for housing and jobs growth in an established area. Environmental constraints were considered when preparing the Draft Monash Structure Plan, along with planning design and public realm enhancements to support community amenity, noting that a new urban character will emerge with higher density development within the Structure Plan Area.

The creation of a new centre of activity and significant population and jobs growth will contribute positively to the role of the Monash NEIC and Regionally Significant Industrial Land in the north and east of the Monash Structure Plan Area. New concentrations of population and jobs will take advantage of this emerging area, supporting existing education and health uses and benefitting from new significant transport infrastructure.

3.2.3 Planning Policy Framework – local

The local Planning Policy Framework (PPF) of the Monash Planning Scheme comprises the Monash Municipal Planning Strategy and local planning policies relevant to the City of Monash. Objectives and strategies of the PPF relevant to the Monash Structure Plan Area are summarised below.

Monash City Council recognises the municipality comprises mainly residential land but also contains leading education, health, research and commercial facilities, including the Monash Technology Precinct and Monash NEIC (clause 02.01).

Residential growth is directed to a network of activity and neighbourhood centres (clause 16.01-1L-01), with the greatest growth directed to parts of the Monash NEIC and Princes Highway (clause 15.01-5L). Student accommodation is encouraged to locate in proximity to tertiary institutions, including Monash University (clause 16.01-1L-02).

Local policy supports Monash University as a major regional asset in its own right and through education links with the Australian Synchrotron and Monash Medical Centre (clauses 02.03-6 and 17.01-2L).

The Monash Technology Precinct is recognised as the primary strategic location for high-technology research and development industries in Victoria (clause 17.01-2L). The Monash Technology Precinct Policy (clause 17.01-2L) supports the significance of a diverse cluster of businesses anchored by leading-edge firms and recognises the potential for links between the Australian Synchrotron, Monash University and Monash Medical Centre in attracting technology, research and development industries and leading businesses of all sizes (clause 02.03). Monash City Council also aspires to attract headquarters for national and international organisations to the Monash Technology Precinct (clause 17.01-2L). The character and design of business parks and industrial areas in the municipality are subject to specific planning requirements (clause 15.01-2L-01).

Transport policy seeks to improve the municipality's public transport access to reduce traffic congestion on Monash Freeway, Princes Highway and Springvale Road (clause 02.03-7) and through sustainable transport in activity centres through public transport and active transport options (clause 15.01-2L-02).

Public open space accessibility is encouraged within 400 metres' walking distance from homes and employment areas (clause 02.03-8). Monash's Tree Conservation Policy (clause 15.01-1L-02) seeks to maintain the tree canopy cover within areas identified as having a Garden City character. This includes the Notting Hill residential neighbourhood in the Monash Structure Plan Area.

Local planning policy also seeks best practice in environmentally sustainable development in the municipality (clause 15.01-2L-02).

The Draft Monash Structure Plan's major direction for intensification in residential areas aligns with existing local planning policies directing higher density housing to the activity centres in Monash. Local policy in the Monash Planning Scheme directs higher density housing to the Monash NEIC, the major boulevard along Princes Highway / Dandenong Road and other major activity centre and neighbourhood activity centre localities, reflecting a general direction for land use intensification within and around activity centres.

Employment and education land use in the Monash Technology Precinct connects with the Clayton Structure Plan Area in the south and will provide a focus for expanding employment in the area.

Industrial areas in the north and east will be maintained and enhanced with increased opportunities for density and floorspace.

Housing along main roads and boulevards will be a continued focus within the Structure Plan Area, along with intensification of areas near Monash University and major employment enterprises, including the Australian Synchrotron and CSIRO site, to take advantage of the scale of the infrastructure investment and significant increase in regional connectivity.

3.3. Council strategies

The Monash Planning Scheme includes background documents that form the basis of strategies relevant to the Monash Structure Plan Area. An overview of relevant documents and the Draft Monash Structure Plan response is set out below. Documents that are not referenced in clause 72.08 of the Monash Planning Scheme are otherwise identified.

3.3.1 Monash Housing Strategy

The *Monash Housing Strategy (2014)* is a background document in the Monash Planning Scheme. The Housing Strategy seeks to address housing issues in the municipality, including by facilitating more diverse housing to support a growing population.

The Residential Development Framework of the Housing Strategy identifies three main areas: areas with future redevelopment potential (including the Monash NEIC and Dandenong Road and Springvale Road boulevards); areas with limited redevelopment potential (heritage precincts, Dandenong Creek escarpment and creek environs); and areas suitable for incremental change (Garden City suburbs).

The Monash Structure Plan Area is predominantly located in the 'Core Employment / University / Hospital Precinct', with areas to the north east and south west located within 'Category 3 Residential Land in the Monash National Employment Cluster'. The Housing Strategy identifies that Category 3 areas will support housing growth and diversification.

The Residential Development Framework also identifies Princes Highway as a 'Boulevard' area, which includes opportunities for higher density residential development proportionate to the scale of the road infrastructure and surrounding context. Areas of 'incremental change' are highlighted in the Monash Structure Plan Area. These include 'Garden City Suburbs' to the north east and south west that also sit within Category 3 areas. The Residential Development Framework identifies these areas as suitable for modest housing growth and diversification.

The Monash Housing Strategy is over a decade old and housing policy and demands have shifted since its preparation. While the Draft Monash Structure Plan generally aligns with the intent of the Housing Strategy by directing higher density and mixed-use development to areas previously identified for housing growth and diversification (such as within the Monash NEIC and along Princes Highway), the Draft Monash Structure Plan sets out a fresh plan for housing to meet projected demand, building on the opportunities that SRL East will generate.

The creation of a new centre of activity for Monash will deliver a new mixed-use environment capable of supporting significant increases in residential density. The Draft Monash Structure Plan also seeks to support growth and diversification in areas surrounding the new centre of activity, recognising the housing, economic and employment opportunities associated with increased accessibility.

Areas previously nominated as 'incremental change' by the Monash Housing Strategy will also experience some intensification to capture the benefits of dramatically improved connectivity in the metropolitan area, as well as access to a new centre of activity.

3.3.2 Monash Affordable Housing Strategy

The *Monash Affordable Housing Strategy (2023)* is an adopted document of council that seeks to increase availability and supply of affordable housing in alignment with the Monash Housing Strategy. The Affordable Housing Strategy identifies that activity centres have significant scope for increased density and development and are suitable for providing more diverse affordable housing types.

The Affordable Housing Strategy identifies opportunities to include at least 10 per cent affordable housing in the residential and commercial areas of the Monash Structure Plan Area.

Proposed Amendment C174 seeks to implement the Monash Affordable Housing Strategy including with a 6 per cent affordable housing contribution when land is rezoned to facilitate residential development or for development of 20 or more dwellings.

The *Housing Needs Assessment – Monash* prepared for the Draft Monash Structure Plan identifies an unmet and growing need for affordable housing and social housing in Monash, particularly in the area of student housing. The Draft Monash Structure Plan will provide opportunities for increased affordable housing and greater housing choice around the SRL station at Monash and in surrounding residential areas.

The Draft Monash Structure Plan includes an objective to 'increase the supply of social and affordable housing', with a strategy to encourage provision of affordable housing on strategic sites and areas identified for significant and high housing growth in alignment with Victorian Government policy. Affordable housing and social housing is also encouraged on government-owned land, with future development and renewal of existing social housing to be investigated.

3.3.3 Monash Boulevards Urban Design Framework

The *Monash Boulevards Urban Design Framework (2022)* is an adopted document of council that sets out a vision to enhance the Princes Highway / Dandenong Road and Springvale Road boulevards. The Urban Design Framework includes residential development guidelines to create a contemporary mid-rise character along the boulevards that respects the surrounding context, improves walking and cycling infrastructure, and enhances the boulevard landscape character with tree planting and landscaping.

Precincts 4, 5 and 6 identified in the Urban Design Framework are within the Monash Structure Plan Area. Precinct 5 provides for building heights up to eight storeys along the northern boundary of Princes Highway / Dandenong Road.

Proposed Amendment C172 seeks to implement the Monash Boulevards Urban Design Framework into the Monash Planning Scheme with a Design and Development Overlay to guide new residential development.

The Draft Monash Structure Plan aligns with the Boulevards Urban Design Framework as it adopts the principle of directing higher density development and supporting new walking and cycling infrastructure along the boulevards.

The Draft Monash Structure Plan sets higher building heights than the Boulevards Urban Design Framework. This reflects the increased density and accessibility that SRL East will provide within the Monash Structure Plan Area.

It is proposed to remove areas within the Monash Structure Plan Area from the Monash Boulevards Urban Design Framework, as built form direction for these areas is addressed in the Draft Monash Structure Plan. This is pending progress and determination of proposed Amendment C172 to the Monash Planning Scheme.

3.3.4 Monash Economic Development Strategy and Action Plan

The *Monash Economic Development Strategy and Action Plan (2018)* is an adopted document of council that outlines its approach to opening up new employment and economic opportunities in the City of Monash.

The Economic Development Strategy identifies that the municipality represents approximately 4 per cent of Victoria's economy and includes a resident workforce of approximately 87,000 people, with businesses providing over 121,000 jobs.

The importance of the Monash NEIC and its education and health strengths are highlighted. The Monash NEIC is the largest of seven NEICs identified in *Plan Melbourne 2017–2050* and includes the Monash and Clayton Structure Plan Areas. The number of jobs in the Monash NEIC is expected to double by 2050.

The Draft Monash Structure Plan provides for a new centre of activity around the SRL station at Monash, supporting and increasing amenity for existing employment land. Significant increases in employment floorspace are planned to support the diversity of the Monash NEIC. This reinforces the existing qualities of the Monash economy, including knowledge-intensive enterprises along Blackburn Road and Ferntree Gully Road. Intensification within the Structure Plan Area will also help to enhance synergies between the health and education precincts of Monash and Clayton.

3.3.5 Monash Open Space Strategy

The *Monash Open Space Strategy (revised in November 2021)* is a background document within the Monash Planning Scheme and provides a framework for providing new open space in the municipality to 2036.

The Monash Structure Plan Area is located within Precinct 3–Clayton and Precinct 8–Notting Hill of the Open Space Strategy. The strategy identifies Precinct 3– Clayton as being 'significantly under provided' and Precinct 8–Notting Hill as being 'under provided' in terms of community open space.

The Open Space Strategy identifies that only 50 per cent of residents in Precinct 3–Clayton have walkable access to open space within 400 metres (and 5 m^2 of open space per person). Precinct 8 – Notting Hill is better served, with 97 per cent of residents having access to open space within 400 metres from home (and an equivalent rate of 5 m^2 per person).

Actions for Precinct 3–Clayton include:

- Clayton is a priority precinct to undertake improvements or additions to open space, including within employment areas, and future development of social family recreation and parks prioritised in the gap areas
- Support and advocate for improvements to paths and connections in the area and promote safe off-road connections
- Construction of an off-road trail along the new Westall Road extension
- Advocate for improvements to the North Road / Wellington Road trail to ensure this is a safe and off-road trail.

Actions for Precinct 8–Notting Hill include:

- Notting Hill is a priority precinct to undertake improvements or additions to open space, including within employment areas, and future development of social family recreation and parks prioritised in the gap areas
- Construction of an off-road trail along the new Westall Road extension.

The Draft Monash Structure Plan seeks to connect and improve access to existing and future open space, and identifies investigation areas for new open spaces. This is in addition to the planned open spaces to be delivered as part of the SRL station, including a new civic space at the SRL station to reduce gaps in walkable access to open space.

The 400-metre walkable access benchmark applied for the Monash Open Space Strategy aligns with the benchmark applied for the *Open Space Technical Report* to inform recommendations for increased access across the Structure Plan Area.

3.3.6 Monash Integrated Transport Strategy

The *Monash Integrated Transport Strategy (2017)* is an adopted document of council that provides a framework for planning Monash's transport system to 2037 and beyond.

The Integrated Transport Strategy anticipates increased pressure on the Monash transport network due to population growth in Melbourne's eastern and southern regions, and people travelling between the outer-eastern and southern regions and inner Melbourne.

A shift to public transport, walking and cycling is promoted to meet future travel demand and reduce traffic congestion. More frequent public transport options between Monash University and the existing Huntingdale, Clayton and Syndal Stations are advocated, along with improved bicycle routes along and parallel to Blackburn Road.

The Draft Monash Structure Plan plans for urban growth around the SRL station, making efficient use of significant new transport infrastructure. Public transport, walking and cycling throughout the Structure Plan Area is prioritised, an active transport link between the Monash and Clayton Structure Plan Areas is provided for, and there is a strong focus on creating streets and places that provide safe walking and cycling routes between key local destinations.

3.3.7 Monash Walking and Cycling Strategy

The *Monash Walking and Cycling Strategy (2012 – updated 2022)* is an adopted council document that seeks to achieve a walking- and cycle-friendly municipality where residents of all ages and abilities can choose active travel as their preferred form of exercise, recreation and transport.

Key actions of the Walking and Cycling Strategy relevant to the Monash Structure Plan Area include providing signage to key destinations such as Monash University, and identifying opportunities to improve existing on-road cycling infrastructure and better link footpath networks and key destinations.

The Draft Clayton Structure Plan supports improved pedestrian-oriented streets and cycling routes linking destinations, and encourages active travel. A new pedestrian and cycling link is planned between Monash and Clayton Structure Plan Areas, as well as links to improve connectivity in residential areas.

3.3.8 Monash Integrated Water Management Plan

The *Monash Integrated Water Management (IWM) Plan (2014)* is an adopted council document that seeks to ensure water is an integral part of planning and service delivery in the municipality.

With forecast population and business growth anticipated to be facilitated through redevelopment (primarily in Monash's activity centres), the IWM Plan highlights the need to plan for integrated water management to support this growth.

Actions relevant to the Monash Structure Plan Area include ensuring opportunities for integrating water sensitive urban design (WSUD) are investigated for capital works programs, and for future structure and precinct plans to require WSUD.

An *Integrated Water Management Strategy* prepared for SRL East sets out strategies and actions to increase climate resilience within the Monash Structure Plan Area by encouraging new developments to incorporate WSUD features and the preparation of an IWM Plan to develop and advance place-based IWM measures and opportunities. More information on the *Integrated Water Management* Strategy is provided in Section 5.5.2 below.

4. Structure Plan considerations

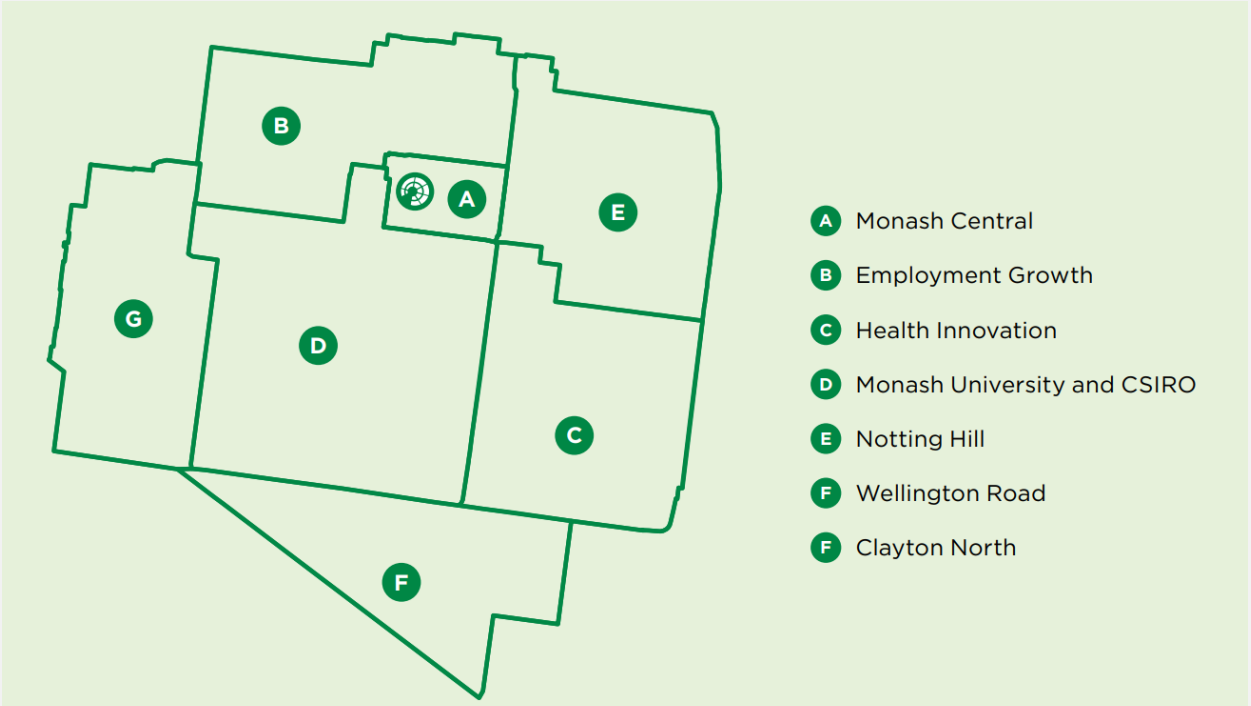
In preparing the Monash Draft Structure Plan, a series of technical investigations were undertaken to analyse potential constraints and opportunities with the potential to impact land capability.

This section describes the key findings of these assessments and the implications for the Draft Monash Structure Plan, with consideration also given to the relationship with other technical assessments discussed in Section 4 and Section 5 of this report. The focus of the below summaries is on how the recommendations of each assessment are captured in the Draft Monash Structure Plan or where variation from the technical assessment has been considered.

Technical Reports referenced in this Background Report are listed in Appendix E.

Neighbourhoods

Discussions in the following sections make reference to planning approaches for specific neighbourhoods where relevant. The Draft Monash Structure Plan introduces seven neighbourhoods defined by their unique characteristics and attributes as a shown below. Each neighbourhood has a distinct role in achieving the Vision for Monash and supporting population and employment growth. Detailed urban design, planning recommendations and development direction will guide the evolution of each neighbourhood.



4.1. Aboriginal cultural heritage

Context

The Bun Wurrung and the Wurundjeri Woi Wurrung people of the Kulin Nation are the Traditional Owners and custodians of the Country the Monash Structure Plan Area is located on.

The Bunurong Land Council Aboriginal Corporation is the appointed Registered Aboriginal Party for most of the land upon which the Monash Structure Plan Area is located. The Wurundjeri Woi Wurrung Cultural Heritage Aboriginal Corporation is the Registered Aboriginal Party for the land covered by the north-western part of the Monash Structure Plan Area.

The *Aboriginal Cultural Heritage Technical Report* identifies registered Aboriginal places and areas of Aboriginal cultural heritage sensitivity within a 2-kilometre radius of the SRL station, as well as ways to protect them.

Key findings

There is one registered Aboriginal place in the Monash Structure Plan Area: Normanby House LDAD 1 (VAHR 7922-1746). This place was discovered as part of the assessment for the Cultural Heritage Management Plan 18258 for the SRL East Main Works (Cheltenham to Monash).

There are five identified Aboriginal places located outside the Structure Plan Area but within a 2-kilometre radius of the SRL station. There is a low probability of identifying intact Aboriginal cultural heritage within the Structure Plan Area due to the significant ground disturbance from previous urban development.

No potential areas to avoid concerning Aboriginal heritage were identified in the Monash Structure Plan Area. Any potential impacts to Aboriginal cultural heritage discovered in the Structure Plan Area could be managed through compliance with the *Aboriginal Heritage Act 2006* (Vic).

Implications for the Draft Monash Structure Plan

While the previous significant ground disturbance means a low probability of intact cultural heritage material remaining within the Structure Plan Area, the requirements of the Aboriginal Heritage Act will continue to apply to 'high impact activities' (as defined under the Act) to manage impacts on identified areas of Aboriginal cultural heritage sensitivity. This includes the requirement to prepare a Cultural Heritage Management Plan for developments that comprise 'high impact activities' in areas of cultural heritage sensitivity.

4.2. Aboriginal cultural values

Context

Structure planning for Monash presents an opportunity to highlight Monash's rich cultural history and to create spaces that support the ongoing interpretation and sharing of cultural values. Structure Planning for Monash has been shaped by engagement with Traditional Owners and the Aboriginal community to integrate cultural values into the planning for the Monash Structure Plan Area. This has included discussions with the Wurundjeri Woi-wurrung Cultural Heritage Aboriginal Corporation and the Bunurong Land Council Aboriginal Corporation to identify opportunities to celebrate Aboriginal voices, history and culture. These conversations have informed the objectives, strategies and actions in the Draft Monash Structure Plan.

Key findings

Consultation with Traditional Owners identified a strong desire to apply the principles of self-determination in planning SRL East. This includes identifying opportunities for involving Traditional Owners and the Aboriginal community in advancing Aboriginal outcomes across various areas such as urban design, environmental restoration, economic inclusion, housing, and community infrastructure.

Implications for the Draft Monash Structure Plan

Section 5.3 'Enriching Community' of the Draft Monash Structure Plan includes Objective 1 to 'Celebrate, protect and interpret Aboriginal cultural values'. Strategies and actions are provided to support ongoing engagement and partnership with Traditional Owners and the Aboriginal community to help shape the future of the Structure Plan Area.

The Draft Monash Structure Plan identifies opportunities for future engagement with Traditional Owners, including (but not limited to) the design of public spaces, new walking and cycling infrastructure, community facilities, creative works, wayfinding, landscaped areas and streetscapes, and advancing Aboriginal employment outcomes and procurement opportunities.

4.3. Post-contact heritage

Context

The SRL station at Monash is located within an existing urban area established as part of Melbourne's early development in the late 1800s. The *Historical Heritage Technical Report* identifies places and objects of historical value within the Structure Plan Area and provides direction for the built form response within a context of significant population, housing and employment growth.

Heritage places reflect key historical development themes and provide insight into local character, identity and established built form.

The report considers legislation, existing statutory controls, heritage studies, non-statutory data sources and information from technical reports prepared for the SRL East Environment Effects Statement (2021).

Key findings

No historical heritage places in the Monash Structure Plan Area are included on the national or Commonwealth heritage lists or the Victorian Heritage Inventory (VHI).

There are two heritage places listed on the Victorian Heritage Register (VHR): the Religious Centre at Monash University (H2188) and Clayton North Primary School No.734 (H1084) at 1714 Dandenong Road, Clayton. Four archaeological sites within the Structure Plan Area are protected by a Heritage Overlay in the Monash Planning Scheme. They represent early establishment of the suburb in the mid-1800s (Clayton Primary School) and post-war educational buildings associated with Monash University. The sites are listed in Table 1. Their locations are shown in Figure 10 (in Section 3.2.1 above).

No heritage studies are underway in the City of Monash. The most recent municipal-wide historical heritage study was completed in 1999.

The *Historical Heritage Technical Report* recognises the prospect for heritage values and places to inform the SRL East urban design response, exploring opportunities to build on valued characteristics and maintain a sense of place. No specific opportunities are identified for the Monash Structure Plan Area.

Table 1 Heritage Overlay places in the Monash Structure Plan Area

Monash Planning Scheme
HO20 – Clayton North Primary School No. 734, 1714 to 1716 Dandenong Road, Clayton North
HO28 – Ferntree Gully Road, Notting Hill (21 to 4) Notting Hill Hotel
HO84 – Menzies Buildings and Oak trees, 1 to 131 Wellington Parade, Clayton North
HO103 – Religious Centre Monash University, 1 to 131 Wellington Parade, Clayton North

Implications for the Draft Monash Structure Plan

Heritage places will continue to form part of the value of the Monash Structure Plan Area and contribute to the sense of place. The Draft Monash Structure Plan does not propose to modify existing Heritage Overlays, and the small number of Heritage Overlay places within the Structure Plan Area will continue to be protected by the Monash Planning Scheme.

Heritage places and objects may be integrated with new development of contrasting scale as part of a contemporary setting. This is particularly appropriate where heritage places do not form part of a Heritage Overlay precinct.

Section 6 of the Draft Monash Structure Plan Area includes built form guidelines to address the relationship with heritage buildings outside Monash University, including:

- In the Employment Growth neighbourhood, the development of sites in proximity to the Notting Hill Hotel (HO28) should be designed to respect and respond to the historic character of the building
- In the Clayton North neighbourhood, new development adjoining Clayton North Primary School (HO20) should be encouraged to be sympathetic and respond appropriately to the heritage character of the site.

4.4. Ecology and arboriculture

Context

The Monash Structure Plan Area comprises urban areas ranging from industrial precincts to residential areas and parkland that display varying levels of ecological value and enhancement potential.

The *Ecology and Arboriculture Technical Report – Monash* assesses the ecological environment and tree canopy cover within and surrounding the Structure Plan Area.

The report was informed by a desktop review of flora and fauna databases, legislation, planning controls, policies and technical reports to ascertain existing ecological and arboriculture conditions. Threatened flora, fauna and ecological communities listed under the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) and *Flora and Fauna Guarantee Act 1988 Environment Protection and Biodiversity Conservation Act 1999* (Vic) were assessed to determine the likelihood of their occurrence within and surrounding the Structure Plan Area.

Recommendations aim to minimise and manage the impacts of change to ecology and arboriculture within the Structure Plan Area and inform future land use and development.

Key findings

Ecology

The Monash Structure Plan Area is heavily modified and dominated by infrastructure, buildings and residential areas with some scattered parklands. There are no habitat corridors or contiguous habitat from adjacent landscapes to encourage movement and dispersal of native fauna within the Structure Plan Area. Existing areas of open space are considered unlikely to provide significant habitat or support permanent populations of native flora and fauna. The locations of three remnant native scattered trees within the Structure Plan Area are shown in Figure 12.

No specific protections of ecological significance are required and existing mechanisms are in place to preserve and protect threatened flora and fauna species if required.

Tree canopy cover

The Monash Structure Plan Area contains 600,140 m^2 of tree canopy, as shown in Figure 12. This equates to 13 per cent tree canopy cover compared to 22 per cent canopy cover within the Monash municipality. Residential properties and streetscapes support 13 per cent of the tree canopy cover within the Structure Plan Area, while commercial and industrial land support 7 per cent of the canopy cover.

Implications for the Draft Monash Structure Plan

A key element of the Vision for Monash is a denser residential and commercial environment, particularly in the neighbourhoods surrounding the SRL station. The creation of high amenity streets and public spaces will support these areas. More housing is planned within existing residential neighbourhoods where higher levels of amenity already exist.

Section 5.3 ‘Enriching Community’, Section 5.5 ‘Enhancing Place’ and Section 5.7 ‘Empowering Sustainability’ of the Draft Monash Structure Plan include strategies to improve ecological outcomes while supporting housing and employment growth, including those relating to.

- Prioritising biodiverse planting along streets and on private land to create habitat corridors that link open spaces
- Encouraging development that provides deep soil planting and canopy trees in building setbacks and streetscapes, aspiring to increase tree canopy coverage to 30 per cent
- Providing space for tree canopy cover and green infrastructure to reduce urban heat island effects and improve the climate resilience of the local environment, including local flora and fauna
- Requiring development to include integrated water management elements that optimise permeable surfaces.

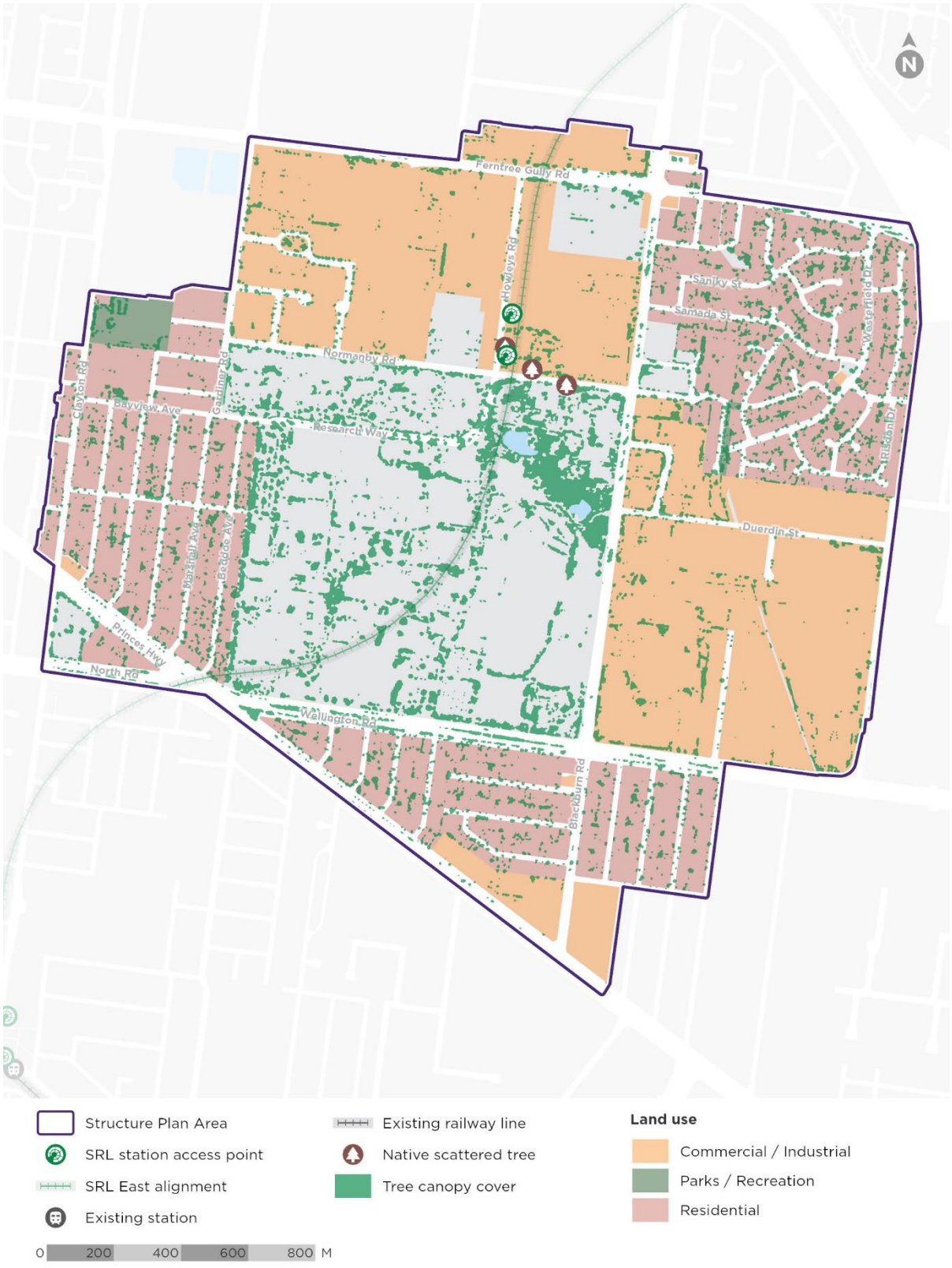


Figure 12 Tree canopy cover within the Monash Structure Plan Area

4.5. Flooding

Context

The Monash Structure Plan Area is currently subject to flooding around the Monash University Drain and Retention Basin, and the Mile Creek West Branch drainage system.

The *Flooding Technical Report* describes existing flooding risks within the Structure Plan Area and identifies risks relating to new development as well as ways to minimise flooding.

The report is informed by flooding and water management policies, planning controls, State Emergency Services (SES) plan, council flood management reports and available flood studies. Flood studies made available by Melbourne Water were reviewed and consolidated to present 1 in 100-year flood event (1% AEP) data accounting for climate change projections (increased intensity and frequency of flood events) to the year 2100. The flood study undertaken for the SRL East Environment Effects Statement (2021) accounts for climate change predictions until the year 2150.

Key findings

The Monash Structure Plan Area is located within the Mile Creek, Mordialloc Settlement Drain and the Gardiners Creek catchments. Most water flows (overland) generally from a north west direction to the south east via the local drainage network through the Monash University Drain and Retention Basin, and into the Mile Creek West Branch Main Drain.

This discharges into Mile Creek, 2 kilometres south east of the Structure Plan Area. Water also flows from the north east to the south west via the local drainage network to the Clayton Drain and the Burton Avenue Drain, discharging to the Mordialloc Settlement Drain located 0.5 kilometres to the south east of the Structure Plan Area. A small amount of water travels north west towards Scotchmans Creek and into the Macrina Street Drain, discharging to Gardiners Creek (Kooyongkoot) north of the Structure Plan Area.

A Special Building Overlay (SBO) generally covers the Monash University Drain, Retention Basin and Mile Creek West Branch drainage system. Proposals for new works in these areas are referred to Melbourne Water to assess flood risk and the effects of development on local overland flow paths.

Hydrological and hydraulic modelling has confirmed the Structure Plan Area experiences a high flood risk with a 1% AEP (1 in 100-year event) flood depth of greater than 2 metres within the Retention Basin and up to 0.5 metres along the Monash University Drain. There is a medium to high risk of flooding along Duerdin Street and at the corner of Nantilla and Wellington roads, with flood depths of greater than 0.6 metres as indicated in the City of Monash Flood Emergency Plan. Generally, shallow overland flows are experienced in the remaining Structure Plan Area, with most of the surrounding catchment of a low flood risk.

Note: Annual Exceedance Probability (AEP) is the probability of a certain sized flood occurring in a single year. For example, a 0.5% AEP flood has a 1-in-200 chance of occurring in any year. A 1% AEP flood has a 1-in-100 chance of occurring in any year.

Implications in the Draft Monash Structure Plan

Melbourne Water is currently remodelling flood risks in partnership with local governments. The results will be used to make any additional updates to the Monash Planning Scheme and planning policy where required by 2026 and may change flood overlay areas within the Structure Plan Area. Modelling of local stormwater drainage underway within the Structure Plan Area in partnership with the City of Monash will be completed in 2025 or early 2026.

The flood risks in the Monash Structure Plan Area identified in the *Flooding Technical Report* include additional areas of moderate to high flood risk. Upon completion of the revised Melbourne Water remodelling, the Monash Planning Scheme will be updated to fully reflect these additional flood risks identified in the *Flooding Technical Report.*

Section 5.7 ‘Empowering Sustainability’ of the Draft Monash Structure Plan includes Objective 28 to ‘Embed Integrated Water Management in the Monash Structure Plan Area’. This includes embedding integrated water management in the development of new buildings, roads and public spaces and encouraging water sensitive urban design (WSUD) in active transport corridors, green spaces and the public realm. WSUD is discussed in Section 5.5.2 below.

4.6. Land contamination

Context

Historical development across the Monash Structure Plan Area has resulted in the potential for existing or former industrial (and other) land uses to leave a legacy of environmental contamination. This is a common issue across established areas of metropolitan Melbourne and has potential implications for development within the Structure Plan Area. Land contamination requires consideration in accordance with Ministerial Direction No.1 Potentially Contaminated Land (MD1) and Planning Practice Note 30 'Potentially Contaminated Land' (PPN30).

The *Potentially Contaminated Land Memo* and the *Land Contamination Technical Report* applies the guidance of PPN30 to identify potentially contaminated land within the Structure Plan Area. This includes where a planning response is required for potentially contaminated land to be used for a public open space, children's playground, secondary school or sensitive use where previously it was prohibited. Sensitive land use is defined in MD1 and includes residential use, child care centre, kindergarten, pre-school centre or primary school, even if ancillary to another use.

Key findings

Desktop searches identified 130 records of potential for land contamination within the Monash Structure Plan Area based on records of regulatory audits, historical land uses and business activities. Of these, 57 sites require a planning response involving a preliminary risk screen assessment before development is permitted for public open space, children's playgrounds, secondary schools or sensitive uses. These 57 sites consist of land with a high potential for contamination (as defined by PPN30) and adjacent land with a medium potential for contamination. The identified sites are:

- 36 sites with a high potential for contamination due to historical business activities
- 21 sites with medium potential for contamination that are adjacent to a site with a high potential for contamination.

There are also three Environmental Audit Overlays that affect land within the Monash Structure Plan Area.

Implications for the Draft Monash Structure Plan

The Draft Monash Structure Plan envisages that existing land use settings within the Structure Plan Area will mostly be retained. The exceptions are the introduction of a new centre of activity around the SRL station in the Monash Central neighbourhood and intensification of mixed uses in the Employment Growth and Wellington Road neighbourhoods (see Section 6 of the Draft Monash Structure Plan for the locations of these neighbourhoods).

Where the Draft Monash Structure Plan envisages a change in permissible land use to no longer prohibit public open space, children's playground, secondary school or sensitive uses, a planning response many be necessary. The *Environmental Protection Act 2017* (Vic) and PPN30 will remain relevant when considering future land use and development applications within the Structure Plan Area.

4.7. Land amenity and buffers

4.7.1 Noise and vibration

Context

Existing noise and vibration sources affecting the Monash Structure Plan Area include major roads, the rail line and industrial and commercial activities.

The *Noise and Vibration Technical Report* identifies existing noise and vibration sources within the Structure Plan Area and within a 1-kilometre radius of its boundary. The report identifies existing planning controls and policies to protect sensitive land uses from noise impacts, and makes recommendations to minimise negative impacts of noise and vibration on future development within the Structure Plan Area. Potential impacts of vibration from the SRL East tunnels are also considered.

Key findings

Noise

Existing noise sources affecting the Structure Plan Area stem from health uses, transport activities and civil infrastructure such as the Monash Children's hospital and the Victorian Heart Hospital, emergency service vehicles, helicopter flightpaths and nearby major arterial roads including Princes Highway and North / Wellington Road.

There is also noise from local commercial uses and industrial uses, Monash Technology Precinct and Monash University. The noise is mainly from mechanical building services (such as air conditioning) and motor-driven equipment (such as pumps, air compressors and conveyors).

Existing planning controls and policies are generally appropriate to address noise impacts. Clause 13.05-1S (Noise Management) of the Victoria Planning Provisions requires consideration of Environment Protection Regulations and other noise policy documents to manage noise effects on sensitive land uses. Residential development standards of the Monash Planning Scheme (such as clauses 55 and 58) require consideration of the impact of noise sources on new residential development and can require an acoustic report.

While these planning controls and policies are considered generally appropriate, a large portion of the Structure Plan Area is subject to cumulative noise impacts from multiple sources such as industrial, helicopter and road traffic noise that are not considered under existing planning controls. In these areas, design strategies should be encouraged to address the cumulative noise.

Noise mitigation measures may be required for new developments to maintain amenity in locations near the Victorian Heart Hospital and Monash Children's helicopter flightpaths (or other uses that emit external noise affecting existing dwellings), given these would be cumulative with other noise emissions. This may require high-performing acoustic glazing and other potential treatments, such as specific façade and roof design constructions.

Vibration

No influence areas for vibration were identified within the Monash Structure Plan Area.

The SRL East rail and station design incorporates measures to prevent vibration and ground-borne noise from the tunnels impacting residential land. The SRL East Environment Effects Statement (2021) concluded that residential land will unlikely experience significant risk from vibration and ground-borne noise from the tunnels. However, other new land uses and developments in the vicinity of the SRL East tunnels that involve the use of vibration-sensitive equipment such as education or health facilities may need to incorporate measures to address potential vibration impacts.

Existing noise influence areas in the Monash Structure Plan Area are shown in Figure 13.

Implications for the Draft Monash Structure Plan

Section 5.5 'Enhancing Place' of the Draft Monash Structure Plan includes Objective 16 to 'Ensure new buildings provide good amenity for occupants' including incorporating appropriate noise and vibration attenuation measures into the design of new sensitive developments.

Section 5.3 'Enriching Community' of the Draft Monash Structure Plan includes Objective 3 to 'Introduce targeted new housing to support the vibrancy of the precinct' with a specific strategy to ensure housing developments in Monash Central, the Employment Growth neighbourhood and along Blackburn Road mitigate off-site noise and vibration impacts.

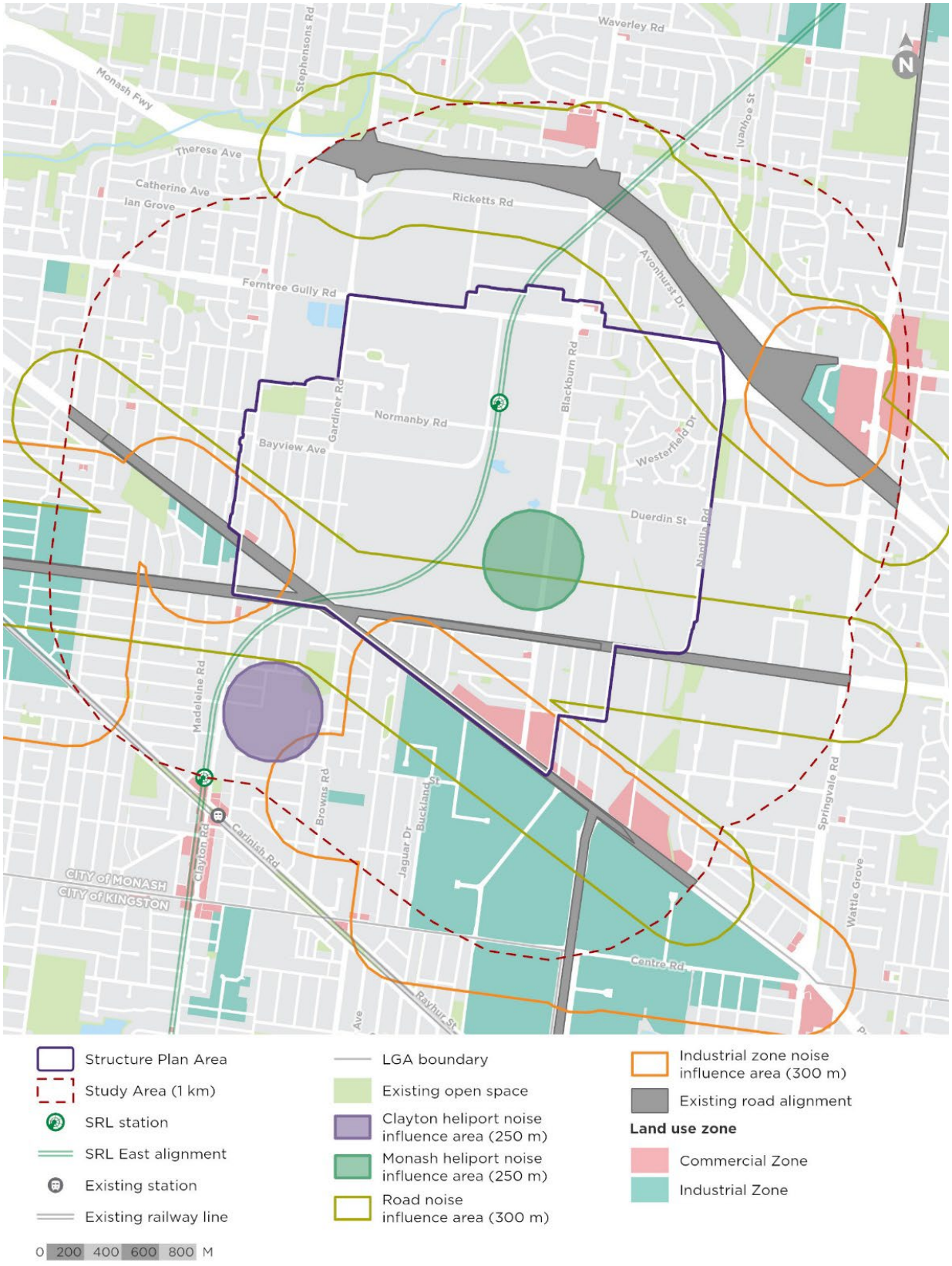


Figure 13 Influence areas of existing noise and vibration sources within the Monash Structure Plan Area

4.7.2 Odour and dust

Context

The Monash Structure Plan Area includes existing businesses and industrial areas with the potential to emit odour and dust.

The *Odour and Dust Technical Report* determines the potential of future land uses within the Monash Structure Plan Area that can be negatively impacted by odour and dust emissions associated with existing businesses and facilities. The report focuses on land use conflicts between sensitive land uses (residential buildings, childcare centres, hospitals and aged care facilities) and industrial land uses.

The report assesses existing businesses and facilities within the Structure Plan Area and a 1-kilometre radius from its boundary, with reference to relevant policy and legislation. Sites are identified that may be subject to a recommended separation distance as set by the EPA Victoria *Separation distance guideline (August 2024*), to determine if a proposed nearby land use or development is suitable.

The Monash Planning Scheme (clause 53.10) sets threshold distances for land uses or activities where as part of a planning permit application, assessment and referral to the EPA Victoria is required for particular new industrial land uses to determine if a proposed use or activity is appropriate.

Key findings

Existing businesses in the Monash Structure Plan Area with the potential to produce odours or dust include the Monash Recycling and Waste Centre and Monash SES. Sources outside the Structure Plan Area but within a 1-kilometre radius include PPG Industries and Inglewood Coffee Roasters. The locations of the businesses and their default recommended separation distances are shown in Figure 14.

Separation distances may apply to Monash SES and Inglewood Coffee Roasters due to the nature of their activities potentially posing an odour risk. Monash Recycling and Waste Centre (on the southern side of Ferntree Gully Road) has potential for dust emissions that require mitigation at the source.

A risk-based assessment was undertaken to identify whether a separation distance is required for the Monash SES and also for the Monash Recycling and Waste Centre. The assessment found a risk of potential dust emissions exists from both the Monash SES and the Monash Recycling and Waste Centre, which needs to be considered when land is developed for sensitive uses.

Given the small encroachment of PPG Industries into the Monash Structure Plan Area, the risk-based assessment found odour impacts would be minimal and so there are no land use constraints associated with this use.

No risk-based assessment for Inglewood Coffee Roasters was undertaken and the Draft Monash Structure Plan does not propose sensitive uses within the area of its location.

Implications for the Draft Monash Structure Plan

Section 5.3 ‘Enriching Community’ of the Draft Monash Structure Plan includes Objective 3 ‘Introduce targeted new housing to support the vibrancy of the precinct’, which includes a strategy to require new housing in Monash Central, the Employment Growth neighbourhood and along Blackburn Road to mitigate against off-site amenity impacts from industrial areas, including odour and dust.

Section 5.5 ‘Enhancing Place’ of the Draft Monash Structure Plan includes Objective 16 to ‘Ensure new buildings provide good amenity for occupants’, which includes general strategies to manage the impacts of adverse amenity, including odour or dust from industrial businesses, by ensuring development includes appropriate design measures.

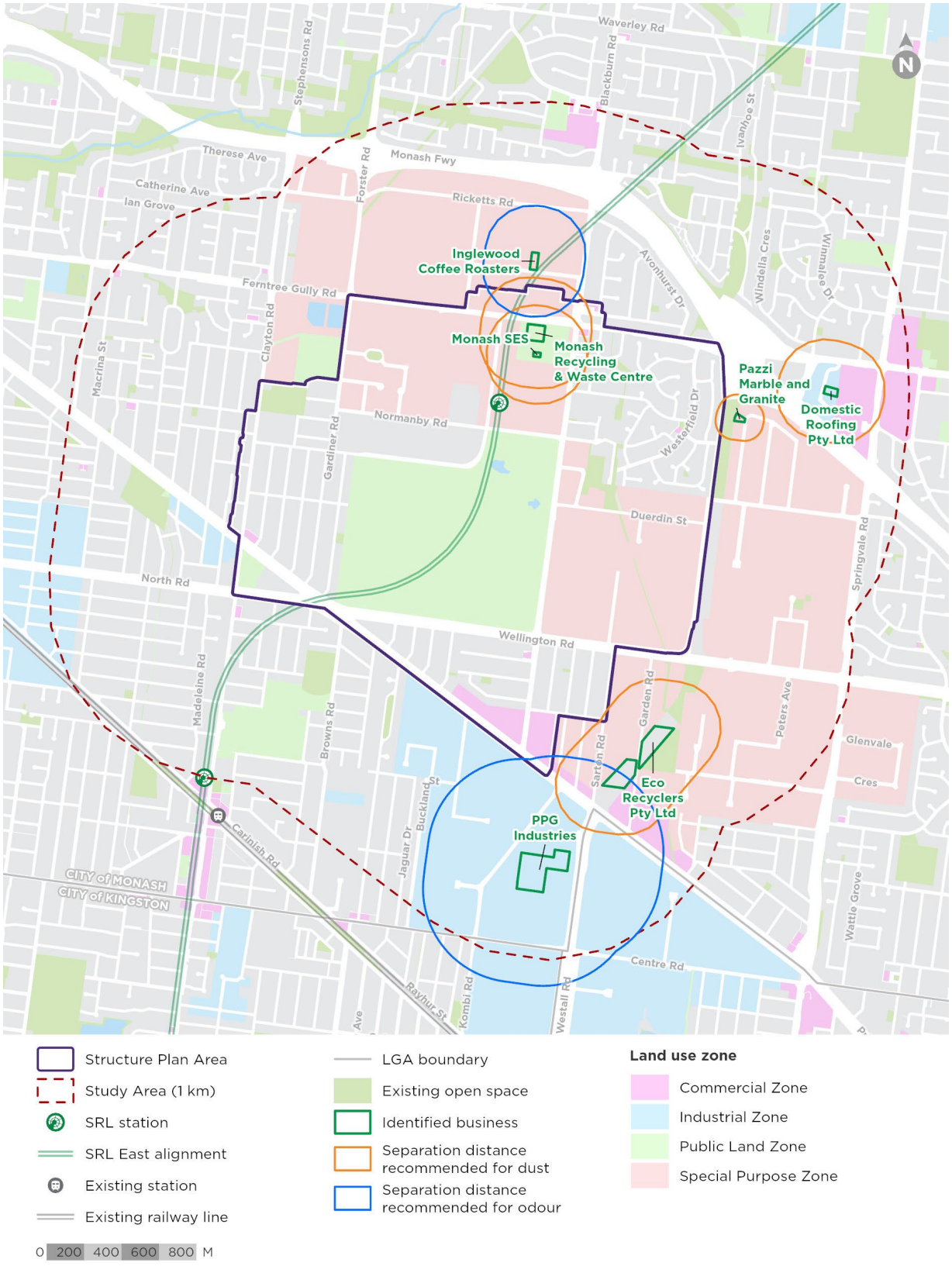


Figure 14 Monash Structure Plan Area separation distances

4.8. Aviation

Context

Victorian Heart Hospital (located within the Structure Plan Area) and Monash Medical Centre (located to the south in the Clayton Structure Plan Area) both include helipads. Moorabbin Airport is located approximately 6 kilometres to the south east of the Structure Plan Area.

The *Aviation and Airspace Technical Report* reviews aviation planning controls and international aviation standards that impact maximum development heights in the Structure Plan Area. The report makes recommendations for future maximum developable heights to avoid conflict with airport operations, including take-off and landing flightpaths.

Approval is required from the Australian Government's Department of Infrastructure, Transport, Regional Communications and the Arts to develop buildings higher than maximum development heights.

Key findings

Design and Development Overlay 17 (DDO17) applies to land immediately surrounding the Victorian Heart Hospital, and requires a permit to construct works that exceed 128.2 metres Australian Height Datum (AHD). DDO18 applies to an outer area, and requires a permit for works exceeding 138.2 metres AHD.

A small portion of the Structure Plan Area north of Dandenong Road is subject to DDO15, which relates to the Monash Medical Centre in the Structure Plan Area and requires a permit for works exceeding 102.6 metres AHD.

The DDOs are shown in Figure 15.

A permit application under any of the aviation protection DDOs would trigger a referral to the Department of Health as a determining referral authority.

Maximum development heights applying to the north-western portion of the Structure Plan Area range from metres 85 to 88 metres. The balance of the Structure Plan Area is subject to maximum development heights ranging from 90 to 170 metres.

Implications for the Draft Monash Structure Plan

Given the distance from the Structure Plan Area to Moorabbin Airport, preferred maximum building heights set out in the Draft Monash Structure Plan are well below the development height limitations.

Consultation with the Victorian Heart Hospital should be ongoing to identify any plans to develop or expand its air-based operations, which could require an amendment to DDO17 and DDO18.

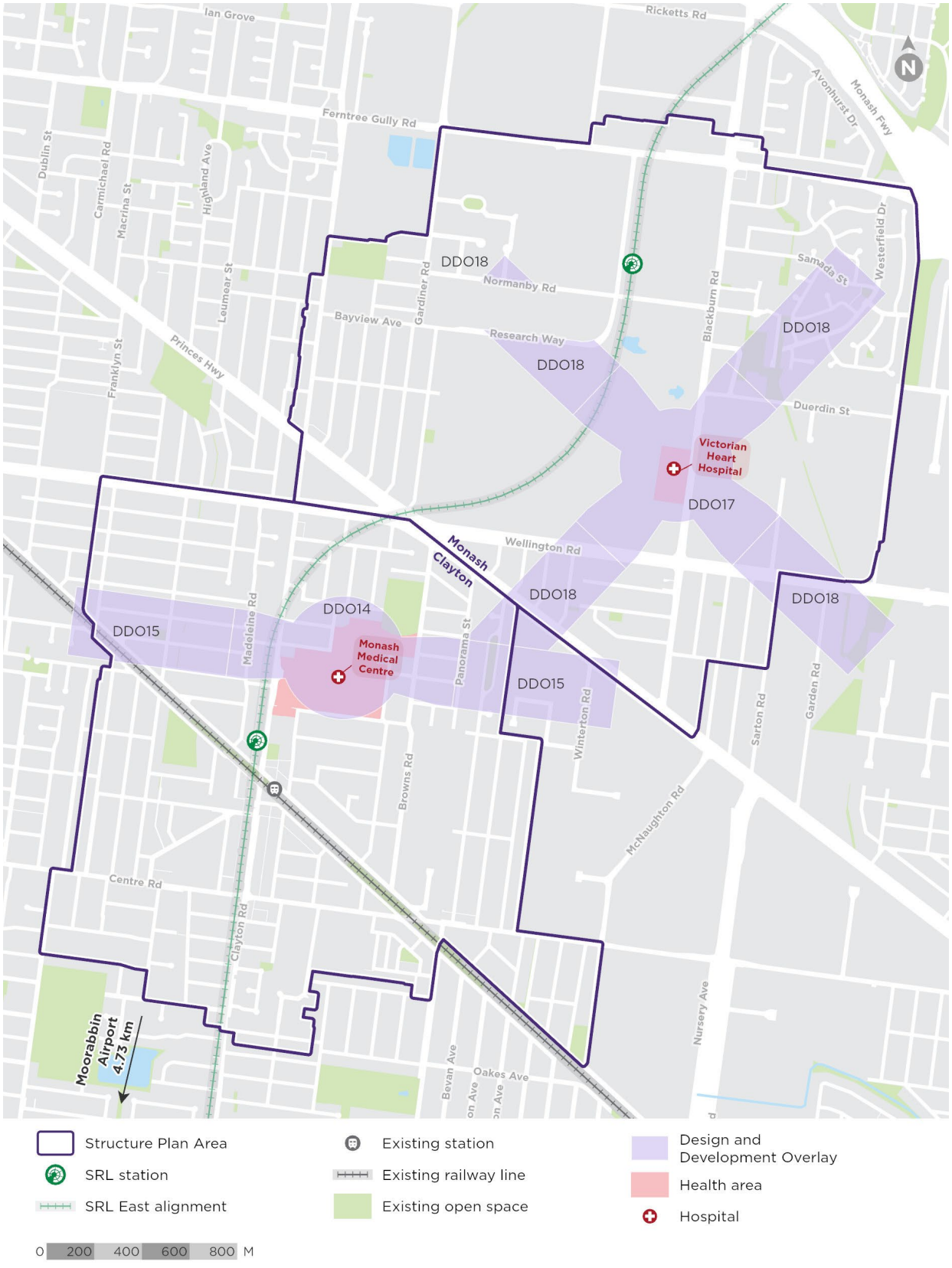


Figure 15 Clayton planning overlays – aviation impacts

4.9. Utilities and servicing

Context

The significant population growth and development anticipated within the Monash Structure Plan Area will impact existing utility services.

The *Utilities Servicing Technical Report* describes existing utility networks and identifies committed augmentation works, anticipated future capacity, and existing considerations for land use and development adjacent to utility assets within the Structure Plan Area.

The report outlines anticipated utility service upgrades for potable (drinking) water, recycled water, sewer, electricity, gas and telecommunications to support population growth in the Monash Structure Plan Area.

Key findings

Consultations with utility service providers identified some augmentation requirements and asset capacity constraints. However, no significant utility service issues were identified. Development within the Monash Structure Plan Area should be able to be appropriately serviced and utility service providers will continue to review and upgrade their infrastructure to meet future demand.

Upgrades are required to Yarra Valley Water potable water trunk mains, the Notting Hill Reservoir Pump Station and Storage Tanks. An investigation into the feasibility of a recycled water network (for non-potable uses such as toilets, laundry and irrigation) is underway.

Augmentations are required to Yarra Valley Water's sewer infrastructure along the Monash University and the Mile Creek Branch Sewers to increase capacity.

The nature of the trunk and reticulation works are unknown. Upgrade solutions and opportunities will be investigated and confirmed by Yarra Valley Water as part of their longer-term planning and as development proposals provide more certainty on timing and demand.

Parts of the Monash Structure Plan Area are near the existing high-pressure gas mains and will likely be subject to a Notification Area, requiring engagement with Multinet Gas and a potential Safety Management Study to identify potential public safety impacts from new development and major works.

Implications for the Draft Monash Structure Plan

There are some utility capacity constraints for the Monash Structure Plan Area but no significant implications for land use and development.

A Safety Management Study may be required during a permit application process to ensure compliance with safety standards for development near existing high-pressure gas mains.

5. Future directions

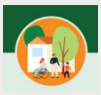
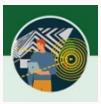
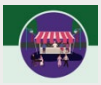
This section outlines the future directions to achieve the Vision for Monash and to support population and employment growth in the Monash Structure Plan Area.

Five themes underpin SRL East structure planning. Each theme is described in Table 2 and the key Technical Reports relevant to the theme are listed. The Technical Reports apply to multiple themes but are listed beside the theme considered most relevant.

This section focuses largely on how the technical assessments have informed development of the future directions and how this is reflected in the Draft Monash Structure Plan generally and within specific neighbourhoods. The future directions bring in considerations that are outside the technical assessments, balancing the full range of influences across the Structure Plan Area.

Appendix E provides a full list of all Technical Reports referenced in this Background Report.

Table 2 Draft Monash Structure Plan themes and key relevant Technical Reports

Draft Monash Structure Plan theme		Key relevant technical reports
	**Enriching Community** Creating healthy and inclusive neighbourhoods with more housing diversity and choice to support Monash's growing population	• *Housing Needs Assessment – Monash* • *Community Infrastructure Needs Assessment – Monash* • *Open Space Technical Report*
	**Boosting the Economy** Strengthening Monash as an innovation precinct of global significance and trigger new investment and jobs	• *Economic Profile Technical Report – Monash* • *Retail Assessment – Monash*
	**Enhancing Place** Providing a high standard of building design and vibrant public spaces that reflect Monash's identity and support collaboration, interaction and knowledge sharing	• *Urban Design Report – Monash* • *Wind Technical Report*
	**Better Connections** Delivering public transport, walking and cycling options to connect people to jobs, opportunities and experiences in the SRL East corridor and beyond	• *Transport Technical Report – Monash* • *Transport Technical Report – Appendix A Precinct Parking Plan – Monash*
	**Empowering Sustainability** Supporting Monash's leadership in responding to climate change, creating a circular economy and making the shift to zero net carbon emissions	• *Climate Response Plan – Monash* • *Integrated Water Management Strategy*

Strategic sites

Discussions in the following sections refer to strategic sites. Strategic sites are generally large, single-ownership sites with strong potential to help achieve the Vision for Monash.

Strategic sites within the Monash Structure Plan Area were identified using the following criteria:

- Complexity of issues – the potential for site issues to be resolved including land use, built form and movement challenges that require a bespoke planning control or process
- Opportunity for public benefit – the potential for a site to accommodate significant housing or employment growth and/or its ability to help achieve government policy objectives that would be lost within the Structure Plan Area if the site was not clearly identified as strategic
- Capacity and scale – the potential for a site to attract significant investment and generate substantial community benefit within the lifespan of the Monash Structure Plan (by 2041).

In addition to these criteria, the following factors were also reviewed when identifying strategic sites:

- Capacity for intensification, including the size of a site, the lack of sensitive interfaces, and the likelihood of its development within the lifespan of the Monash Structure Plan (by 2041)
- Ability to support open space and/or community infrastructure
- Distance from the SRL station and core of the Monash Structure Plan Area
- Whether ownership enables investment to be unlocked in the short to medium term
- Significant environmental or land use constraints (such as heritage or flooding)
- Draft built form and land use objectives contained in the Key Directions developed for the Monash Structure Plan Area
- Landowner intentions for the site (established through consultation).

To capture these opportunities, some strategic sites may be subject to a master planning process that would facilitate use and development that responds to the site's context, and manage site-specific and off-site impacts. The master planning process allows flexibility and provides for an integrated approach to land use, design response, public realm, movement and infrastructure.

Strategic sites within the Monash Structure Plan Area

The criteria and factors listed above were applied to identify the following strategic sites in Monash:

- **SRL Station Development Area** – opportunities supporting the SRL station and mixed-use development
- **CSIRO & CSIRO North –** intensification of existing research and education land uses supported
- **Australian Synchrotron** - State significant facility with potential for more collocated development
- **Monash Waste Transfer Station** – council-owned with potential for high density employment uses
- **326 Ferntree Gully Road** – warehouse within a concentration of health, education and research institutions
- **30 Henderson Road, Clayton –** large opportunity site located in the Health Innovation Neighbourhood
- **Monash University Clayton Campus, and significant landholdings** –intensification of existing research and education land uses supported:
  - 625 Blackburn Road, Notting Hill
  - 700 Blackburn Road, Notting Hill
  - 710 Blackburn Road, Clayton
  - 738 Blackburn Road, Clayton
  - 762 Blackburn Road, Clayton
  - 770 Blackburn Road, Clayton.

The locations of these strategic sites are shown in Figure 16.

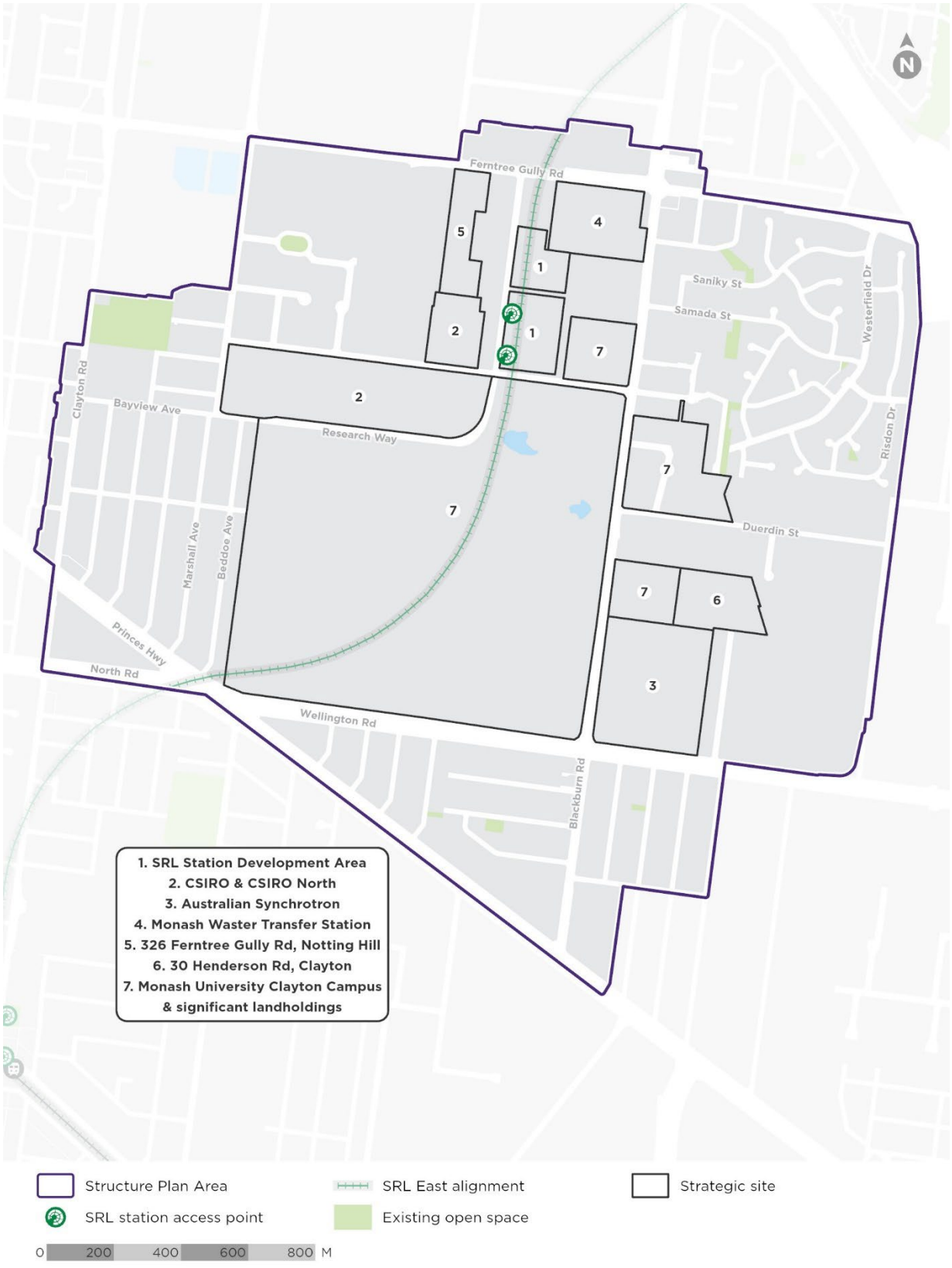


Figure 16 Strategic sites within the Monash Structure Plan Area

5.1. Enriching Community

The Vision for Monash envisages more diverse housing types, sizes and tenures to support a growing population with changing household needs and preferences. With population growth comes the need for well-located community facilities to meet the daily needs of residents and workers.

The *Housing Needs Assessment – Monash*, the *Community Infrastructure Needs Assessment – Monash* and the *Open Space Technical Report* informed the response in the Draft Monash Structure Plan to the Enriching Community theme, as summarised in the following sections.

5.1.1 Housing needs

Context

The SRL station at Monash will be a catalyst for higher density housing development with options to meet different needs and preferences.

The Draft Monash Structure Plan seeks to support Victoria to meet its housing targets while encouraging opportunities for more diverse and affordable housing options in highly accessible locations.

The *Housing Needs Assessment – Monash* projects the number of dwellings needed to accommodate the forecast population growth to 2041, and identifies the type and size of dwellings and the most suitable locations within the Structure Plan Area for higher density housing.

Dwelling definitions used by the Australian Bureau of Statistics (ABS) are adopted for consistency in data analysis: low density (stand-alone dwellings), medium density (attached dwellings up to two storeys) and high density (flats and apartments with three or more storeys).

Community engagement and stakeholder feedback also informed the approach to addressing housing needs outlined in the Draft Monash Structure Plan.

Key findings

The resident population within the Monash Structure Plan Area is projected to almost double from 10,000 people (ABS 202 Census) to 17,900 by 2041. More housing and more housing choices are needed to accommodate this growth.

A net extra 4,400 dwellings are needed within the Structure Plan Area by 2041. Most should be provided in high density developments (4,500) with a small number provided in medium density developments (20). A decline of low density dwellings is projected (-180) due to the demolition of older dwellings and their replacement with medium and high density development.

Approximately 220 new dwellings will be required each year to achieve this housing growth. This is above the rate of recent annual housing completions within the Structure Plan Area (140) but is considered achievable subject to market conditions.

The Structure Plan Area already has a higher proportion of high density housing (37 per cent) compared to Greater Melbourne (13 per cent) and medium density housing (34 per cent) compared to Greater Melbourne (22 per cent). This reflects the recent trend for higher density housing development in the area.

Monash's future housing provision will continue to respond to the predominance of a younger age bracket and student population attracted to the area by Monash University, with a greater proportion of lone and group households and people aged 15 to 24 years and 25 to 39 years compared to Greater Melbourne (ABS 2021 Census).

The number of key workers within the Structure Plan Area is estimated to reach almost 4,450 by 2041, particularly in the education and industrial areas. Around 38 per cent of key workers within the Structure Plan Area currently travel from outside the South East Region and it is anticipated that greater housing choice will be needed to accommodate future key workers. More higher density, purpose-built student accommodation will also be needed.

The predominance of students and white-collar workers means that demand for one and two bedroom apartments will continue. An increase from the currently low level of three or more-bedroom high density dwellings, although not critical to supporting population growth, could accommodate a broader range of resident groups. It is important to promote a broader range of apartment types, especially larger apartments, to accommodate different demographic cohorts.

More social and affordable housing for very low to moderate income earners is needed, with an estimated 1,650 households within the Structure Plan Area potentially eligible for social and affordable housing in 2041. The need for aged care and retirement dwellings is projected to decrease sharply with a decline in people aged 65+ years projected. This indicates that existing supply (220) can meet demand. However, the opportunity for new facilities should be explored to support a more diverse population.

The *Housing Needs Assessment – Monash* recommends facilitating higher density housing in areas with the best access to jobs, transport, services and amenities, including the Monash Central neighbourhood adjacent to the SRL station where residential and mixed-use commercial / retail development will be needed to support population growth. Monash University is projected to be a key driver of housing demand, with development recommended that caters to employees and students, including purpose-built student accommodation with various dwelling mix options. Residential development in the Monash Structure Plan Area will support the employment focus of the Monash National Employment and Innovation Cluster (NEIC).

The *Housing Needs Assessment – Monash* recommends that high density housing is facilitated along key movement corridors including Blackburn Road, Wellington Road and Princes Highway. Increasing the population within the Structure Plan Area provides an opportunity to support amenity and retail offerings that are also suitable for the area's workers. Lot consolidation is recommended in established residential areas to support higher density housing.

Future directions in the Draft Monash Structure Plan

Section 5.3 'Enriching Community' of the Draft Monash Structure Plan includes Objective 2 to 'Deliver more housing to support jobs growth'. It recommends that most of the 4,400 new dwellings needed within the Structure Plan Area are provided in high density developments.

Three levels of housing growth are identified – significant, high and medium. These housing growth levels provide guidance on where the 4,400 new dwellings are best distributed across the Structure Plan Area. The guidance considers the opportunities and constraints of the existing and future context, recommendations of the *Housing Needs Assessment – Monash* and the *Urban Design Report – Monash,* State and local planning policy, the Vision for Monash and community feedback. The housing growth levels are illustrated in Figure 17. The associated built form categories described in Section 5.3.1 *Urban design* are also illustrated.

Figure 17 Built form scale in the context of the Structure Plan Area

These growth levels direct the most significant housing growth to places within the Structure Plan Area with the best access to services, amenities and transport, strategic sites and where the preferred scale of future development is greater. This recognises that modest housing growth is more appropriate in established residential areas where the preferred scale of future development is relatively lower. The range of housing growth levels enables a variety of residential types and development locations to attract diverse developers and offer greater choice of housing for the community.

The different housing growth levels are shown in the 'Enriching community plan – Housing' in Figure 18 below. The housing growth levels and preferred built form are also reflected in the Neighbourhood Framework Plans provided in the Draft Monash Structure Plan. High housing growth is planned along key movement corridors including Blackburn Road, Wellington Road and Princes Highway and at strategic sites to increase housing supply in highly accessible locations. Medium housing growth is proposed within the Monash Central neighbourhood and part of the Employment Growth neighbourhood, close to the SRL station, as employment remains the land use focus in this area. Medium growth levels

are proposed elsewhere across the Structure Plan Area to enable a transition between significant and high housing growth areas and sensitive interfaces outside the Structure Plan Area.

Strategies are included in the Draft Monash Structure Plan to facilitate a variety of dwelling sizes and types, including new and emerging housing models to foster a diverse housing market. Academic, student and key worker housing is encouraged, and emerging housing models including built-to-rent are promoted to provide a range of housing options to support the future population to live, work and study locally.

State planning policy encourages more affordable housing throughout Victoria for very low to moderate income households. The Draft Monash Structure Plan seeks to help achieve this policy and meet the projected demand for more social and affordable housing within the Structure Plan Area by encouraging provision of affordable housing on strategic sites and in areas identified for significant and high housing growth in alignment with Victorian Government policy. Other strategies encourage innovative affordable housing models by the not-for-profit and community housing sector and social and affordable housing on government-owned land.

These directions are considered in the *Urban Design Report – Monash* (discussed in Section 5.3.1 below) and have guided the urban form proposed to maximise opportunities for achieving planned housing growth in preferred locations.

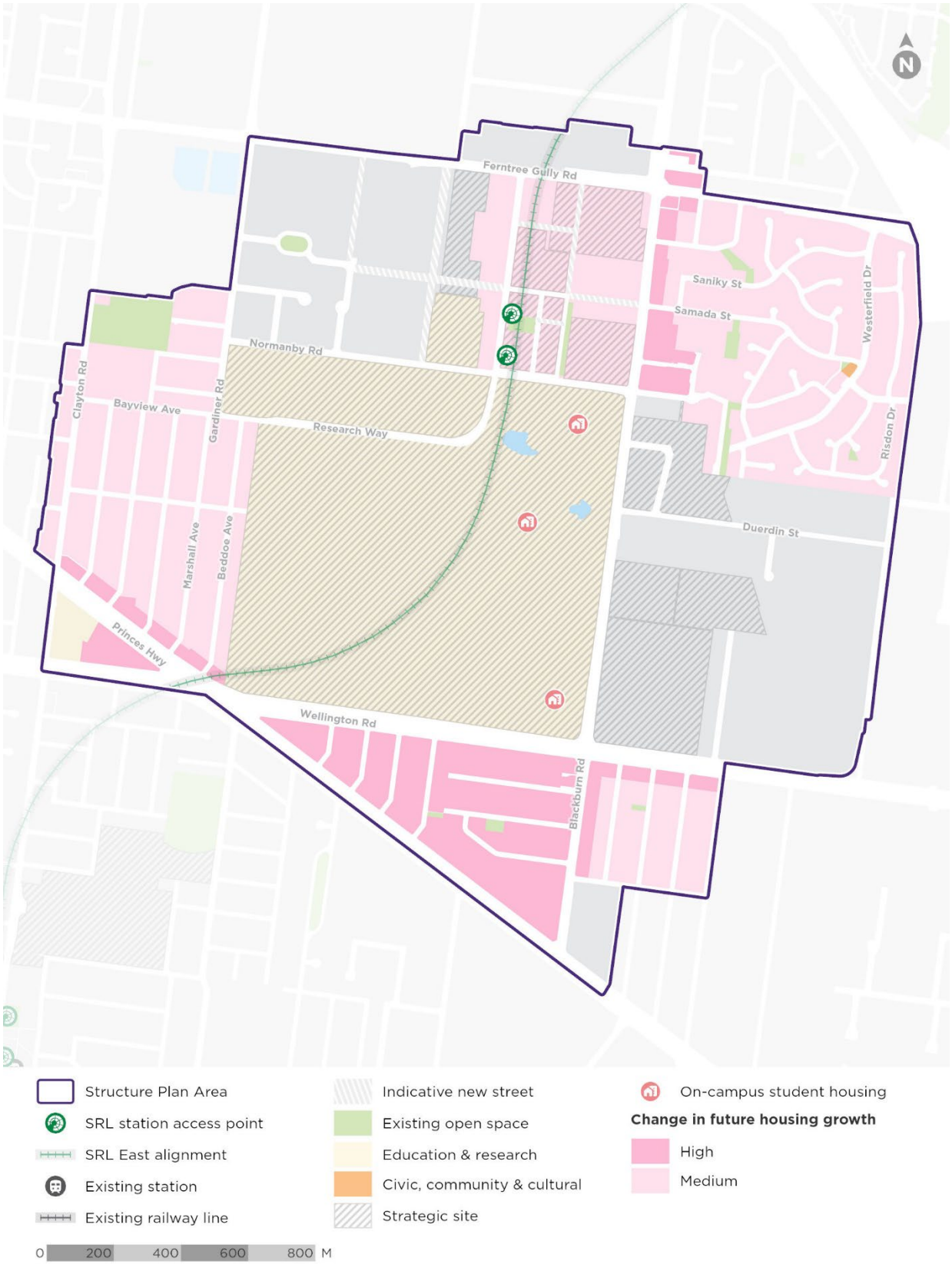


Figure 18 Enriching community plan – Housing

5.1.2 Community infrastructure needs

Context

Population growth within the Monash Structure Plan Area will increase demand on existing community infrastructure and create demand for more community infrastructure.

The *Community Infrastructure Needs Assessment – Monash* focuses on local community infrastructure (library, community hub, neighbourhood house, maternal child health, youth spaces, indoor and outdoor courts, and sports fields) within the Structure Plan Area and a wider 1.6-kilometre station radius (referred to as the '1.6-kilometre local catchment').

The quality of existing community infrastructure is assessed, based on accessibility, condition, capacity and growth potential, and trends in community infrastructure provision are described. Community infrastructure needs to 2041 are identified based on projected population growth. Consultations with the City of Monash informed the assessment.

The *Community Infrastructure Needs Assessment – Monash* makes recommendations for future community infrastructure provision within the Structure Plan Area to 2041. Potential sites for this infrastructure are identified for future detailed investigation.

Key findings

There are limited existing council community infrastructure types located within the Monash Structure Plan Area and 1.6-kilometre local catchment. These include a neighbourhood house and playing fields. The Monash University fields, multi-purpose facilities and indoor courts meet some of the local demand but are not always open to community use.

Trends in community infrastructure provision include a preference for larger integrated community hubs and district-scale sporting facilities over single-use stand-alone facilities and single sports fields. Integrated facilities offer operational and commercial efficiencies to better meet community needs and expectations.

The *Community Infrastructure Needs Assessment – Monash* acknowledges that finding the space for new facilities within a high density urban area is challenging, and that further work is required to confirm the preferred form, function and location of community infrastructure.

There are current and emerging needs for a library and community hub, and youth, creative and maternal child health spaces within the Monash Structure Plan Area that will increase to 2041. The *Community Infrastructure Needs Assessment – Monash* recommends planning for the following facilities to meet the demand generated by population growth within the Structure Plan Area:

- A new library, a new indoor sports facility and an expanded Clayton Community Centre in the neighbouring Clayton Structure Plan Area
- A new multi-purpose community hub to provide a range of community services and spaces, including a maternal and child health service and associated spaces to suit local community needs. A strategic location next to the SRL station within the Monash Central neighbourhood is identified as a candidate site to support a new facility
- Augmentation and upgrades to existing fields and outdoor tennis courts to extend playable hours and facilitation of shared use agreements with schools and other institutions with fields and courts.

Principles to guide future decisions on the location of new community infrastructure and further consideration of the candidate sites are provided in the *Community Infrastructure Needs Assessment – Monash*.

Future directions in the Draft Monash Structure Plan

Section 5.3 'Enriching Community' of the Draft Monash Structure Plan includes Objective 6 to 'Provide an enhanced and accessible network of community infrastructure that meets the needs of the future community'. This will be achieved through facilitating:

- Multi-purpose community facilities, collaborative workspaces and creative spaces in the Monash Structure Plan Area, with consideration to locating these within the Monash Central neighbourhood
- New maternal child health services co-located with other health and local community services
- Provision of new and enhanced sports, multi-purpose facilities and spaces within or accessible from the Structure Plan area that support community belonging and participation in sports, recreation, cultural and social activities
- Exploration of opportunities for greater community use of sporting facilities and other spaces at schools and private institutions.

Potential locations for new community infrastructure are included in the 'Enriching community plan – Open space and community infrastructure', shown in Figure 19 below, and the Neighbourhood Framework Plans in the Draft Monash Structure Plan. These are shown as 'opportunity areas' to enable flexibility and support further consideration of:

- The site selection principles for new community infrastructure in the Draft Monash Structure Plan (outlined below)
- The preferred future scale, form and function of the infrastructure
- Preferred service and infrastructure delivery models
- Community needs and preferences
- Opportunities pertaining to land ownership, development and funding.

Actions are included in the Draft Monash Structure Plan for SRLA to work collaboratively with Monash City Council to confirm the form and location of community facilities and deliver new and enhanced local community infrastructure.

The Draft Monash Structure Plan also includes strategies and actions to ensure that kindergarten and government primary and secondary school capacity meets the future needs of the community in Monash and surrounding areas. This includes an action to monitor the need for new government secondary school provision and monitor and respond to the need for new and/or expanded public, not-for-profit and for-profit kindergarten provision.

Site selection

The following site selection principles will assist in identifying sites suitable for new community infrastructure (shown as 'opportunity areas' in Figure 19):

- New sites are locally accessible to maximise walking, riding and public transport networks that foster healthy communities
- Sites are located in an activated area, where other community infrastructure, retail or amenities are provided
- A site contributes to the network of local community infrastructure
- A site has capacity to be flexible to meet changing needs over time
- A site has, or is anticipated to have, potential to be available and developable for community infrastructure within the structure planning period (to 2041)
- Council-owned land should be the priority sites for new community infrastructure, followed by State-owned land. Co-locating new community infrastructure with existing infrastructure is encouraged. Purchasing land should be considered where other options have been excluded.

5.1.3 Open space

Context

Population growth within the Monash Structure Plan Area will increase demand on public open space. In higher density urban environments, access to high-quality public open space is important for supporting recreational use and activity and for providing a diversity of recreational opportunities. Public open space is also important to the amenity of an area.

The *Open Space Technical Report* assesses the existing provision and accessibility of open space within the Structure Plan Area and the wider 1.6-kilometre station radius. The report makes recommendations for increasing or enhancing public open space and pedestrian links within the Structure Plan Area, primarily utilising *access* (400-metre walkable access) and *quality* benchmarks in its assessment, with the *quantum* of open space (square metre per person with the Structure Plan Area) used as a secondary indicator.

Key findings

There are currently 10 public open spaces in the Monash Structure Plan Area with a combined area of more than 53,000 m^2. These open spaces are primarily owned by Monash City Council and include a number of scattered smaller open spaces, with Carlson Reserve (sports park) comprising the largest area.

Two new open spaces are planned for the Structure Plan Area as part of the SRL station at Monash.

The Monash Structure Plan Area has a relatively low amount of public open space, with large gap areas in 400-metre walkable access, mainly due to the size of the Monash University campus and industrial / employment estates to the north and east which create barriers. Public open space within the Structure Plan Area is distributed unevenly, with most space located on its edges, partly due to the central location of the Monash University campus.

While the Monash University campus has extensive green outdoor spaces, these are restricted and not always available to the general community. More public open spaces (including several large parks) and restricted public open spaces (such as schools and institutions) are located beyond 400-metre walkable access but are within or just beyond the 1.6-kilometre station radius, so still accessible.

Three areas of the Structure Plan Area do not currently have 400-metre walkable access to public open space: most of the north of the Structure Plan Area (including Ferntree Business Park); areas in the vicinity of the Australian Synchrotron, Victorian Heart Hospital and Monash University; and a range of industrial buildings and several blocks of residential land on the western edge of Monash University.

Around half of existing public open spaces within the Structure Plan Area are considered to be low-quality. Enhancements are recommended to Arnott Street Reserve, Akuna Avenue Linear Reserve and Berrydale Court Reserve as a priority, combined with the progressive enhancement of other lower-quality spaces, to meet future needs for quality open space.

Recommendations of the *Open Space Technical Report* aim to improve accessibility to high-quality open space through new open spaces, new pedestrian links and enhancements to broaden the diversity and use of existing open space, optimising the function and value to residents, workers and visitors.

The recommendations include:

- Nine new public open spaces to address gaps in 400-metre walkable access
- Three public open spaces proposed for priority quality enhancement
- Five new pedestrian links to improve permeability and access to existing public open space
- Consideration of opportunities to increase public access and restricted access to open space at Monash University and Clayton North Primary School.

Delivery of the planned and recommended new open spaces and pedestrian links would increase the proportion of households within the Structure Plan Area with 400-metre walkable access to public open space to 93 per cent, with 72 per cent having 200-metre walkable access to public open space in the highest density areas.

The public open space provision ratio (m^2 per person) was assessed for the projected Structure Plan Area population and wider 1.6-kilometre station radius to 2041. With the additional population and the recommended open spaces, the current 5 m^2 of open space per person within the Structure Plan Area is projected to drop to 4.5 m^2 per person by 2041. However, if the assessment includes public open space within the wider 1.6-kilometre station radius, this increases to 9 m^2 per person. This reflects the presence of existing open spaces on the edge of the Structure Plan Area that are accessible.

With the planned and recommended new and enhanced public open spaces and pedestrian links, the Structure Plan Area will provide a suitably accessible, quality and diverse open space network to support the future population.

Future directions in the Draft Monash Structure Plan

Section 5.3 ‘Enriching Community’ of the Draft Monash Structure Plan includes Objective 7 to ‘Create a connected and accessible open space network for those who live and work in Monash’.

The focus of the Draft Monash Structure Plan is to support 400-metre walkable access to quality public open space for the majority of households and greater open space accessibility in higher density areas through better connections and new high-quality open spaces.

Improving the quality and function of existing open space is a key strategy in providing for future communities. Providing greater diversity of function will enable the spaces to be utilised effectively and meet the needs of more people.

The Draft Monash Structure Plan includes strategies and actions to facilitate and enhance open space. It also includes Neighbourhood Framework Plans that support greater diversity and use of open space, identify opportunities for underutilised land to be used for open space on a temporary and permanent basis, and maximise open space provision on large redevelopment sites. These are shown on the ‘Enriching community plan – Open Space and community infrastructure’ in Figure 19 below and include:

- Nominated potential future key links and safe crossing points on arterial roads to improve access to existing and new open spaces, including linking existing public open space in Notting Hill

- Supporting Monash City Council to undertake quality improvements to existing open spaces to enhance their capacity and use, including Akuna Avenue Linear Reserve, Arnott Street Reserve and Berrydale Court Reserve
- Identification of investigation areas for potential new open space locations. Future options are to be considered using the site selection principles for new open space identified in the Draft Monash Structure Plan (outlined below).

Section 5.3 'Enriching Community' and Section 5.6 'Better Connections' of the Draft Monash Structure Plan address the potential of the Mile Creek corridor to create a linear park connecting the broader eastern precinct. The drainage corridor currently makes a mixed contribution to open space (or is formed as a drain) and provides an opportunity to improve public open space and reduce gaps in walkable access within the Structure Plan Area.

The corridor has been the subject of SRLA engagement with Melbourne Water and will be the subject of further future investigations. Mile Creek is also addressed with reference to managing flood risk and integrated water management in the Section 5.7 'Empowering Sustainability' of the Draft Monash Structure Plan.

Site selection principles

The following site selection principles will assist in identifying sites suitable for new open space (shown as 'investigation areas' in Figure 19):

- **Land ownership** – suitability for conversion to public open space, rezoning and/or repurposing existing public land
- **Condition** – the physical condition of the site is suitable for use as public open space
- **Alignment** with intended open space classification / typology – primary function and catchment
- **Access** to public open space – improves 400-metre walkable access from anywhere within the Structure Plan Area, with a target of greater accessibility in higher density areas where possible
- **Accessibility onto the site** – more than one entry point, road frontages, topography, accessible for people of all abilities, available car parking off- and on street
- **Adjoining land use** – considers opportunities to enlarge existing public open spaces, opportunities for co-location with community facilities
- **Connectivity** – consideration of links and connections to existing open space, open space corridors, cycle routes
- **Size** – suitable for intended purpose and minimum dimensions.

Realising the investigation areas and pedestrian links

The investigation areas for new open spaces and the new pedestrian links are identified indicatively in the Draft Monash Structure Plan to enable further investigation of their optimal location. This will enable community consultation and further testing of the preferred future scale, form and function of the open spaces and links, including opportunities pertaining to land ownership, development and funding.

Actions are included in the Draft Monash Structure Plan for:

- Monash City Council and SRLA to partner to deliver the new open spaces and enhance existing open space where required
- SRLA to amend the Monash Planning Scheme to encourage delivery of the new pedestrian links.

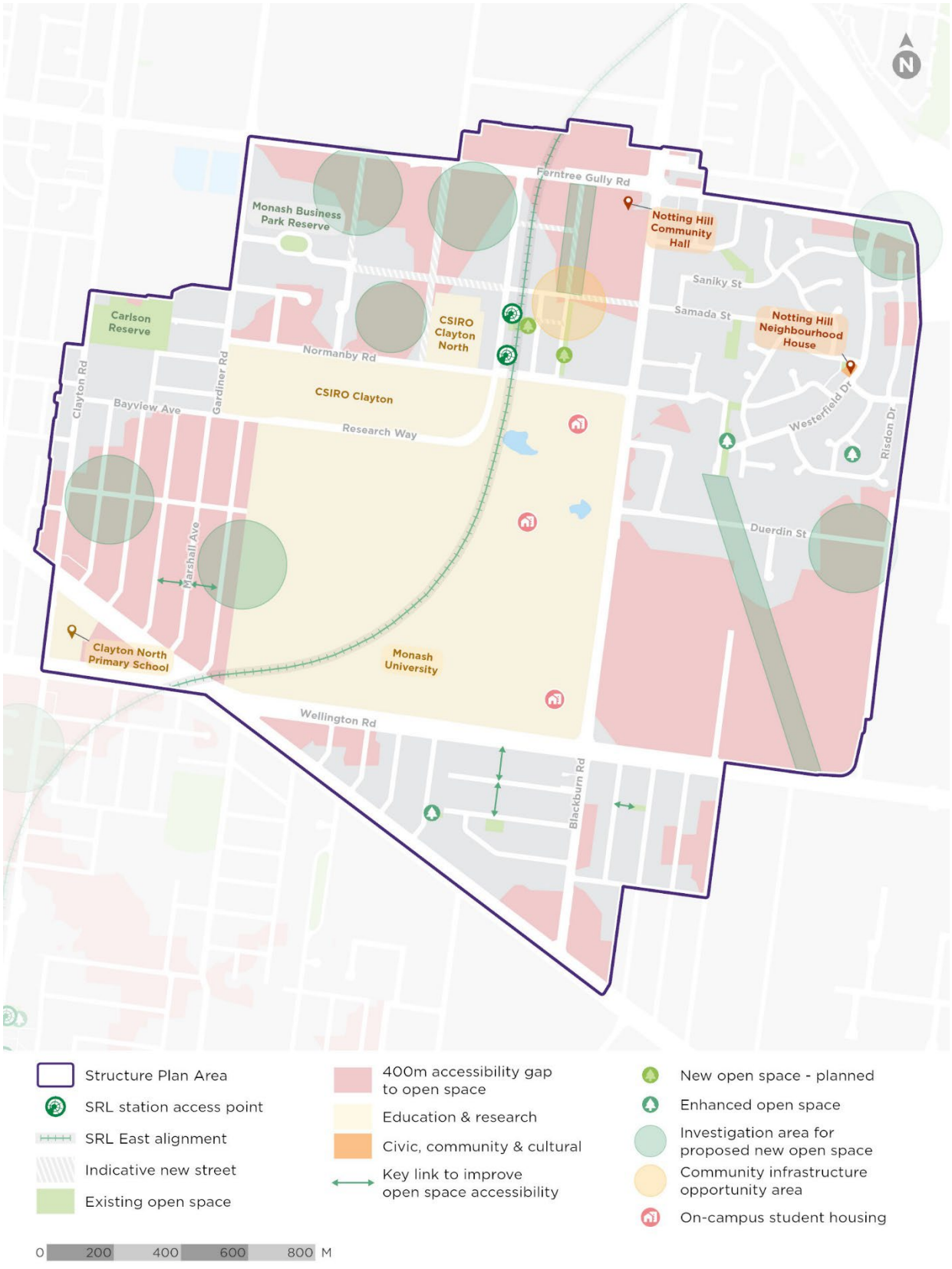


Figure 19 Enriching community plan – Open space and community infrastructure

5.2. Boosting the Economy

Monash is home to a variety of businesses and industries that contribute to its status as a key part of the Monash National Employment and Innovation Cluster (NEIC).

SRL East will catalyse future growth in these businesses and industries, creating an innovation precinct of global significance that generates new investment opportunities while strengthening existing institutions. This will support more high density knowledge-based jobs and boost the local Monash economy.

The *Economic Profile Technical Report – Monash* and the *Retail Assessment – Monash* informed the response in the Draft Monash Structure Plan to the Boosting the Economy theme, as summarised in the following sections.

5.2.1 Economic profile

Context

The Monash Structure Plan Area will continue to provide important employment opportunities for residents in the surrounding region, enhanced by the increased rail connectivity SRL East will provide.

The importance of Monash University to the education and research sectors will remain, while existing industrial areas such as the Ferntree Gully Road and Blackburn Road industrial areas will continue to be important regional employment generators.

The *Economic Profile Technical Report – Monash* reviews the current economic context and trends and outlook for the Structure Plan Area and provides direction for economic growth. Job growth sectors and the amount and type of additional employment floorspace needed by 2041 are identified, as well as possible locations for floorspace growth. An industrial land supply assessment establishes key directions for managing and benefiting from growth within the Structure Plan Area.

Key findings

The economy of Monash is based around Monash University and its student population, and knowledge-intensive industries. The Structure Plan Area contains strong employment anchors, including Monash University, the Victorian Heart Hospital, CSIRO, the Australian Synchrotron, the Monash Technology Precinct, Notting Hill business activities and M-City.

The worker population in the Monash Structure Plan Area is projected to increase from 21,900 (ABS 2021 Census) to 50,000 by 2041. An estimated 1,055,000 m^2 of additional floorspace will be needed to support this jobs growth. The greatest demand will be for office employment space (411,700 m^2).

Industrial land in the Monash Structure Plan Area incorporates two key industrial areas: Ferntree Gully Road industrial area and Blackburn Road industrial area. Combined, Monash's industrial areas currently support 11,500 jobs, with tenants servicing regional and intermediate catchments.

The industrial land supply assessment recommends:

- The Ferntree Gully Road industrial area provide a greater diversity of knowledge-intensive employment opportunities due to its excellent access to the core of the Structure Plan Area. This will facilitate a transition over time from lower-value industrial uses. The amalgamation of small lots around the core of the Structure Plan Area is recommended to enable larger development supported by high-quality amenities to appeal to international businesses, along with residential development and amenity for residents and workers in the evening
- The Blackburn Road industrial area support infill development to facilitate greater employment density and larger-scale office developments, subject to their capacity to manage interfaces with the Australian Synchrotron. This could also enable a transition along Henderson Road. The industrial area will support a lower density relative to the core of the Structure Plan Area, with potential future opportunities to increase density.

The *Economic Profile Technical Report – Monash* makes the following recommendations for future employment floorspace:

- The new centre of activity should be the focus for higher density office buildings near the SRL station and new amenities
- Office spaces could be located on infill sites around the Health Innovation neighbourhood at a lower scale relative to the town centre

- High-value industrial uses should locate in the Employment Growth neighbourhood, and lower-scale industrial uses should locate in the Health Innovation neighbourhood
- Health spaces should locate near the Victorian Heart Hospital, with smaller facilities located in the new centre of activity
- Future education floorspace should mainly be located on the Monash University Clayton campus, with mixed-use development with an education component in the new centre of activity
- Retail spaces at neighbourhood-scale should be located around the SRL station, providing links to the Blackburn Road industrial area and the residential areas
- Future accommodation should be located in the new centre of activity, including student accommodation
- Nominal public use floorspace should be located in and around the new centre of activity, or near residential areas.

Future directions in the Draft Monash Structure Plan

The Monash Structure Plan Area is characterised by businesses and industries that contribute to the Monash NEIC. These business and industries will be strengthened by creation of a new centre of activity near the SRL station, supported by attractive public spaces and infrastructure. Locations for employment priorities are shown on the Boosting the Economy Plan in Figure 20 below.

The Draft Monash Structure Plan encourages the grouping of high density, knowledge-intensive innovation jobs near prominent institutions and specialised manufacturing, and with access to the new SRL station. The Monash Central neighbourhood will facilitate growth of knowledge-based industries and higher density offices alongside amenities to support workers, students and residents. Areas surrounding the centre of activity are expected to transition into higher-value industrial and office uses as existing lower-value businesses re-locate.

Section 5.4 'Boosting the Economy' of the Draft Monash Structure Plan includes strategies to encourage jobs growth in defined neighbourhoods of the Structure Plan Area (the locations of these neighbourhoods are shown in Section 6 of the Draft Box Hill Structure Plan). The Draft Monash Structure Plan seeks to:

- Ensure that future planning for Monash includes the necessary infrastructure and amenities to attract research and development, as well as innovation businesses including incubators, start-ups, spin-offs and maturing businesses
- Encourage knowledge, education and research-based industries that are conducive to and support innovation, building on Monash's strengths in research, technology, education, health and advanced manufacturing
- Encourage new, high-quality and innovative development to strengthen the identity of the Health Innovation neighbourhood as part of an innovation precinct of global significance
- Intensify and diversify employment supporting uses, including purpose-built and biomedical laboratories, research and development, meeting, collaboration and office spaces
- Encourage a transition away from traditional industrial uses and service industries that serve a local catchment to knowledge sector uses that will support the evolution of this innovation precinct
- Leverage the proximity between Monash University, CSIRO and the Employment Growth neighbourhood to identify opportunities to strengthen physical and economic links between advanced manufacturing in the Employment Growth neighbourhood and medical and scientific research at Monash University and CSIRO.

5.2.2 Retail needs

Context

Residential and worker population growth within and surrounding the Monash Structure Plan Area will increase retail demand.

The *Retail Assessment – Monash* identifies the current type and amount (m^2) of retail floorspace within the Structure Plan Area, identifies future retail needs and floorspace required, and recommends retail types and locations to support amenity and economic development.

Key findings

The Monash Structure Plan Area currently accommodates approximately 37,000 m^2 of gross lettable area (GLA) of retail floorspace. There are limited retail options with a focus on serving on-site workers and students across the Structure Plan Area. M-City provides a large share of the total GLA with large retail anchors including a supermarket and discount department store. Monash University provides cafes and takeaway outlets and limited other tenancies. Small retail facilities are scattered through employment areas. A small retail strip fronts Princes Highway on the western edge of the Structure Plan Area.

Additional retail floorspace of up to 20,000 m^2 GLA will be needed within the Structure Plan Area by 2041 to provide a combined retail floorspace of up to 53,600 m^2 GLA.

The *Retail Assessment – Monash* recommends building on existing and emerging strengths of the Structure Plan Area to provide amenity and activity for local residents, workers and visitors, including:

- Accommodate additional retail floorspace growth of up to 20,000 m^2 GLA to 2041
- Ensure most additional retail space and supporting entertainment is directed to Monash Central to concentrate activity and provide amenity for residents and workers
- Provide worker and student retail amenity in key employment locations across the Structure Plan Area, particularly food and beverage amenity in office, industrial and education precincts
- Support the regeneration and modest expansion of the retail offer within other existing commercial nodes
- Consider approaches to limit the spread of peripheral retail space along transport corridors away from designated commercial centres
- Support actions to enhance the public realm that encourage shoppers to stay longer and visit more often.

Future directions in the Draft Monash Structure Plan

More people living and working in the Monash Structure Plan Area will increase demand for retail growth that considers existing retail assets and caters to local groups, including residents, workers and students.

Locations for commercial and mix-used priorities are shown on the 'Boosting the economy plan' in Figure 20 below.

Section 5.3 'Enriching Community' and Section 5.4 'Boosting the Economy' of the Draft Monash Structure Plan include strategies to encourage retail growth within the Structure Plan Area, including those relating to:

- Directing the majority of new retail floorspace to around the new SRL station at Monash
- Encouraging small-scale and complementary uses such as small-scale retail and hospitality and worker amenities (such as childcare and gyms) in other locations where they will not detract from the centre of activity or other commercial precincts
- Limiting retail (including food and beverage) outside Monash Central, except in the following circumstances:
  - A small offering as part of employment and mixed-use development that has a limited catchment
  - Intensification of existing retail nodes (including along Princes Highway, where the existing commercial strip shops are located in Clayton North, and at M-City)
- Exploring opportunities for complementary uses including residential, retail and hospitality that are conducive to a high amenity centre of activity but do not detract from the employment and innovation focus
- Supporting retail, hospitality and other active uses at ground-floor level of new developments in the town centre.

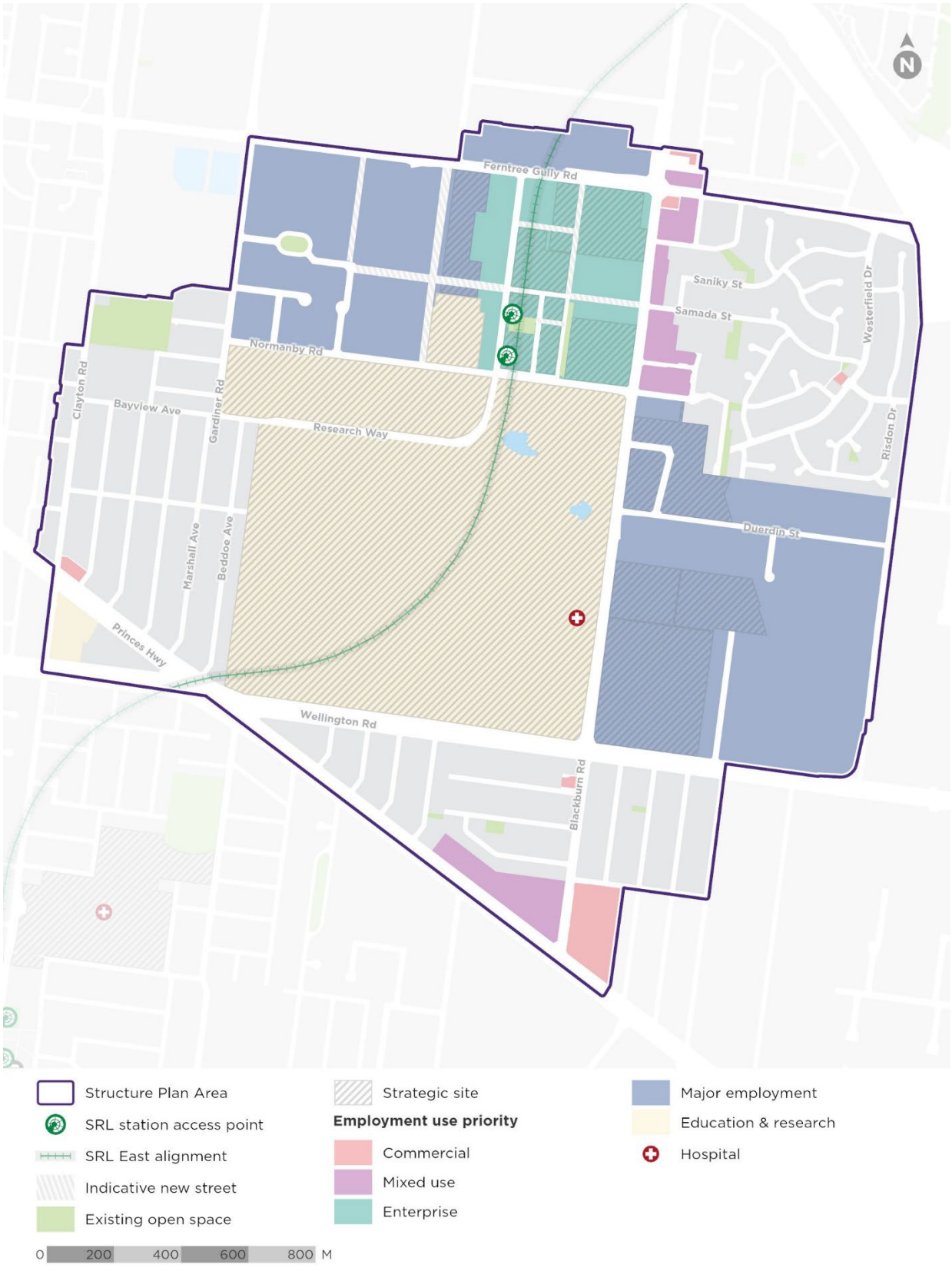


Figure 20 Boosting the economy plan

5.3. Enhancing Place

The Monash Structure Plan Area will need to evolve to accommodate the projected demand for new homes and employment floorspace.

New development will need to optimise the benefits of denser living and respond to the unique and distinct characteristics of Monash, supported by a well-connected, comfortable and welcoming public realm.

Increasing the number of people with better access to homes, jobs and services can improve environmental performance by reducing travel distances, which increases support for local businesses, reduces costs with better use of existing infrastructure, and offers a more vibrant environment that supports more diverse opportunities for cultural and recreational experiences.

Increasing density can present different challenges. The scale of density should respond to the local context and future role in supporting the Vision for Monash. This includes ensuring that appropriate building heights, street wall heights, building separation, setbacks and landscaping contribute to a green urban environment.

The *Urban Design Report – Monash* and the *Wind Technical Report* informed the response in the Draft Monash Structure Plan to the Enhancing Place theme, as summarised in the following sections.

The *Urban Design Report – Monash* also influenced place outcomes in the Draft Monash Structure Plan, including for streetscapes, transport, tree canopy and ecology.

Built form and public places creating a centre of activity

5.3.1 Urban design

Context

The new accessibility and connectivity opportunities delivered by SRL East means that the urban form of Monash will transform over coming decades. The *Urban Design Report – Monash* provides direction on where and how growth can be achieved, while maintaining Monash as an attractive place for people to live and work.

The report outlines urban design outcomes and recommendations for public realm, urban form and built form. These were guided by eight Design Directions as shown in Figure 21. The Design Directions and associated strategies informed the concurrent development of Urban Form, Public Realm and Built Form Frameworks, which are described further below.

Figure 21

Figure 21 *Urban Design Report – Monash* Design Directions

Key findings

Public realm

The *Urban Design Report – Monash* sets out a Public Realm Framework for the proposed future public realm and open space network as shown in

. The framework outlines outcomes and recommendations to support the important role of the public realm in ensuring that as the Structure Plan Area grows it is an inviting and attractive for walking, cycling, community life and activity that supports cooling, greening and urban biodiversity.

The Public Realm Framework identifies a finer-grain network of streets with improved streetscapes and new and improved open space to enhance greening, connectivity and recreational opportunities throughout the Structure Plan Area. This includes recommendations to improve connectivity between the SRL station and Monash University, and greater access to properties to allow businesses and residential uses to grow. A greater focus will be on establishing a safe and accessible street network with new and improved open space that caters for visitors, residents, students and workers to promote a positive public street life. The heart of the Structure Plan Area is proposed to be a vibrant hub of activity focused around a central open space, with an attractive and accessible public realm.

Growth in walking and cycling is supported by legible and safe connections that link the SRL station to Monash University, the Victorian Heart Hospital, key businesses and the communities in Notting Hill and Clayton North. An increased level of permeability in the street network, particularly to the north and east, allows for more access and routes through the area, promoting walking and cycling and more dispersed traffic. New and improved crossing points on main roads allow for more choice, minimising barriers to movement.

Improvements to the Mile Creek drain and the creation of a linked network of parks will connect with a green streets network to create a legible urban structure that is pleasant to move through.

Public Framework Plan

Urban form

The *Urban Design Report – Monash* sets out an Urban Form Framework for future urban form and land use attributes. As the Structure Plan Area transitions, the framework seeks to ensure the urban form supports high amenity environments and promotes diverse, liveable and productive neighbourhoods. To achieve this, the Urban Form framework generally adopts a mid-rise development pattern throughout the Structure Plan Area, with building heights ranging from four to 10 storeys. Immediately around the SRL station, high-rise buildings are proposed to take advantage of this well-connected location and to provide a catalyst for improved services and activity. This approach to the urban form is shown in Figure 22.

Figure 22 Distribution of built form with good urban design

The *Urban Design Report – Monash* encourages a range of development types across different parts of the Structure Plan Area to create places with distinct identifies, support legibility, and facilitate housing and business accommodation diversity.

Taller buildings are recommended within the commercial / retail core of the Structure Plan Area near the SRL station. The town centre character extends north to Ferntree Gully Road with Howley's Road as a major axis with high-rise and mid-rise development that supports the core with an activated and continuous street wall and separated towers for access to light and internal amenity. Taller podium-tower buildings will provide retail activity and high density employment and housing supporting a vibrant urban centre. Buildings will have an activated and continuous street wall to create a 'human scale' street-edge that supports good public realm amenity to create a street-oriented town centre. Above the podium, towers will be setback to maintain a sense of openness and sky views, allow solar access to the public realm, ensure reasonable amenity for tower occupants and maintain equitable development opportunities for neighbouring properties.

Support for employment growth is recommended in the areas to the north west of the core, and west of Monash University. Sites will develop into a mid-rise character with buildings of eight to 10 storeys within a landscape setting. Buildings with large floorplates are appropriate given the intended innovation, research, institutional and advanced manufacturing uses. Street walls should frame the public realm and provide a sense of openness and solar access to the street. Buildings will be setback from the street and sides to contribute to greening and tree canopy cover.

Wellington and Dandenong Roads are generally wider and carry public transport to provide a high level of accessibility to jobs and services. This greater road width enables taller, continuous, buildings to be accommodated without overwhelming the street. These areas will be lined with mid-rise apartment buildings with pockets of mixed-use. Buildings will be setback at the front and the rear for trees and landscaping.

A predominantly residential urban form is proposed between Wellington Road, Dandenong Road and Blackburn Road. Mid-rise apartments and mixed-use buildings will support a well-activated and strongly framed public realm with continuous and activated street walls with rear setbacks for canopy trees.

A more moderate level of housing growth is proposed in the residential areas of Clayton North and Notting Hill. Mid-rise apartments will mix with low rise townhouses in a garden setting, providing a diversity of housing styles for an increasing population as shown in Figure 23.

The development of four to six-storey apartments will rely on the amalgamation of two typical lots. Generous building setbacks, including upper levels setbacks above four storeys, will manage the change in scale. Importantly, building setbacks will retain and strengthen the leafy character by providing for 35 per cent deep soil planting for canopy trees in apartment developments, and between 20 to 25 per cent in townhouses. This urban form will offer a different housing choice to other parts of Monash that responds to the existing character.

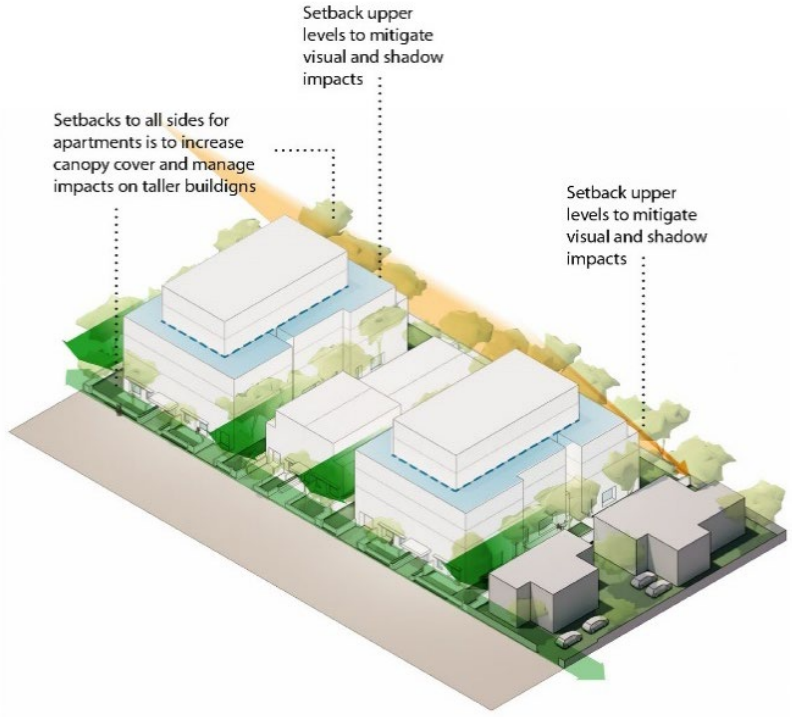


Figure 23 Mid-rise apartments and townhouse in garden settings

Built form

The *Urban Design Report – Monash* outlines a Built Form Framework to support an inviting public realm and ensure high-quality and responsive development.

An inviting public realm will be supported by the careful design of built form to consider matters such as building orientation, tower separation and provision of sunlight to the public realm, weather protection to buildings in active urban areas, and ensuring engaging building facades and active frontages in commercial and mixed-use areas to provide a sense of address to streets.

A high-quality and responsive built form will be achieved by ensuring reasonable internal amenity and equitable development opportunities. Upper levels will be setback from the street wall to maintain solar access and a sense of openness in the public realm, while rear setbacks will minimise shadow and visual bulk impacts on neighbouring properties. Heights will transition from higher to lower at interfaces with sensitive areas. Enhancing landscaping and canopy trees in development outside the core will maintain the leafy character of the Structure Plan Area by encouraging taller buildings to mark key locations and ensuring buildings with an interface to public open space provide passive surveillance, landscaped setbacks and an appealing legible composition.

Place-specific built form recommendations are outlined in further detail in the *Urban Design Report – Monash*.

Future directions in the Draft Monash Structure Plan

The design directions, strategies, outcomes and recommendations of the *Urban Design Report – Monash* informed the development of Section 5 ‘Strategic response’ and Section 6 ‘Neighbourhoods’ of the Draft Monash Structure Plan as shown in Figure 24.

While the findings of the *Urban Design Report – Monash* form the basis of the built-form approach, the Draft Monash Structure Plan was also informed by other considerations. This includes the projected demand for housing, retail and employment uses set out in the *Housing Needs Assessment - Monash*, *Economic Profile Technical Report - Monash* and *Retail Assessment - Monash* (outlined in Sections 5.1 and 5.2 of this Background Report) and stakeholder feedback received during the Key Directions consultation. The built form approach in the Draft Monash Structure Plan also responds to Victorian Government policy and the Vision for Monash, which seek to maximise change in highly accessible locations, particularly around the SRL station at Monash.

In key locations, the *Urban Design Report – Monash* recommends that surrounding development consider solar access to public realm. The Monash Structure Plan balances solar access considerations with the strategic role, desired activity, and function of the public realm network and the broader neighbourhood.

In some instances, the *Urban Design Report – Monash* may recommend indicative heights as a range, generally with a single storey and/or one metre tolerance. In these instances, the Draft Monash Structure Plan has generally adopted the upper limit of the range as the preferred maximum height.

In the Employment Growth neighbourhood, the enterprise area bounded by Ferntree Gully Road, Blackburn Road and the East-West Street is a strategically important area within the new mixed-use area of Monash and will support significant growth near the SRL station at Monash. The Draft Monash Structure Plan envisages heights of up to 18 storeys in this area. The *Urban Design Report – Monash* recommends preferred heights generally up to 17 storeys and opportunities for taller buildings of up to 20 storeys in key locations. The approach to heights in the Draft Monash Structure Plan generally aligns with the preferred height range outlined in the *Urban Design Report – Monash* while allowing flexibility to determine the appropriate location of taller built form as part of a master planning process.

The Draft Monash Structure Plan includes a preferred height of up to four storeys for a portion of the Notting Hill neighbourhood near the north east boundary of the Monash Structure Plan Area. This is lower compared to the *Urban Design Report – Monash* which states a preferred height of up to six storeys. A lower height limit takes into consideration the subdivision pattern, provides a transition in scale away from the SRL station and will have no material impact on the Draft Monash Hill Structure Plan's long-term housing growth aspirations. The proposed change is supported by stakeholder and community feedback.

Urban Design Report	How urban design findings were used in Structure Plans	Structure Plan
Public Realm		
Design Direction 1: Ensure streets are inviting places that support community life	Informed strategies and actions to establish a network of activity streets, boulevards, avenues and 'green streets'	ENHANCING PLACE **Objective 14**: Create a network of streets and public spaces that are vibrant, inviting and support growth
Design Direction 2: Promote active transport access	Informed the objective to 'create a legible and safe active transport network'	BETTER CONNECTIONS **Objective 20:** Create a legible and safe active transport network
Design Direction 3: Foster resilient urban environments	The tree canopy cover, landscape and water sensitive urban design focus is reflected in the 'Empowering sustainability' strategies and actions	EMPOWERING SUSTAINABILITY **Objective 27:** Facilitate a cool, green and biodiverse environment **Objective 28:** Embed Integrated Water Management in the Monash Structure Plan Area
Design Direction 4: Facilitate outdoor recreation	Recommendations for open space informed the objective and actions to 'create a connected and accessible open space network for those who live and work in Monash'.	ENRICHING COMMUNITY **Objective 7:** Create a connected and accessible open space network for those who live and work in Monash
Urban Form		
Design Directions 5: Provide for growth in a form that delivers high amenity environments	Recommendations to increase density throughout the Structure Plan Area in different forms that still deliver high amenity aligns with the objective to 'ensure the scale of built form is responsive to its context'	ENHANCING PLACE **Objective 13:** Ensure the scale of built form is responsive to its context
Design Directions 6: Establish diverse, liveable and productive neighbourhoods	The geographically aligned strategies and the design logic for each type of place are embedded in the Enhancing Place objectives. Influenced the Boosting the Economy and Enriching Community objectives; for example, land use facilitation for employment and appropriate new housing areas.	ENRICHING COMMUNITY **Objective 2:** Deliver more housing to support jobs growth BOOSTING THE ECONOMY **Various objectives**
Built Form		
Design Direction 7: Support an inviting public realm	Translated in the objective 'to ensure new development contributes positively to the public realm' through strategies that encourage a sense of address, provide active frontages and minimise overshadowing and weather impacts	ENHANCING PLACE **Objective 15:** Ensure new development contributes positively to the public realm
Design Direction 8: Ensure high-quality and responsive built form	The guidance for amenity, setback and transitions has been interpreted within the objective and strategies that consider building setbacks and separation, on-site amenity, off-site amenity impacts and equitable development for adjoining sites	ENHANCING PLACE **Objective 16:** Ensure new buildings provide good amenity for occupants

Section 6: Neighbourhoods

Figure 24 How urban design findings have been incorporated into the Draft Monash Structure Plan

5.3.2 Wind

Context

The *Urban Design Report – Monash* and the Vision for Monash propose moving from a predominantly low-scale environment (with some buildings of significant height within Monash University) to one with more multi-storey buildings.

The *Wind Technical Report* analyses existing wind conditions, as well as the future highly developed scenarios, in each Structure Plan Area. The report provides criteria for walking, standing and sitting comfort and safety, and makes recommendations to reduce wind within the Structure Plan Area.

Key findings

The increased scale of development will improve wind conditions overall for most of the Structure Plan Area, achieving a 'comfortable sitting environment.' This includes at Monash University where conditions will be greatly improved in the modelled scenario. Some small areas along Ferntree Gully Road and Wellington Road will experience increased winds but these will still provide comfortable walking environments.

In existing and forecast future wind conditions, safety exceedances are found at the first row of buildings on Ferntree Gully Road, Blackburn Road and Gardiner Road that exceed 40 metres high, and at the intersection of Howleys Road and Normanby Road.

Future directions in the Draft Monash Structure Plan

The *Wind Technical Report* recommends wind studies at the development application stage, depending on proposed building heights, to ensure future development does not create negative wind impacts to the public realm.

Safety exceedances identified near and around the SRL station can be mitigated by specific building designs such as applying setbacks on taller buildings and using wind screens. Chamfered or rounded corners should be considered on unshielded façades, particularly north-facing and west-facing.

Section 5.5 'Enhancing Place' of the Draft Monash Structure Plan includes strategies for new development and building design to minimise adverse wind impacts to allow for a safe and comfortable environment for future residents, workers and visitors, particularly in locations where walking or sitting will be encouraged.

5.4. Better Connections

The focus of the SRL station at Monash is the creation of a well-designed public transport interchange and an integrated active and public transport network.

Improved connections for pedestrians, cyclists and public transport will support this, particularly within the Monash Central neighbourhood where intensive new development is planned.

The *Transport Technical Report – Monash* and the *Precinct Parking Plan – Monash* informed the response in the Draft Monash Structure Plan to the Better Connections theme, as summarised in the following sections.

5.4.1 Transport

Context

The *Transport Technical Report – Monash* assesses how transport modes will respond to the forecast land use changes and increased transport demand within the Monash Structure Plan Area. The report assesses existing transport conditions within and at the periphery of the Structure Plan Area, and the impact of projected resident and worker population growth on the transport network.

The report makes infrastructure and non-infrastructure recommendations. Infrastructure recommendations focus on improving strategic and local corridors, optimising sustainable active and public transport networks to promote these modes while maintaining car access via the existing arterial road network. The non-infrastructure recommendations focus on policy and statutory planning initiatives to promote sustainable transport choices, and managing parking, kerbside activities and freight deliveries.

Key findings

Mode share

Most trips from, to and within the Monash Structure Plan Area are by private vehicles on a typical weekday (60 per cent), with 14 per cent by public transport and 26 per cent by active travel. By 2041, population and jobs growth combined with movements associated with the SRL station at Monash will see total trips from, to and within the Structure Plan Area grow from 18,200 today to 32,600 during a typical peak hour. If current travel practices continue, there will be some shift to sustainable modes but an additional 6,700 more car trips during the typical peak.

The *Transport Technical Report – Monash* identifies a target mode share to achieve a shift toward sustainable transport modes in Monash. Shifting short trips to more sustainable modes, supported by intensified land use close to public transport facilities, is critical to enabling this outcome. Growth in car trips can be accommodated on the existing road network (accounting for changes proposed as part of the SRL East rail works). Fifty per cent of the 32,600 trips that start, end or are wholly within the Structure Plan Area in 2041 are within Monash and surrounding suburbs (a 5-kilometre radius), highlighting the high number of short trips made to nearby services. Improved walking and cycling infrastructure will support the attractiveness of more sustainable transport modes for these trips.

The mode share projections show potential for Monash to accommodate a significant percentage of the growth in trips to 2041 by increasing the share of public transport and active transport trips in peak periods. The mode share projections are shown in Figure 25.

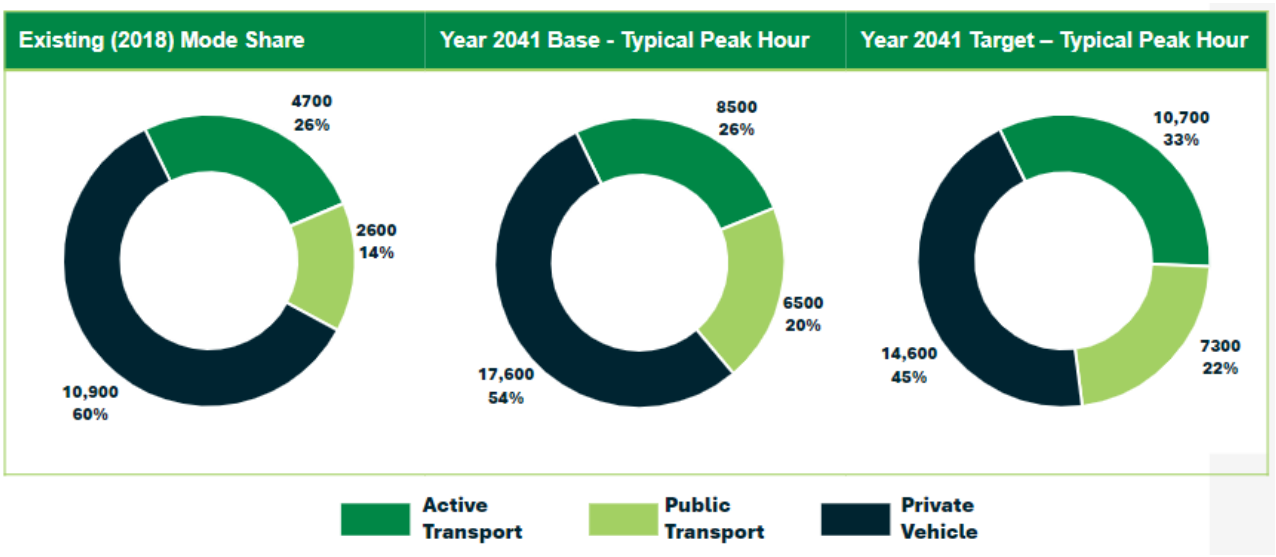


Figure 25 Mode share scenario projections, typical peak hour (average of AM / PM peak 1 hour)

Source: VITM

Mode share modelling approach

A comparison of the land use and transport characteristics of the SRL East Structure Plan Areas has been undertaken, using a score-based methodology, to estimate an appropriate modal share target for each. 'Transit score' is a patented measure of how well a location is served by public transit; 'walk score' measures the walkability of any address; and 'bike score' measures whether a location is good for cycling.

The Monash and Burwood Structure Plan Areas have the lowest walk scores, with no access to existing railway stations and little recent land use change. The Clayton, Cheltenham and Glen Waverley Structure Plan Areas have similar characteristics, with an existing railway station and adjacent bus interchange near existing activity centres. There is a similar walk score for all three Structure Plan Areas. The Box Hill Structure Plan Area has the highest transit score and is served by bus, rail and tram services centred around an activity centre that has undergone the largest scale of development uplift in the last 20 years.

Based on the above groupings, the following targets have been set to increase the sustainable transport mode share compared to the baseline scenario:

- The Burwood and Monash Structure Plan Areas have been set an increase of 20 per cent in sustainable transport reflecting the significant potential for change which is expected to occur closer to the opening of the SRL station. Of this 20 per cent increase, 75 per cent of trips are aimed to be shifted to active transport and 25 per cent to public transport.
- The Clayton, Cheltenham and Glen Waverley Structure Plan Areas have been set the highest increase of 25 per cent in sustainable transport because they have a more immediate potential for change. Of this 25 per cent increase, 75 per cent is allocated to people changing modes to active transport and 25 per cent to public transport.
- The Box Hill Structure Plan Area has been set the lowest increase of 15 per cent in sustainable transport as some mode shift has already occurred with development in recent years. Of this 15 per cent increase, 75 per cent is allocated to people changing modes to active transport and 25 per cent to public transport.

A high proportion of the projected growth in sustainable transport mode share is attributed to more active transport trips. This is due to the planned increase in the density and diversity of land uses in each Structure Plan Area, making walking and cycling more attraction options for short trips. This is supported by actions in each Structure Plan that focus on improving walking and cycling access within the Structure Plan Areas.

Transport network

The *Transport Technical Report – Monash* identifies the Draft Monash Structure Plan must focus on locations where active transport and public transport connectivity can improve, while maintaining general traffic and freight movements along key road networks.

Monash is not currently served by the metropolitan rail or tram network, with the existing closest station being Clayton Station located 2.6 kilometres to the south. The Monash University bus interchange and a network of bus routes connect residential areas, employment precincts and Monash University. A bus operates between the existing Huntingdale Station and the Monash University.

The bus network has gaps across residential and employment areas north of Monash University, and other areas also experience low-quality infrastructure and services, making buses uncompetitive with private vehicles.

Monash caters to a significant level of through-traffic, with the existing road network prioritising general and freight traffic, leading to high congestion, interrupted flows and modal conflicts, such as along Blackburn Road, Ferntree Gully Road, Wellington Road, Clayton Road and Princes Highway / Dandenong Road. Pedestrian accessibility is interrupted by barriers to movement including major freeways and highways and large industrial and employment blocks. Pedestrians and cyclists experience limited infrastructure, low amenity routes, traffic conflicts, long wait times and long trip distances.

The SRL station at Monash will form a key public transport interchange.

Critical transport links

A network of new transport links is needed to support development within the Monash Structure Plan Area, and the most critical links will form the basis for a new street grid. This grid will realise the Vision for Monash by dramatically improving accessibility to the SRL station for people walking, cycling and taking public transport. It will also enable a greater intensity of development by expanding the local street network for general traffic and servicing access.

This new grid across the Employment Growth and Monash Central neighbourhoods will support the integrated transport, land use and urban design outcomes set in the Draft Monash Structure Plan. Master planning of the most intensified area of these neighbourhoods is the preferred approach to realising these links, enabling further testing and refinement of designs, and working in partnership with the City of Monash and landowners across the master plan area.

Future directions in the Draft Monash Structure Plan

The transport ambition for the Monash Structure Plan Area is to encourage people to choose more active and public transport trips over the private car.

Section 5.6 'Better Connections' of the Draft Monash Structure Plan includes strategies to:

- Connect and integrate multi-modal transport options, facilitating a network of strategic and local transport corridors
- Prioritise walking and cycling to connect key destinations and broader regional strategic transport routes
- Limit the supply of car parking in new developments to encourage more people to reduce their private vehicle use in favour of public transport and active transport
- Locate the highest density housing and employment close to high-quality walking, cycling and public transport routes
- Facilitate the establishment of an urban street network to support the anticipated growth and transformation, as well as improve connectivity
- Improve pedestrian permeability and wayfinding to better connect the SRL station and public transport interchange, Monash University Clayton campus bus interchange and existing bus infrastructure
- Direct private vehicles and freight to the strategic traffic and freight network, away from priority walking and cycling areas and off local streets to protect local streets and residential neighbourhoods as lower-speed and safe streets.

These outcomes will improve street and public space activation, providing greater support for local businesses and the local economy.

Section 5.6 'Better Connections' of the Draft Monash Structure Plan includes Objective 18 to 'Create a new, highly walkable and coordinated street network at the centre of the Structure Plan Area'. The objective includes strategies to guide a principle-based approach to providing new streets and links across the Employment Growth and Monash Central neighbourhoods.

A network of corridors

The new transport network in Monash will establish or reinforce multimodal movement corridors within the Structure Plan Area, which are defined by the following hierarchy:

- **Strategic corridors** provide high-quality connections that prioritise the movement of one or more transport modes. They provide safer and more direct routes for large volume trips to, from and through Monash, connecting to key destinations
- **Local corridors** provide attractive connections for moving within Monash to local destinations and connect to strategic corridors.

A variety of modes of transport are catered for within this hierarchy, including walking, cycling, traffic and public transport so that residents can meet their daily needs in an easy, equitable and sustainable manner.

These hierarchies are shown on the 'Better connections plans' for active transport, public transport and general freight and traffic in Figure 26 to Figure 28.

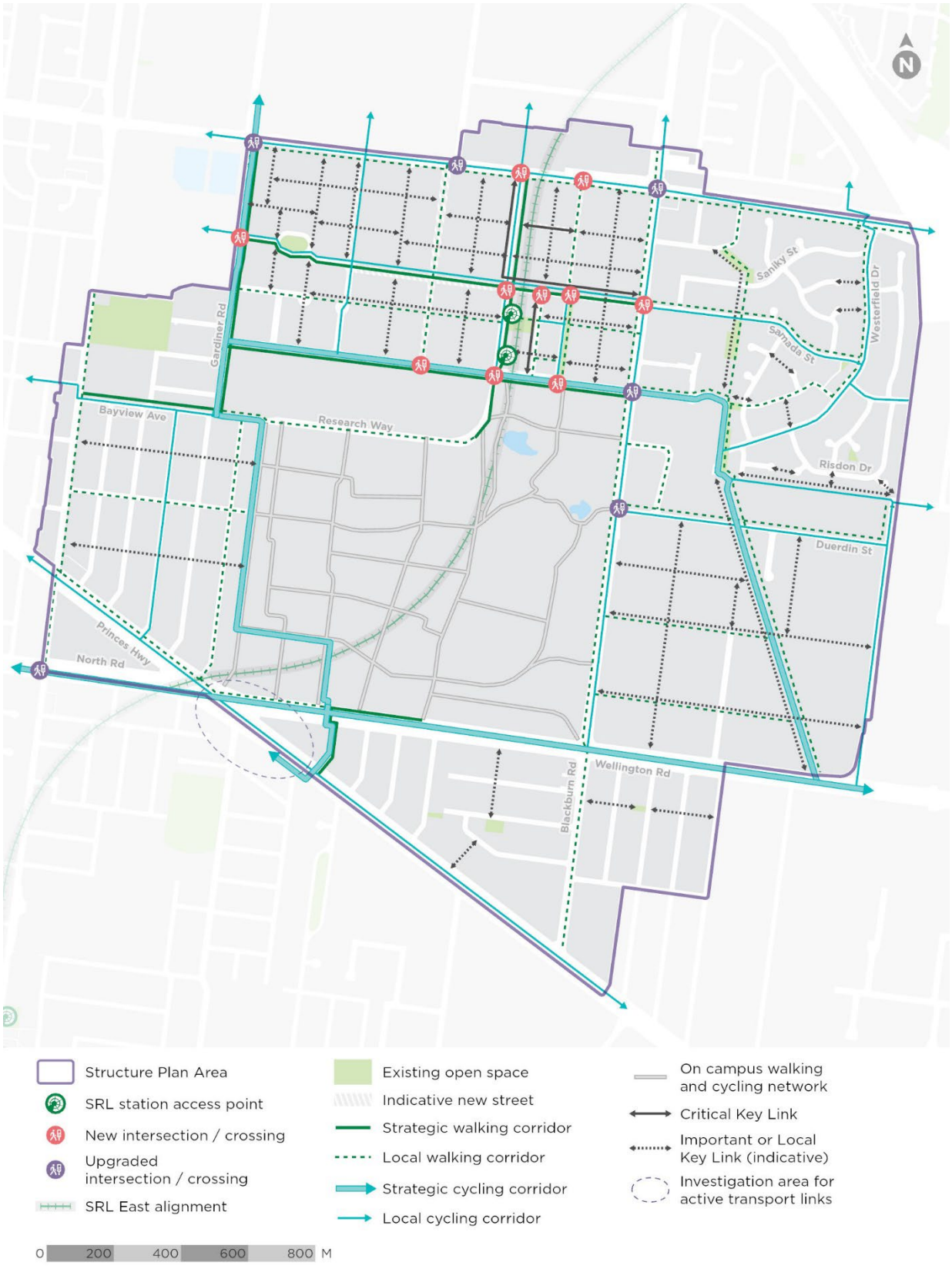


Figure 26 Better connections plan – Active transport

Figure 27 Better connections plan – Public transport

Figure 28 Better connections plan – General traffic and freight

5.4.2 Parking

Context

Resident and worker population growth within the Monash Structure Plan Area will increase pressure on car parking facilities.

The *Precinct Parking Plan – Monash* (prepared as an appendix to the *Transport Technical Report – Monash*) assesses existing car and bicycle parking conditions within the Monash Structure Plan Area and makes recommendations for an integrated approach to managing parking supply and demand.

Tools and strategies to encourage active and public transport trips are described, including two new parking overlays for the Structure Plan Area.

Maximum car parking and minimum bicycle parking recommendations focus on areas with high accessibility and where higher density development is planned around the SRL station (Parking Overlay Area A).

A mix of minimum and maximum car parking rates are proposed for the rest of the Structure Plan Area (Parking Overlay Area B).

Key findings

Parking provision

Parking facilities are currently constrained in the Monash Structure Plan Area.

A modest number of on-street and off-street car parking spaces are provided, with a high concentration within Monash University and industrial and business parks. Residential areas predominantly provide restricted street parking. Lack of public transport access and the availability of parking at the university attracts a significant number of car trips in Monash.

Public bicycle parking provision within the Monash Structure Plan Area is moderately low. There is abundant bicycle parking at Monash University but limited availability in industrial and business parks, or bicycle parking is provided in areas with perceived security and safety risks. Ground-level car parking facilities such as kerbside parking impact comfortable bicycle access along key roadways. There are also limited end-of-trip facilities for cyclists.

The average residential car ownership rate within the Structure Plan Area is generally equal to or less than the car parking provision requirements of the Monash Planning Scheme. Continued provision of car parking at current rates will increase congestion and the inefficient use of space. Improving cycling infrastructure will promote a shift from private vehicles and reduce car parking demand.

Parking rates

The *Precinct Parking Plan – Monash* recommends the introduction of two Parking Overlay Areas (zones) across the Structure Plan Area as shown in Figure 29.

Parking Overlay Area A encompasses areas with high accessibility where the highest density development is planned. Maximum car parking rates are proposed here to enable developments to respond to land use changes while accessibility improves over time. While maximum car parking rates require consideration of the impact on on-street parking, discretionary controls to exceed the maximum rate in appropriate locations can be implemented.

The rest of the Structure Plan Area covered by Parking Overlay Area B is generally further from higher capacity public transport corridors or immediate access to services, and in areas of proposed lower built form, often where there is existing single-lot residential development.

Accordingly, Parking Overlay Area B maintains minimum parking provision rates but proposes to introduce maximum parking rates for residential uses to help manage growth in parking over time. The maximum rates for residential dwellings in Area B are higher than in Area A reflecting the difference in accessibility. The minimum parking rates are maintained in recognition that people will likely continue to rely on private vehicles to access areas covered by Parking Overlay Area B as they are further from stations and other public transport and away from the focus for highest density housing. However, making provision for residential maximum parking rates within Parking Overlay Area B provides some limitation to carparking supply, reflecting a long-term mode share shift across the entire Structure Plan Area in time, particularly once the SRL station opens.

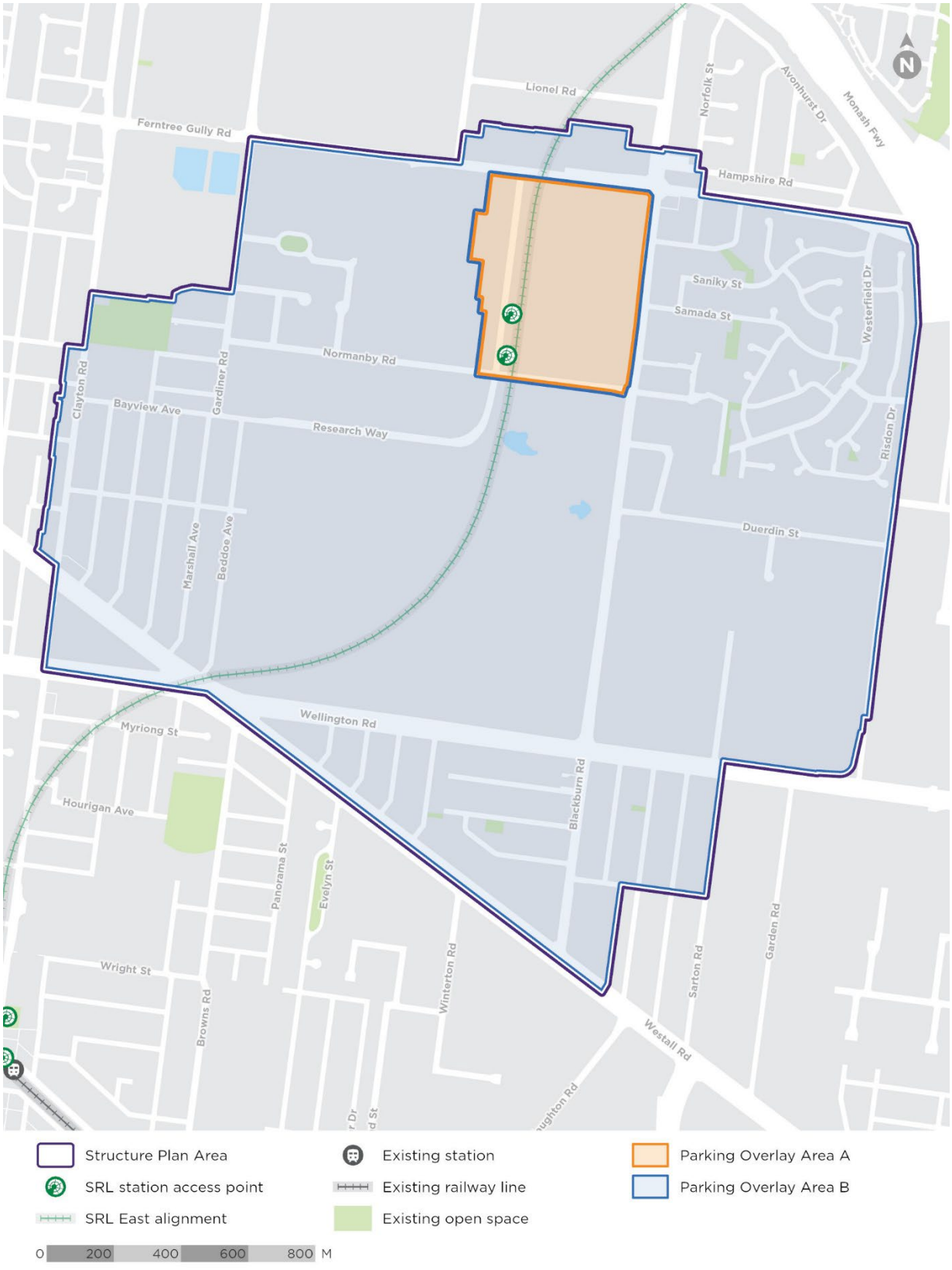


Figure 29 Recommended Monash parking overlay areas

Maximum parking rates will require consideration of on-street parking management, kerbside management and freight and loading controls in consultation with the City of Monash and major landowners (such as Monash University). On-street parking management should involve parking restrictions, including short-term, paid and permit provision spaces, centralisation of loading facilities and greater supply of *Disability Discrimination Act 1999* (Cth) (DDA) compliant parking spaces.

The approach to setting parking rates is different for residential and commercial and other uses because of the different evidence bases available to underpin the proposed rates. SRLA has used evidence consistent with standard industry practice. For residential dwellings, this means the focus has been on car ownership rates using Australian Bureau of Statistics (ABS) Census data. Lower current car ownership is an indication that future car parking rates can be lower. For commercial and other uses, parking rates are linked to walk and transit scores that assess the accessibility of places to alternative transport options or other services, indicating reduced demand for parking.

The *Precinct Parking Plan – Monash* also recommends minimum bicycle parking rates of one parking space for dwellings with one and two bedrooms and two spaces for dwellings with three or more bedrooms. These minimum rates are significantly higher than current requirements which are based on the number of dwellings, not bedrooms. For commercial and retail premises, the recommended bicycle parking provision is one space per 300 m^2 of leasable floor area (LFA) and 0.6 customer spaces per 100 m^2 LFA if the LFA exceeds 500 m^2.

The characteristics of the Structure Plan Area will change over time. The *Precinct Parking Plan – Monash* is intended to be a 'live document' where the approaches to parking management will be monitored and reviewed to reflect requirements into the future.

Future directions in the Draft Monash Structure Plan

The parking recommendations align with other outcomes sought by the Draft Monash Structure Plan in relation to the integration of land use, development and transport, particularly the ambition to achieve an all-inclusive transport network anchored by sustainable travel modes that guide a shift to the efficient use of car parking facilities.

On-street parking management in higher density locations will maintain parking access for priority users and optimise the movement of people in activated and accessible areas. The co-location of alternative parking options (such as car share, bike and scooter parking) in these areas (which are practical, safe and accessible) will also support people to choose sustainable transport modes.

To support this change, the Draft Monash Structure Plan encourages the provision and upgrading of active transport infrastructure to provide more attractive alternatives to private vehicle use. Increasing DDA-compliant spaces will also support people who need to travel by car.

Section 5.6 'Better Connections' of the Draft Monash Structure Plan lists strategies to manage the demand and supply of parking facilities, including:

- Improve the provision and standard of bicycle parking and end-of-trip facilities within new developments to encourage a shift to sustainable modes
- Support and encourage reduced car parking spaces in new developments consistent with the accessibility of the Structure Plan Area
- Encourage the integration of micro-mobility and car share schemes and cycle infrastructure within new development
- Encourage the consolidation of existing car parking facilities to reduce their visual impact
- In key locations, encourage alternative and adaptable uses for car parking facilities and structures when these are no longer required for parking
- Improve on-street parking management to optimise streets for walking and cycling.

5.5. Empowering Sustainability

The Vision for Monash is for quality environments, clean water, the protection and extension of tree canopy cover and improved sustainability for buildings.

The design of new development and public spaces should elevate sustainability standards, with consideration given to climate risks and support for local renewable energy generation, use and storage. Reducing waste and using recycled and sustainable resources should be a focus.

Creating a cooler and greener urban environment and embedding integrated water management principles should be a priority.

The *Climate Response Plan – Monash* and the *Integrated Water Management Strategy* informed the response in the Draft Monash Structure Plan to the Empowering Sustainability theme, as summarised in the following sections.

5.5.1 Climate response

Context

A key challenge for the Monash Structure Plan Area is to achieve the projected population growth and higher density development in a sustainable manner. The *Climate Response Plan – Monash* identifies sustainability challenges and opportunities within the Structure Plan Area and makes recommendations to improve sustainability and build climate-change resilience, including with planning mechanisms.

Key findings

The main sustainability challenges and opportunities within the Monash Structure Plan Area include achieving net zero carbon emissions, adopting integrated water management and circular economy principles, taking place-based measures to promote zero emissions transport, adapting to climate change, enhancing and protecting the natural environment, and mitigating urban heat island impacts.

Energy use accounts for 70 per cent of municipal greenhouse gas emissions. The emissions are attributable to the large share of commercial and industrial buildings and a low uptake of small-scale solar installations. There are opportunities to plan for new energy technologies to enable a smooth transition to net zero, and to embrace sustainable design practices so that new developments are low in carbon and powered by renewable energy.

Current recycling rates in the Monash Structure Plan Area are 49 per cent, with the balance of resources going to landfill. There are limited minimum targets in the Monash Planning Scheme to manage operational waste and a lack of prescriptive requirements on material choice or embodied energy reduction for developments. The uptake of on-site small-scale solar installations is also low in Monash compared to other areas of Victoria, with fossil fuels primarily powering energy use. There are opportunities to embed circular economy principles to support zero / reduced waste outcomes in the design, construction and operation of new development.

The Structure Plan Area depends on a potable water mains network for all water uses, with no alternative water network supply. There are opportunities to support alternative water provision and embed other integrated water management principles in the development of the Structure Plan Area to build climate change resilience and create functional, high-quality green networks that keep water in the landscape.

Monash is also vulnerable to urban heat island effects due to limited open space and tree canopy coverage, which will reduce outdoor thermal comfort as average temperatures increase over time. Urban heat island pockets exist in commercial areas, such as between Clayton Road and Gardiner Road and Ferntree Gully Road and Hilltop Avenue. There is opportunity to mitigate the urban heat island effect and reduce the impact of a changing climate on Monash residents, students and workers by incorporating sustainability into the design of new development and increasing canopy cover.

The *Climate Response Plan – Monash* recommends that new buildings above 5,000 m^2 gross floor area (GFA) achieve a Green Star Buildings rating (or equivalent independent standard) to maximise building sustainability performance and contribute to Victoria achieving its net-zero carbon emissions target by 2045. New buildings below this threshold are encouraged to achieve a Built Environment Sustainability Scorecard (BESS)-8 'Excellence' rating. The adoption of these tools and thresholds aligns with international benchmarking, government policy and approaches adopted for other structure planning projects of a similar scale.

Future directions in the Draft Monash Structure Plan

Climate resilience is recognised in the Draft Monash Structure Plan as a key pathway towards supporting a sustainable community. The Structure Plan Area is already exposed to climate change impacts, and existing and new infrastructure and development will need to manage a changing climate and extreme weather events.

The Draft Monash Structure Plan includes objectives and strategies to respond to sustainability challenges and opportunities. Section 5.7 'Empowering Sustainability' includes Objective 27 to 'Facilitate a cool, green and biodiverse environment', which includes an aspiration to achieve 30 per cent tree canopy coverage on public and private land by 2041, aligning with the *Climate Response Plan – Monash*. This aspiration also aligns with the City of Monash Urban Landscape and Canopy Vegetation Strategy (2018), which includes a canopy cover target of 30 per cent on public and private land.

In addition to reducing the urban heat island effect, increasing tree canopy cover can facilitate more active transport use (by making streets pleasant for pedestrians and cyclists), contribute to the new preferred character of neighbourhoods and improve habitat diversity and connectivity for wildlife. The amount of canopy cover to be achieved varies across the Structure Plan Area, depending on the individual place type and the objective sought for each neighbourhood.

Public spaces, including parks, plazas and roads, and university campus land, present significant opportunities to increase overall canopy cover. These areas make up a moderate proportion of the Structure Plan Area and can support more canopy tree planting. The *Transport Technical Report – Monash* and accompanying *Precinct Parking Plan – Monash* seek to improve sustainable active and public transport infrastructure within these key places and networks to reduce carbon emissions.

Other measures to improve sustainability include strategies for renewable energy infrastructure, prioritising innovative water sensitive urban design (WSUD) measures and delivering a network of 'green streets' connecting neighbourhoods and open spaces. The *Climate Response Plan – Monash* identifies that Green Star Buildings with a 5-star rating are an effective tool to deliver climate-responsive developments powered by renewables, built with lower-carbon materials and high efficiency.

Section 5.7 'Empowering Sustainability' of the Draft Monash Structure Plan includes sustainability strategies relating to:

- Encouraging development to be fossil-fuel free, highly energy efficient and built with lower upfront emissions and embodied carbon
- Requiring a 5-star Green Star standard (or equivalent) for all developments greater than 5,000 m^2 GFA and aiming to meet the BESS-8 'Excellence' rating for new buildings less than 5,000 m^2 GFA
- Planning for future provision of an alternative water supply via 'third pipe' plumbing to service toilets, washing machines and landscaped areas
- Encouraging renewable electricity generation and use at a precinct and neighbourhood scale.

5.5.2 Integrated water management

Context

The *Integrated Water Management (IWM) Strategy* identifies opportunities within the Monash Structure Plan Area to reduce reliance on potable (drinking) water, minimise stormwater runoff and localised flood risk, and improve water quality. A preliminary IWM assessment undertaken for the *IWM Strategy* identifies opportunities to explore short, medium and longer-term IWM initiatives within the Structure Plan Area with government stakeholders, water authorities and water retailers.

Key findings

Higher density development and population growth will increase demand for potable water within the Monash Structure Plan Area by 95 per cent by 2041. Reliance on potable water could be reduced by up to 31 per cent with a combination of rainwater tanks (in private developments) and recycled water supply, and stormwater harvesting (for irrigating open spaces and trees).

The IWM assessment found the Mean Annual Runoff Volume (MARV) of stormwater will increase 11 per cent within the Structure Plan Area by 2041. There is potential to reduce the MARV by up to 27 per cent with rainwater tanks, stormwater harvesting and passively irrigating street trees to reduce current and future stormwater runoff volumes.

The IWM assessment also considered Best Practice Environmental Guidelines for Urban Stormwater (BPEM) and identifies that additional treatment options will be required (such as stormwater wetlands or bioretention swales) to meet water quality standards. IWM opportunities modelled show the EPA Victoria stormwater harvesting target (26 to 27 per cent) can be exceeded (EPA Victoria Publication 1739.1 *Urban stormwater management guidance* 2021).

Future directions in the Draft Monash Structure Plan

IWM is recognised in the Draft Monash Structure Plan as a key pathway to support a resilient and sustainable community, particularly for the provision of drinking water and the health of waterways, landscapes and the environment.

The Draft Monash Structure Plan recognises the need to reduce water use and the opportunity to leverage stormwater reuse and recycled water within new buildings and for irrigating landscaping, street trees and open spaces.

Section 5.7 ‘Empowering Sustainability’ of the Draft Monash Structure Plan includes Objective 28 to ‘Embed Integrated Water Management in the Monash Structure Plan Area’. Strategies and actions focus on facilitating an alternative water supply to reduce potable water demand, reducing stormwater runoff and improving runoff water quality, and encouraging the use of WSUD principles in the design of private and public spaces and infrastructure. An action is included to prepare an IWM Plan that considers opportunities within the Structure Plan Area to develop and advance place-based IWM measures and opportunities within the Structure Plan Area, including new flood mitigation infrastructure.

Section 5.3 ‘Enriching Community’ of the Draft Monash Structure Plan includes Objective 7 to ‘Create a connected and accessible open space network for those who live and work in Monash’. A strategy and objective relates to the naturalisation of the Mile Creek West Branch Drain (concrete channel) to create a linear open space (park) as part of a blue-green corridor within the Structure Plan Area.

6. Land use

6.1. Land use objectives

A set of consistent land use terms and associated objectives was used to help define the different functions and future role of land within each SRL East Structure Plan Area.

The land use terms in Table 3 provide a framework for the Draft Monash Structure Plan to give effect to the recommendations of the Technical Reports, achieve the future directions described in Section 5 and realise the Vision for Monash by providing guidance about the priorities for how land is used.

The future role of land in the Monash Structure Plan Area is identified and described in the Draft Monash Structure Plan based on how it can support the land use objectives in Table 3 in a way that responds to the local context.

Monash uses a combination of *Housing, Mixed-use, Commercial, Enterprise, Major employment, Civic, community and cultural, Education* and *Public open space* terms to give direction about the future role and function of land in the Monash Structure Plan Area.

Table 3 Land use terms and associated objectives used to guide the future role of land as described in the Draft Monash Structure Plan

Land use	Objectives
Housing	• To encourage residential growth and provide for increased housing densities; and provide for some community and local population serving uses, particularly along key movement corridors.
Mixed-use	• To provide for a range of uses including residential, commercial and other uses that contribute to a mixed-use environment, where high-density housing and/or a significant change in character is encouraged. • To encourage a range of residential compatible uses at ground level including, food and drink, office, hairdressers and professional services.
Commercial	• To encourage diversity of uses to support high density, high activity, high amenity, including commercial office, retail, accommodation, hospitality, entertainment and community uses. • To support and enhance vibrant, mixed-use high streets as places for retail, hospitality, office, business, entertainment and community uses; and encourage commercial floorspace and residential uses at upper levels to contribute to the mixed-use function of the area. • To support local amenity by providing commercial and local services for residential areas. • To provide for active uses at ground floor to support vibrant, safe, high amenity pedestrian environments.
Enterprise	• To support mixed-used employment precincts for knowledge-based industries, low-impact industry and advanced manufacturing, small and medium enterprise, start-ups and a wide variety of other businesses. • To allow for a range of supporting uses, including retail, entertainment, hospitality and residential where they contribute to the economic and employment objectives of the area. • To provide for some dwellings where they would complement the employment and economic objectives of the area.
Major Employment	• To support the growth of advanced manufacturing, including specialised research, development and technologies. • To provide for significant office growth and associated commercial and industrial uses. • To provide for some supporting worker amenities, including limited retail and hospitality.

Land use	Objectives
Civic, community and cultural	• To identify land for arts and cultural facilities, community facilities and other civic or public uses.
Education	• To provide land for education including primary schools, secondary schools and tertiary education and their associated research facilities.
Public open space	• To identify land for public open space.

6.2. Capacity analysis

Context

The *Land Use Scenario & Capacity Assessment* was prepared to test that the land use and built form directions in the Draft Monash Structure Plan can accommodate the projected population and employment growth to 2041, with an appropriate allowance for longer-term growth. The *Land Use Scenario & Capacity Assessment* brings together residential and employment floorspace demand estimates established in the *Housing Needs Assessment – Monash*, the *Retail Assessment – Monash* and the *Economic Profile Technical Report – Monash* and compares them against calculated future capacity of the Structure Plan Area and each neighbourhood within it. Future capacity is derived from the built form guidance contained in the Draft Monash Structure Plan and the *Urban Design Report – Monash*.

Beyond 2041, the neighbourhoods surrounding the SRL station will continue to grow in accordance with the longer-term Vision for Monash. The *Land Use Scenario & Capacity Assessment* therefore includes a capacity buffer above that required under the Structure Plan so that capacity will still be available by 2041 to accommodate future growth. The capacity assessment checks to ensure the area can continue to support long-term growth, while acknowledging the ultimate scale, form and location of the growth beyond 2041 will be subject to a future strategic planning process. The capacity buffer also allows for higher than anticipated demand over the life of the Monash Structure Plan and recognises that not every site will realise its full development capacity. Accounting for these factors, the *Land Use Scenario & Capacity Assessment* determines that floorspace demand should not exceed 70 per cent of floorspace capacity by 2041.

The *Land Use Scenario & Capacity Assessment* informed preparation of the Draft Monash Structure Plan by iteratively testing potential land use planning responses, including the distribution of land uses and building heights that would support population and employment growth and enable priority land uses to be taken up in the locations set out in the Draft Monash Structure Plan.

Key findings

- Based on the land use and built form directions in the Draft Monash Structure Plan, there is sufficient capacity to support forecast population and employment growth to 2041.
- Beyond this, there is an appropriate capacity buffer to allow for continued growth beyond 2041, to support delivery of the Vision for Monash.
- Maintaining an appropriate capacity buffer is necessary to support long-term growth in Monash beyond 2041. By 2041, only 44 per cent of the 2056 employment growth for Monash is forecast to have been realised within a 1.6-kilometre radius from the SRL station. This means that most growth will need to occur post-2041 and sufficient capacity will need to be available to realise this growth.
- The Monash University and CSIRO neighbourhood has a notional capacity issue, but there is space in the adjoining Employment Growth neighbourhood to accommodate overspill. It will be important to maintain a large capacity buffer in the Employment Growth neighbourhood to provide space for business and activity linked to Monash University to locate, if capacity constraints in the Monash University and CSIRO neighbourhood do occur.
- Residential growth is unlikely to crowd out employment floorspace in the Monash Central neighbourhood. Almost three times the total amount of new residential floorspace required across the whole Structure Plan Area, in addition to the required employment floorspace, could be accommodated in the Monash Central neighbourhood before it reaches capacity. However, this amount of residential floor space is well above what is needed to accommodate future population growth and would be greater than the projected employment floorspace at 2041. Enabling this much

residential development in the Monash Central neighbourhood would shift the focus of the neighbourhood away from employment and could potentially limit growth beyond 2041.

- Residential growth in the Monash Central neighbourhood should be accommodated primarily to support the amenity and vibrancy of the precinct. There is sufficient capacity in the Notting Hill, Wellington Road and Clayton North neighbourhoods to deliver the projected residential floorspace growth. Given that realising the capacity of Notting Hill, Wellington Road and Clayton North neighbourhoods relies on the consolidation of existing lots and the individual decisions of landowners and may be slow to realise, allowing some residential floorspace in the Monash Central neighbourhood would provide a sensible alternative.
- There is significant capacity on strategic sites, which make up 41 per cent of Monash's total capacity. Failing to achieve significant development on these sites could limit floorspace capacity and raise capacity concerns.
- There is ample capacity to accommodate retail floorspace demand to 2041. Therefore, it is not necessary for every building in the Monash Central neighbourhood to accommodate ground floor retail space.
- Overall, floorspace demand is lower than capacity. However, this is not a reason to revise the built form guidelines in the Draft Monash Structure Plan. Additional capacity allows for flexibility, can encourage development activity and provides choice to the community. The existence of capacity does not mean it will be realised on every site, or even most sites. The risks associated with insufficient capacity are more acute, including overcrowding, strains on infrastructure, constrained growth and rapid rises in property costs.

The *Land Use Scenario & Capacity Assessment* makes recommendations to support the strategic objectives of the Draft Monash Structure Plan, including:

- **Support significant growth of high density buildings to accommodate residential and employment uses in the Monash Central neighbourhood.** Significant densities should be encouraged to maximise the opportunity for growth in the area immediately around the SRL station in the short to medium term. Realising capacity in Monash Central neighbourhood will rely on some lot consolidation, which will require relocation of small format industrial uses.
- **Maintain a large capacity buffer in the Employment Growth neighbourhood.** This neighbourhood will support the longer-term growth of the Monash Structure Plan Area employment forecasts and can support an expansion of activity linked to Monash University. While the initial focus for development will be concentrated around the SRL station, it will logically radiate out into the Employment Growth neighbourhood over time. This area will be the focus for significant growth beyond 2041, as demand expands out from Monash Central and overflow space for the University neighbourhood is potentially taken up. Additionally, while not all sites will develop to their full potential, the opportunity to do so can be an important catalyst for change and should be maintained.
- **Support the evolution of existing industrial areas towards higher value employment precincts.** Most employment floorspace growth will be supported through a shift from traditional industrial uses towards high-value uses including advanced manufacturing, research and development, and professional services. In addition to creating physical capacity for expansion, strategies for each of the employment neighbourhoods (Employment Growth Neighbourhood, Monash Central and Health Innovation neighbourhood) to deliver growth in line with employment projections should be included within the Structure Plan.
- **Encourage the delivery of catalytic development on strategic sites.** Monash's strategic sites are estimated to account for 41 per cent of the Structure Plan Area's capacity. Given their substantial size and the opportunity to accommodate large institutions and businesses, achieving significant development will deliver much of the identified Structure Plan Area capacity, particularly in the short to medium term.
- **Support lot consolidation and discourage underdevelopment in the Notting Hill, Wellington Road and Clayton North neighbourhoods.** While some residential demand will be supported within Monash Central, a sizeable proportion of future growth is expected in Monash's residential neighbourhoods. To realise the modelled capacity of these residential neighbourhoods, existing residential lots will need to be consolidated to deliver new infill apartments. Realistically, this will occur over time and rely on the decisions of individual landowners. In recognition of the challenges associated with realising capacity associated with infill development, underdevelopment should be avoided. Additionally, residential density proposed along key main road frontages is a major contributor to capacity and should be realised.

Future directions in the Draft Monash Structure Plan

The objectives and strategies of the Draft Monash Structure Plan provide a strategic framework to give effect to the land use and built form settings tested through the *Land Use Scenario & Capacity Assessment*. Key components of Monash's strategic response include:

- Encouraging significant change in the Monash Central neighbourhood, including a mix of high density commercial office buildings, retail, health and community uses; and some supporting residential uses
- Retaining land in the Employment Growth neighbourhood for employment uses and encouraging higher density, knowledge-intensive industries and businesses including through built form guidance that supports advanced manufacturing, specialised industries and office space
- Supporting a transition from traditional industrial uses to higher value employment uses in the Employment Growth, Health Innovation and Monash Central neighbourhoods through built form guidance that supports a mix of high density office space, campus style offices, advanced manufacturing, research and development, and professional services to support long-term employment growth
- Supporting increased residential densities through mid-rise apartments, infill development and policy to avoid underdevelopment in residential neighbourhoods and along movement corridors
- Support for lot consolidation to enable the capacity in Notting Hill, Wellington Road and Clayton North neighbourhoods to be delivered
- Consolidating retail floorspace in locations around the SRL station and M-City, and allowing for some retail space across Monash Central to serve specific needs and improve amenity for workers
- Maintaining a large capacity buffer in the Employment Growth neighbourhood to support longer-term employment growth, including higher density, knowledge-intensive employment uses and new building typologies
- Policy to maximise development on strategic sites for large institutions and businesses, particularly around the SRL station, to accommodate a significant share of employment demand, particularly in the short term.

Appendix A:
SRL East assessment considerations

Overview

This appendix sets out how the Draft Monash Structure Plan interacts with previous assessment processes for SRL East. The potential environmental effects of the construction and operation of SRL East were considered via a comprehensive public East Environment Effects Statement (EES) process (2021), which culminated in an assessment by the then Minister for Environment and Climate Action (Minister's assessment) (as discussed in Section 1.2 of this report).

Planning Scheme Amendment GC197

As a part of the EES, a draft of Planning Scheme Amendment GC197 (GC197) was exhibited affecting the Bayside, Kingston, Monash and Whitehorse Planning Schemes. Amendment GC197 was required to facilitate use and development of land for the purposes of SRL East. The Minister for Planning subsequently approved Amendment GC197, having regard to the Minister's assessment of the EES.

Amongst other things, the Amendment applied the following controls to land for the purposes of SRL East:

- Schedule 14 to Specific Controls Overlay (SCO14) which applies the *Suburban Rail Loop East, Incorporated Document, August 2022* (Incorporated Document) to specified land to facilitate the design, construction and operation of the underground tunnels, stations and other SRL East infrastructure
- Schedule 15 to Specific Controls Overlay (SCO15) which applies the *Suburban Rail Loop East Infrastructure Protection, Incorporated Document, August 2022* to specified land to protect SRL East underground infrastructure from developments that could damage infrastructure if they are not designed appropriately. It does so by imposing permit requirements on certain types of development.

Relationship between the SRL Incorporated Documents and the Draft Monash Structure Plan

The application of the Draft Monash Structure Plan to land already covered by SCO14 and SCO15 will not impact the operation of these planning controls. The Draft Monash Structure Plan does not provide planning permission; rather, it provides a framework for how the area around the SRL station will develop in the future.

The incorporated document applied by SCO14 includes conditions with which SRLA must comply during the design, construction and operation of SRL East including, relevant to the structure planning process, the preparation of:

- Surface and Tunnel Plans (S&TPs), to the satisfaction of the Minister for Planning
- An Urban Design Strategy, to the satisfaction of the Minister for Planning
- Urban Design and Landscape Plans (UDLPs) for each SRL East precinct and additional locations, to the satisfaction of the Minister for Planning.

Surface and Tunnel Plans

SRL East will be constructed generally in accordance with the S&TPs that form part of the Incorporated Document approved by the Minister for Planning in April 2024. The draft S&TPs were exhibited during the EES process and were discussed in the Minister's assessment.

The S&TPs include 'sites subject to future precinct planning process, including possible additions to the public realm, community facilities and pick up/drop off spaces'. These sites are generally owned by the State Government and will be above and adjacent to the new SRL station at Monash, once constructed. The Draft Monash Structure Plan identifies these sites as strategic sites and envisages they will accommodate significant growth subject to detailed master planning in the future.

Recommendations from the Minister's assessment

This section discusses the recommendations that have implications for structure planning and how they were considered for the Draft Monash Structure Plan.

1. Integration with Urban Design and Landscape Plans

The Minister's assessment made clear the expectation that development of the UDLPs and precinct planning would work hand in hand to optimise outcomes for each precinct surrounding the SRL station.

Contractors for SRL East are required to prepare UDLPs as set out within the Incorporated Document to the satisfaction of the Minister for Planning. These plans will show the final design for SRL East, including any associated public realm, roads and SRL station components (as shown on the S&TPs). The UDLPs need to demonstrate they are generally in accordance with the S&TPs and meet the requirements of the approved Urban Design Strategy. The Urban Design Strategy sets out an urban design vision for SRL East, along with design principles, objectives and place-specific requirements. The UDS was exhibited with the EES and subsequently approved by the Minister for Planning in April 2024.

UDLPs are being prepared in a staged manner, as required by the construction sequence of SRL East. While the UDLPs are guided by the Urban Design Strategy, they will need to be responsive to the Vision for Monash and the Draft Monash Structure Plan to ensure an integrated land use and transport solution (in accordance with UDS Objective UD2.1 Strategic alignment).

The Draft Monash Structure Plan has taken into consideration the future SRL East and includes strategies and actions to maximise connectivity and integration. In particular, the *Urban Design Report – Monash* incorporates the Urban Design Strategy Principles and Objectives, which will help facilitate alignment with the UDLPs. In addition, the process for approval of UDLPs will include assessment against the Urban Design Strategy and any other relevant matters set out in the Minister's assessment, including consideration of the Draft Monash Structure Plan to ensure alignment between the Urban Design Strategy, UDLPs and the Draft Monash Structure Plan.

2. Sensitivity modelling to inform the Draft Monash Structure Plan

The Minister's assessment recommended that further sensitivity modelling of development scenarios should be undertaken to inform the design of the road network around each Structure Plan Area.

In this respect, ongoing transport analysis has been undertaken and will continue throughout the Draft Monash Structure Plan implementation to maximise the performance for all modes. This process will continue as part of the surface transport design delivery near the SRL station and other network improvements within the Structure Plan Area. Following the Minister's assessment, further transport analysis of the reference design presented at the EES panel hearing has been undertaken in collaboration with the relevant road authorities.

For Monash, further transport modelling was undertaken on the reference design. This resulted in minor adjustments to the reference design to include an opening in the central median in Normanby Road to permit the right turn into the new North South Street and banning the right turn from Howleys Road into the bus street and allowing general traffic to use the bus street in a southbound direction to connect to Normanby Road. These minor alterations improve the traffic flow and pick up and drop off circulation within the Structure Plan Area.

Appendix B:
Plan Melbourne outcomes and directions

Plan Melbourne outcomes and directions

The following outcomes and directions from *Plan Melbourne 2017–2050* are relevant to planning for the Monash Structure Plan Area. These outcomes and directions have been considered in structure planning for SRL East.

Outcome 1: Melbourne is a productive city that attracts investment, supports innovation and creates jobs

- Direction 1.1: Create a city structure that strengthens Melbourne's competitiveness for jobs and investment
- Direction 1.2: Improve access to jobs across Melbourne and closer to where people live
- Direction 1.3: Create development opportunities at urban renewal precincts across Melbourne

Outcome 2: Melbourne provides housing choice in locations close to jobs and services

- Direction 2.1: Manage the supply of new housing in the right locations to meet population growth and create a sustainable city
- Direction 2.2: Deliver more housing closer to jobs and public transport
- Direction 2.3: Increase the supply of social and affordable housing
- Direction 2.5: Provide greater choice and diversity of housing

Outcome 3: Melbourne has an integrated transport system that connects people to jobs and services and goods to markets

- Direction 3.1: Transform Melbourne's transport system to support a productive city
- Direction 3.3: Improve local travel options to support 20-minute neighbourhoods

Outcome 4: Melbourne is a distinctive and liveable city with quality design and amenity

- Direction 4.1: Create more great public places across Melbourne
- Direction 4.3: Achieve and promote design excellence
- Direction 4.4: Respect Melbourne's heritage as we build for the future
- Direction 4.6: Strengthen community participation in the planning of our city

Outcome 5: Melbourne is a city of inclusive, vibrant and healthy neighbourhoods

- Direction 5.1: Create a city of 20-minute neighbourhoods
- Direction 5.2: Create neighbourhoods that support safe communities and healthy lifestyles
- Direction 5.3: Deliver social infrastructure to support strong communities
- Direction 5.4: Deliver local parks and green neighbourhoods in collaboration with communities

Outcome 6: Melbourne is a sustainable and resilient city

- Direction 6.1: Transition to a low-carbon city to enable Victoria to achieve its target of net zero greenhouse gas emissions by 2050
- Direction 6.3: Integrate urban development and water cycle management to support a resilient and liveable city
- Direction 6.4: Make Melbourne cooler and greener
- Direction 6.5: Protect and restore natural habitats

Appendix C:
Existing zones and overlays

Zones and overlays

Existing zones

Existing planning zones in the Monash Structure Plan Area are summarised in Table 4.

Table 4 Existing planning zones in the Monash Structure Plan Area

Zone	Purpose	Schedule	Planning Scheme
Residential zones			
Mixed Use Zone (MUZ)	Facilitates a range of higher density residential and commercial uses that balance multi-functional activities with neighbourhood character.	MUZ1 – Monash Residential Areas	Monash Planning Scheme
General Residential Zone (GRZ)	Supports residential development that respects neighbourhood character and provides housing diversity near services and transport, as well as appropriate non-residential use.	GRZ3 – Garden City Suburbs	Monash Planning Scheme
		GRZ6 – MNEIC and Clayton Activity Centre	Monash Planning Scheme
Residential Growth Zone (RGZ)	Diverse, higher-scale residential uses near services and transport and transition to surrounding areas, as well as non-residential uses in appropriate locations.	RGZ3 – Clayton Major Activity Centre and MNEIC	Monash Planning Scheme
Commercial zones			
Commercial 1 Zone (C1Z)	Mixed-use commercial centres with residential densities that complement the scale and function of the centre.	-	Monash Planning Scheme
Commercial 2 Zone (C2Z)	A range of commercial services and large format retail that are cognisant of adjacent sensitive uses.	-	Monash Planning Scheme
Industrial zones			
Industrial 1 Zone (IN1Z)	Manufacturing and storage and distribution of goods without comprising the safety and well-being of local communities.	-	Monash Planning Scheme
Industrial 3 Zone (IN3Z)	Light industrial and small format retail uses to maintain a buffer between more intensive industrial operations and adjacent sensitive uses.	-	Monash Planning Scheme
Public land use zones			

Public Use Zone (PUZ)	Public utility and community services and facilities consistent with the intent of the public land reservation.	PUZ1 – Service & Utility	Monash Planning Scheme
		PUZ2 – Education	Monash Planning Scheme
		PUZ6 – Local Government	Monash Planning Scheme
Public Park and Recreation Zone (PPRZ)	Public recreation and open space with provisions for environmental conservation or commercial application that respond to the environment.	-	Monash Planning Scheme
Transport Zone (TRZ)	Facilitates uses for transit routes, services, and facilities that provide an integrated and sustainable transport system.	TRZ1 – State Transport Infrastructure	Monash Planning Scheme
		TRZ2 – Principal Road Network	Monash Planning Scheme
Special purpose zones			
Special Use Zone (SUZ)	Facilitates uses with specific purposes.	SUZ5 – Australian Synchrotron	Monash Planning Scheme
		SUZ6 – Monash Technology Precinct	Monash Planning Scheme

Existing overlays

Existing planning overlays in the Monash Structure Plan Area are summarised in Table 5.

Table 5 Existing planning overlays in the Monash Structure Plan Area

Overlay / Schedule	Purpose / Description	Planning Scheme
Design and Development Overlay (DDO)		
DDO1 (Industrial and Commercial Design and Development Area)	Development that contributes to the Garden City Character and responds to the industry Character Type outlined in local policy. New development should retain and enhance increased vegetation and planting. Minimum front setbacks apply.	Monash Planning Scheme
DDO4 (Former Rusden Campus - Deakin University, 662-678 Blackburn Road, Notting Hill)	Former Rusden Campus 'Deakin University', 662–678 Blackburn Road, Notting Hill. Buildings and car park areas must be set back 20 metres from Blackburn Road and height must not exceed 15 metres.	Monash Planning Scheme
DDO14 - Monash Medical Centre Hospital Emergency Medical Services Helicopter Flight Path Protection (Inner Area)	Largely covers the areas near Monash Medical Centre and applies height requirements to new development.	Monash Planning Scheme
DDO15 - Monash Medical Centre Hospital Emergency Medical Services Helicopter	Applies to land either side of DDO14 and applies height requirements to new development.	Monash Planning Scheme

Flight Path Protection (Outer Area)		
Environmental Audit Overlay (EAO)		
EAO	Applies to a selected area of land east of the Australian Synchrotron. Ensures that potentially contaminated land is suitable for future sensitive land use.	Monash Planning Scheme
Heritage Overlay (HO)		
HO20 / H1084	1714–1716 Dandenong Road, Clayton North): Clayton North Primary School No. 734)	Monash Planning Scheme
HO84	1–131 Wellington Road, Clayton North (Monash University) (21-1/2): Menzies buildings and oak trees.	Monash Planning Scheme
HO103 / H2188	1–131 Wellington Road, Clayton North, and Building 9 Monash University: Religious Centre.	Monash Planning Scheme
Development Plan Overlay (DPO)		
DPO5	Applies to 1 Renver Road, Clayton – Monash Special Development School	Monash Planning Scheme
Incorporated Plan Overlay (IPO)		
IPO2	Applies to land known as 'M-City', located at the corner of Blackburn Road and Dandenong Road, Clayton and applies the Nova Centre Incorporated Plan	Monash Planning Scheme
Special Building Overlay (SBO)		
SBO	Applies to land on Monash University Clayton campus and industrial areas to the east along drainage easements. Identifies land in urban areas liable to inundation by overland flows from urban drainage systems, in consultation with the flood authority.	Monash Planning Scheme
Specific Controls Overlay (SCO)		
SCO14 (Suburban Rail Loop East Incorporated Document, August 2022)	SRL East Infrastructure Protection Incorporated Document, August 2022.	Monash Planning Scheme
SCO15 (Suburban Rail Loop East Incorporated Document, August 2022)	SRL East Infrastructure Protection Incorporated Document, August 2022.	Monash Planning Scheme
Vegetation Protection Overlay (VPO)		
VPO1 (Tree Protection Area)	Applies to small areas of land to identify areas of significant vegetation. A permit is required to remove or lop vegetation specified in the schedule (canopy trees).	Monash Planning Scheme

Appendix D:
Planning Policy Framework

State and Regional Planning Policy

The following objectives and strategies of the Planning Policy Framework – state and regional are relevant to the Monash Structure Plan Area.

- **11.01-1R Settlement – Metropolitan Melbourne:** Develop the Suburban Rail Loop through Melbourne's middle suburbs to facilitate substantial growth and change in major employment, health and education precincts and activity centres.
- **11.02-1S Supply of urban land:** Planning for urban growth should consider opportunities for consolidation, redevelopment and intensification of existing urban areas.
- **11.02-2S Structure planning:** To facilitate the orderly, economic and sustainable development of urban areas.
- **13.03-1S Floodplain management:** Avoid intensifying the impact of flooding through inappropriately located uses and development.
- **13.04-1S Contaminated and potentially contaminated land:** To ensure that contaminated and potentially contaminated land is used and developed safely.
- **13.05-1S Noise Management:** To assist the management of noise effects on sensitive land uses.
- **13.07-1S Land use compatibility:** To protect community amenity while facilitating commercial, industrial, infrastructure or other uses with potential adverse off-site impacts.
- **15.01-1S Urban design:** To create urban environments that are safe, healthy, functional and enjoyable and that contribute to a sense of place and cultural identity.
- **15.01-1R Urban design – Metropolitan Melbourne:** To create a distinctive and liveable city with quality design and amenity.
- **15.03-1S Heritage conservation:** To ensure the conservation of places of heritage significance.
- **15.03-2S Aboriginal cultural heritage:** To ensure the protection and conservation of places of Aboriginal cultural heritage significance.
- **16.01-1S Housing supply:** To facilitate well-located, integrated and diverse housing that meets community needs.
- **16.01-2S Housing affordability:** To deliver more affordable housing closer to jobs, transport and services.
- **17.01-1S Diversified economy:** To strengthen and diversify the economy.
- **17.02-1S Business:** To encourage development that meets the community's needs for retail, entertainment, office and other commercial services.
- **18.01-1S Land use and transport integration:** To facilitate access to social, cultural and economic opportunities by effectively integrating land use and transport.
- **18.01-2S Transport system:** To facilitate the efficient, coordinated and reliable movement of people and goods by developing an integrated and efficient transport system.
- **19.02-1S Health facilities:** To assist the integration of health facilities with local and regional communities.
- **19.02-6S Open space:** To establish, manage and improve a diverse and integrated network of public open space that meets the needs of the community.
- **19.02-6R Open Space – Metropolitan Melbourne:** To strengthen the integrated metropolitan open space network.
- **19.03-1S Development and infrastructure contributions plans:** To facilitate timely infrastructure provision through the preparation of development contributions plans and infrastructure contributions plans.
- **19.03-2S Infrastructure design and provision:** To provide timely, efficient and cost-effective development infrastructure that meets the needs of the community.
- **19.03-3S Integrated water management:** To sustainably manage water supply and demand, water resources, drainage and stormwater through an integrated water management approach.

Local Planning Policy

Monash Local Policy

The Planning Policy Framework (PPF) comprises the Municipal Planning Strategy (MPS) and local planning policies applicable to the City of Monash. The following objectives and strategies of the Municipal Planning Strategy and local polices of the PPF are relevant to the Monash Structure Plan Area:

- **Clause 02.01 Context:** identifies that Monash comprises primarily residential land but has leading education, health, research, and commercial facilities, including the Monash Technology Precinct and MNEIC. The policy identifies the specialised function of the MNEIC and Monash Technology Precinct, including Monash University and the Monash Medical Centre, as a key influence in planning decisions.
- **Clause 02.02 Vision:** identifies Council's vision for a City of Monash with four primary areas of focus – a sustainable city, inclusive services, enhanced places and good governance.
- **Clause 02.03 (Strategic directions):** The following directions are relevant to the Clayton Structure Plan Area.
  - **Clause 02.03-1 (Settlement):** establishes a network of activity centres within Monash as a focus to integrate land use and transport planning, including Major Activity Centres to Neighbourhood Activity Centres.
  - **Clause 02.03-2 (Environmental and landscape values):** aims to enhance the quality and ecological value of Monash's natural environment, including by protecting and enhancing biodiversity and waterways.
  - **Clause 02.03-3 (Environmental risks and amenity):** seeks to adapt to and mitigate the impacts of climate change.
  - **Clause 02.03-4 (Built environment and heritage):** seeks that new development responds to contaminated land, as well as appropriately site non-residential uses and licensed premises to maintain land use compatibility.
  - **Clause 02.03-5 (Housing):** the preferred residential development outcome in activity centres is housing at higher densities.
  - **Clause 02.03-6 (Economic Development):** aims to support a diverse cluster of businesses anchored by leading-edge firms and develop linkages between the Synchrotron Facility, Monash University and Monash Medical Centre.
  - **Clause 02.03-7 (Transport):** seeks to facilitate development that provides connectivity to a wider range of destinations and major transport linkages in metropolitan Melbourne
  - **Clause 02.03-8 (Infrastructure):** seeks to provide an appropriate provision of health and education facilities, as well as open space within 400 metres walking distance for the majority of residents.
- **Clause 2.04 (Strategic Framework Plans):** identifies the Monash Technology Precinct as the majority of the Structure Plan Area, as well as identifying Monash University and the Australian Synchrotron as key regional assets.
- **Clause 11.03-1L-01 (Activity Centres – Monash):** outlines Monash's activity centre framework and demonstrates that the Structure Plan Area is well-connected at the centre of multiple major and neighbourhood activity centres.
- **Clause 11.03-1L-04 (Monash National Employment and Innovation Cluster):** encourages uses that support the continued growth and primary function of the Precinct, as well as uses that do not detract from its specialised function nor compete with nearby activity centres.
- **Clause 15.01-1L-02 (Tree Conservation for a Garden City):** seeks to maintain the tree canopy cover within Garden City Character areas, including the Notting Hill residential area which forms part of the Structure Plan Area.
- **Clause 15.01-2L-01 (Industry and Business Built Form Character):** seeks to maintain industrial and business development character, including the office and manufacturing areas to the north and east of Monash University.
- **Clause 15.01-2L-02 (Environmentally Sustainable Development Policy):** seeks to ensure they achieve best practice in environmentally sustainable development.
- **Clause 15.01-5L (Monash Preferred Neighbourhood Character):** directs residential growth to neighbourhood and activity centres, the MNEIC and the Princes Highway boulevard.
- **Clause 16.01-1L-02 (Student Accommodation):** encourages student accommodation to locate in proximity to tertiary institutions, including Monash University.

- **Clause 16.01-1L-01 Housing Supply:** seeks to manage residential growth around an activity and neighbourhood centre network, with higher residential densities located within the Clayton Major Activity Centre and along the Princes Highway boulevard.
- **Clause 17.01-1L (Diversified Economy):** seeks to revitalise employment areas and facilitate innovation and growth in the knowledge economy, particularly science, technology and emerging industries.
- **Clause 17.01-2L (Monash Technology Precinct Policy):** aims to attract a diverse set of technology, research and development industries, including leading businesses and small and medium-size businesses.

Appendix E:
Relevant Technical Reports

Relevant Technical Reports

SRL Draft East Structure Plan – Aboriginal Cultural Heritage Technical Report

SRL Draft East Structure Plan – Historical Heritage Technical Report

SRL Draft East Structure Plan – Ecology and Arboriculture Technical Report – Monash

SRL Draft East Structure Plan – Flooding Technical Report

SRL Draft East Structure Plan – Potentially Contaminated Land Memo

SRL Draft East Structure Plan – Noise and Vibration Technical Report

SRL Draft East Structure Plan – Odour and Dust Technical Report

SRL Draft East Structure Plan – Aviation and Airspace Technical Report

SRL Draft East Structure Plan – Utilities Servicing Technical Report

SRL Draft East Structure Plan – Housing Needs Assessment – Monash

SRL Draft East Structure Plan – Community Infrastructure Needs Assessment – Monash

SRL Draft East Structure Plan – Open Space Technical Report

SRL Draft East Structure Plan – Economic Profile Technical Report – Monash

SRL Draft East Structure Plan – Retail Assessment – Monash

SRL Draft East Structure Plan – Urban Design Report – Monash

SRL Draft East Structure Plan – Wind Technical Report

SRL Draft East Structure Plan – Transport Technical Report – Monash

SRL Draft East Structure Plan – Transport Technical Report – Appendix A Precinct Parking Plan – Monash

SRL Draft East Structure Plan – Climate Response Plan – Monash

SRL Draft East Structure Plan – Integrated Water Management Strategy

SRL Draft East Structure Plan – Land Use Scenario & Capacity Analysis

Glossary

Active frontages	A building frontage that interacts with and provides pedestrian interest to the public realm such as with building entries, windows to a shop and/or a food and drink premises, and/or customer service areas or other active uses.
Active transport	Transport requiring physical activity, typically walking and cycling.
Activity centre	Areas that provide a focus for services, employment, housing, transport and social interaction. They range in size and intensity of use from smaller neighbourhood centres to major suburban centres and larger metropolitan centres.
Advanced manufacturing	Includes any manufacturing process that takes advantage of high-technology or knowledge-intensive inputs as an integral part of its manufacturing process.
Affordable housing	Housing, including social housing, that is appropriate for the housing needs of very low income, low income and moderate income households.
Arterial road	A higher-order road providing for moderate to high volumes at relatively higher speeds typically used for inter-suburban or inter-urban journeys, often linking to freeways.
Building height	The vertical distance from natural ground level to the roof or parapet at any point.
Built form	Built form refers to the physical description of properties, including the form of development, the building mass and height.
Built form scale	Built form scale in the context of the Structure Plan Area can be broadly defined as: – Significant: buildings of 12 or more storeys – High: buildings between seven and 11 storeys – Medium: buildings between four and six storeys. Range of storeys is based on typical residential floor to floor measurement of 3 metres.
Business and Investment Case	The Business and Investment Case (BIC) for SRL, released in August 2021. The BIC outlines the overarching strategic case for SRL inclusive of all transport investments and precinct developments, and all stages of the project.
Car share schemes	A form of personal travel in which users share access to cars rather than privately owning them.
Embodied energy	The energy consumed by all of the processes associated with the production of a building, from the mining and processing of natural resources to manufacturing, transport and product delivery.
Equitable development	Buildings designed so that they do not compromise the reasonable development opportunity of adjacent properties. This is a key principle for areas where substantial change is sought, where it is important that the development potential of each property is optimised.
Fine-grain character	Refers to an urban environment with human scale spaces, mixed uses, smaller lots and through block links that support diverse activities and walkability.
Fixed Key Link	A publicly accessible access route delivered along a specific alignment.
Flexible Key Link	A publicly accessible access route that can be delivered along a range of alignments, determined at time of planning implementation.
Floorspace	The surface area of the floor in a building.
Framework plans	High level coordinating plans that set policy directions and the spatial structure for a defined area. Framework plans guide growth and development over the longer term and define the steps, key projects and infrastructure required to support growth.

Green infrastructure	Any system that fuses natural and built environments to reduce the environmental impacts of the built environment. Green infrastructure can take many forms and may include green roofs or vertical walls, permeable paths, rain gardens and urban forests.
Housing density	The number of dwellings in an urban area divided by the area of the residential land they occupy, expressed as dwellings per hectare.
Integrated water Management (IWM)	An approach to planning that brings together all facets of the water cycle including sewage management, water supply, stormwater management and water treatment, ensuring environmental, economic and social benefits.
Knowledge-based jobs	A knowledge-based job refers to a role that primarily involves the application of a deep level of knowledge or expertise in a specific field. These jobs typically require a high level of education, training or experience. Examples include roles in sectors such as healthcare, education, technology, engineering, law, and finance.
Local street(s)	Local streets are non-arterial roads that provide quiet, safe and desirable residential access for all ages and abilities. They contribute to the overall functioning areas bounded by arterial roads or other barriers.
Lot	A part (consisting of one or more pieces) of any land (except a road, a reserve or common property) shown on a plan, which can be disposed of separately and includes a unit or accessory unit on a registered plan of strata subdivision and a lot or accessory lot on a registered cluster plan.
Major activity centres	Suburban centres that provide access to a wide range of goods and services. They have different attributes and provide different functions, with some serving larger sub-regional catchments.
Master plan	A plan that directs how a single site of landholding or a cluster of related sites will be developed. It is usually more detailed than a structure plan.
Metropolitan activity centres	Higher-order suburban centres intended to provide a diverse range of jobs, activities and housing for regional catchments that are well served by public transport. These centres play a major service delivery role, as well as providing retail and commercial opportunities.
Micro-mobility	Refers to small, lightweight vehicles driven by users personally. Vehicles include bicycles, e-bikes, electric scooters and electric skateboards.
Mixed-use	A mixture of different land uses such as retail, commercial and residential in the same location or building.
Mode	Mode of travel, such as walking, cycling, train, tram, bus, motorcycle or private vehicle.
Neighbourhood activity centres	Local centres that provide access to local goods, services and employment opportunities and serve the needs of the surrounding community.
Planning Area	Area where SRLA is a planning authority under the *Planning and Environment Act 1987* and may prepare Planning Scheme Amendments.
Planning authority	A planning authority is any person or body given the power to prepare a planning scheme or an amendment to a planning scheme. The Minister for Planning is a planning authority and may authorise any other Minister or public authority to prepare an amendment to a planning scheme.
Planning scheme	A document approved by the Victorian Government that set out objectives, policies and controls for the use, development and protection of land for each municipality across Victoria.
Precinct	Precinct refers to a designated area of focus where a critical mass of activity and significant change is anticipated.
Public open space	Public open space or ‘open space’ means public land and waters that provide for one or more of the following purposes - Outdoor recreation, Leisure, Environmental and cultural benefits, Visual amenity and Off-road active transport.

Public realm	The public realm comprises spaces and places that are open and accessible to everyone. The public realm can include streets and laneways, parks and plazas, waterways and foreshores.
Public transport interchange	Places where people can access or change between multiple public transport routes and modes.
Renewable energy	Energy that comes from resources that are naturally replenished such as sunlight, wind, rain, tides, waves and geothermal heat.
Resilience	The capacity of individuals, communities, institutions, businesses, systems and infrastructure to survive, adapt and grow in response to challenges. 'Climate resilience' is the ability to prepare for, recover from, and adapt to these impacts of a changing climate.
Rise	The rise in storeys of a building generally means the number of storeys above natural ground level. - Low-rise means buildings with 1-3 storeys - Mid-rise means buildings with 4-11 storeys - High-rise means buildings with 12 or more storeys.
Setback	The horizontal distance from a boundary or building.
Social housing	Government subsidised rental housing, generally comprising two types of housing: public housing (owned and managed by state governments) and community housing, (managed, and often owned, by not-for-profit organisations).
SRL East Urban Design Strategy	Developed as part of the SRL Environment Effects Statement (EES), this establishes the Victorian Government's requirements for SRL East. The strategy provides a performance-based design brief and a design quality assessment and evaluation tool.
SRL East	Approved project from Cheltenham Station to Box Hill Station. SRL East was previously referred to as SRL Stage One.
SRL Station Development Area	Sites intended for significant scale development adjacent to and over SRL East stations and station buildings, and the associated public realm between buildings.
Street wall	The façade of a building facing (and closest to) the street. The term is usually used where buildings are built on or close to the street boundary, so that they define the public realm.
Structure Plan Area	The extent of the land to which the Structure Plan applies. The Structure Plan will focus on areas near to the SRL station and locations with more significant future change. This area is smaller than the Planning Area.
Sustainable transport	Transport by modes other than single-occupancy cars. Includes walking, cycling, bus, tram, train and carpooling.
Traditional Owners	People who, through membership of a descent group or clan, are responsible for caring for particular Country. A Traditional Owner is authorised to speak for Country and its heritage as a senior Traditional Owner, an Elder or, in more recent times, a registered native title claimant.
Urban form	Urban form is the physical characteristics that make up built-up areas, including the land use, density and configuration of cities, towns and neighbourhoods.
Urban heat island effect	When the built environment absorbs, traps and in some cases directly emits heat, causing urban areas to be significantly warmer than surrounding non-urban areas.
Walkability	The degree to which an environment supports walking as a transport mode.
Water sensitive urban design (WSUD)	Integrating the urban water cycle into urban design to minimise environmental damage and improve recreational and aesthetic outcomes. WSUD includes the use of passive irrigation techniques and the incorporation of WSUD infrastructure such as swales, biofiltration systems (rain gardens), permeable paving, and wetlands into the design.

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