Appendix A
Existing conditions analysis

AJM
Joint Venture

Key character attributes

Urban character areas refer to areas within the Structure Plan Area that possess distinct physical, architectural, cultural and functional characteristics. These areas are typically defined by their physical and land use attributes, which may include natural and man-made features.

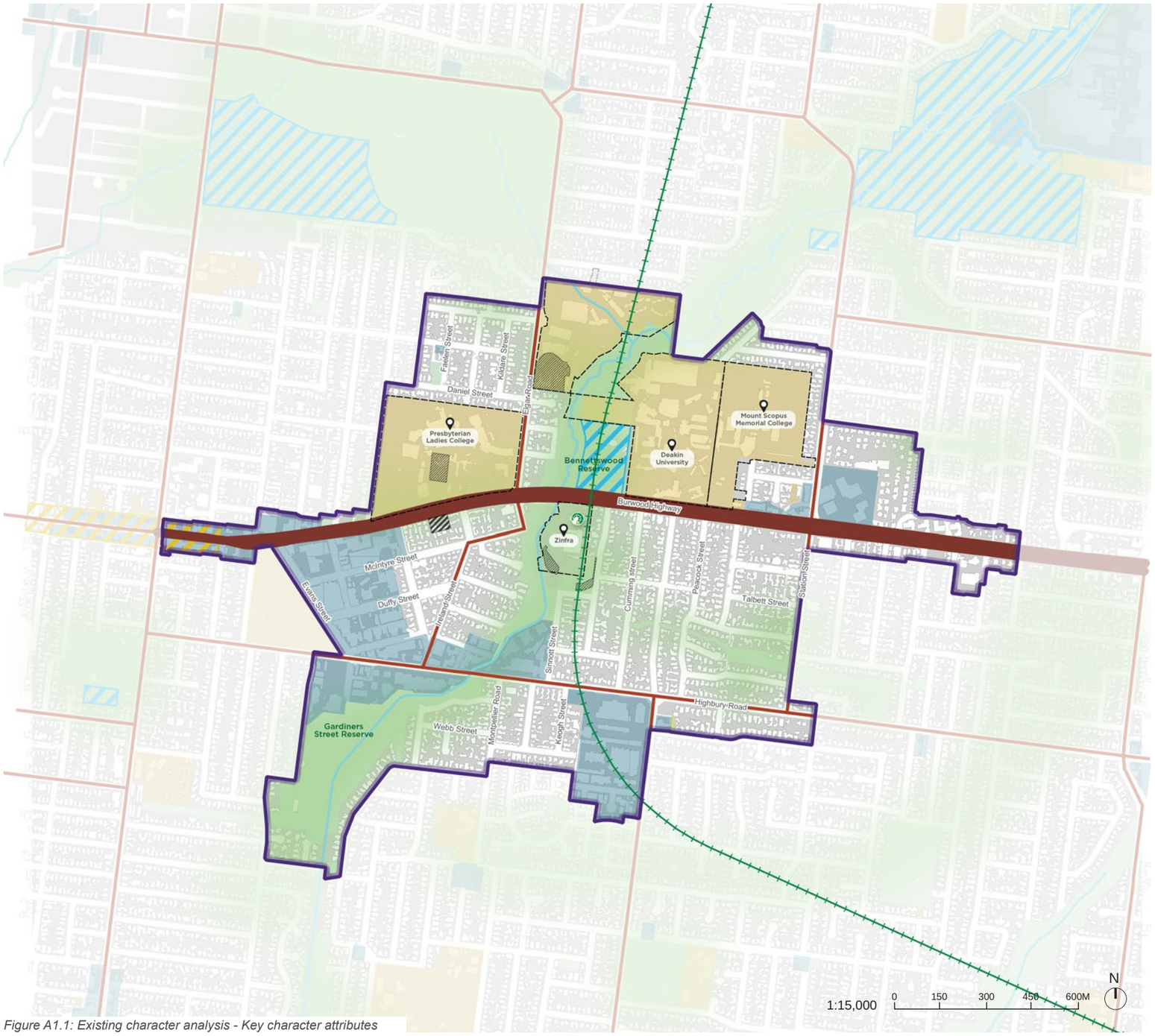


Figure A1.1: Existing character analysis - Key character attributes

Legend

- SRL station
- SRL East alignment
- Structure Plan Area
- Heritage Overlay
- Victorian Heritage Register
- Large landholders
- Built form

Land use

- Health / Medical
- Education
- Mixed use / Employment
- Sports and recreation
- Local activity centre

Landscape features

- Water
- Public open space
- Canopy -

Movement

- Highway
- Arterial roads

Summary

Following a review of the background documents and local policy, desktop and site analysis was undertaken to understand the character elements and features within the Burwood Structure Plan Area.

A number of urban typologies and character study areas have been defined. The following is a description of the key character drivers for the Burwood Structure Plan Area.

Land use and key destinations

The Burwood Structure Plan Area is predominantly residential uses, with pockets of activity and local shopping opportunities spread throughout. The Burwood Village Neighbourhood Activity Centre (NAC) at the corner of Burwood Highway and Station Street is the closest shopping area to the SRL station. Burwood Brickworks, a larger centre is found at the eastern edge of the Burwood Structure Plan Area. The area also contains a number of commercial and industrial areas dispersed through it. At its core is Deakin University, which is a regional attractor and has national education significance.

Topography, natural features and landmarks

The Structure Plan Area's biodiversity and natural features play a role in the character of the area. The highly varied topography, mature vegetation that exists in open spaces, streetscapes and on private properties all contribute to a green canopy that is dominant in all parts of the area.

The Structure Plan Area features a primary valley defined by Gardiners Creek running north-south through the area. The edges of the Gardiners Creek corridor typically have a relatively steep incline, while the rest of the area rises more gently to Wattle Park in the north-west and Federal Reserve in the south-east. North of Burwood Highway, Gardiners Creek is within a natural embankment, with dense native canopy trees and open space adjacent to the creek. South of Burwood Highway, Gardiners Creek is within a concrete channel and is fenced off to the public. Adjacent to this section of the creek are pedestrian paths and pockets of open space with dense native trees.

Views in the Structure Plan Area differ, depending on the position within the valley. Closer to Gardiners Creek, views are generally short range and terminate with native canopy trees. At the highest point near Federal Reserve, there are sweeping views to Melbourne CBD and Box Hill from key streets.

Landmarks within the Structure Plan Area are minimal due to the high canopy coverage and undulating topography. Deakin University's Corporate Centre on Burwood Highway provides the only prominent landmark within the area. From a few vantage points, the Surrey Hills Exchange Tower is also visible, although this tower is located outside of the Structure Plan Area.

Generally street tree species and tree canopy size varies across the Structure Plan Area. The areas closest to Gardiners Creek tend to have an increased native landscape character, whilst the areas within Boroondara tend to have a leafy green, exotic landscape character.

Urban structure

Burwood Highway and the Gardiners Creek Reserve are the primary organising elements of the Burwood Structure Plan Area. The cluster of educational and commercial areas at its heart creates a well-defined core of more intense activity. Warrigal Road, Elgar Road, Station Street and Huntingdale Road also provide key connections and barriers.

Burwood Highway is the key arterial through the Burwood Structure Plan Area, running east-west through its centre. Burwood Highway creates a barrier to north-south movement and has a poor pedestrian environment.

The Burwood Structure Plan Area also features three north-south main road corridors (Warrigal Road, Huntingdale Road and Station Street) that provide regional connections. Additionally, local roads (15m wide) with a regular block structure enhance legibility of the area. Newer residential developments tend to have cul-de-sacs and are often disconnected from the structure of the area.

Built form

The character of the Burwood Structure Plan Area is also dominated by 1 to 2-storey detached dwellings of varying architecture styles. Unit developments and contemporary infill are common, and scattered throughout the area. The western half of the area experienced development earlier than the east, and some of the original houses from the 1940s and 1950s are still visible today. Generally, newer houses and multi-unit developments have increased site coverage and reduced soft landscaping opportunities.

The residential areas are punctuated by the education precinct at the core, which contains taller built form ranging in height from 2 to 8 storeys, and occasional apartment buildings up to 5 storeys along major roads.

Elements contributing to character

In the following pages the analysis highlights the main drivers of character within the Burwood Structure Plan Area. The analysis highlights the main contributors to character and their distinguishing characteristics across the Burwood Structure Plan Area.

The main character drivers identified are:

- Gardiners Creek, including its surrounding parkland
- Gardiners Creek as natural creek vs. concrete channel
- Linear reserves and natural landscapes
- Burwood Highway and the high levels of movement and restricted north-south access
- Topography and views to surrounding areas
- Street tree species and tree canopy size
- Dwellings that are diverse and inconsistent in age and typology
- Land use
- Front setback.

Land use

The Burwood Structure Plan Area is predominantly residential. Residential land use across the Burwood Structure Plan Area is characterised by lower density, largely 1 to 2-storey detached houses set in suburban streets. Pockets of more intense residential development exist where sites have been developed to accommodate more compact homes, smaller lot sizes and denser built forms. A few sites of medium to higher density residential development also exist in retirement villages.

Key non-residential uses are summarised below.

- There are a large number of education facilities, particularly at the core of the Structure Plan Area. These are detailed more on the next page
- The Structure Plan Area contains a small number of retail and commercial areas
- There are also a number of industrial areas, with different lot sizes
- The Structure Plan Area also features extensive open space areas. Open spaces for public access include reserves dominated by a landscape character of trees and water (including reserves aligned with water bodies such as Gardiners Creek, centrally through the area), reserves for more formal recreation including sports pitches, smaller pocket parks and other public spaces including Burwood Cemetery. Other areas of landscape include golf courses (Wattle Park Golf Course to the north-west and Box Hill Golf Club to the north-east).

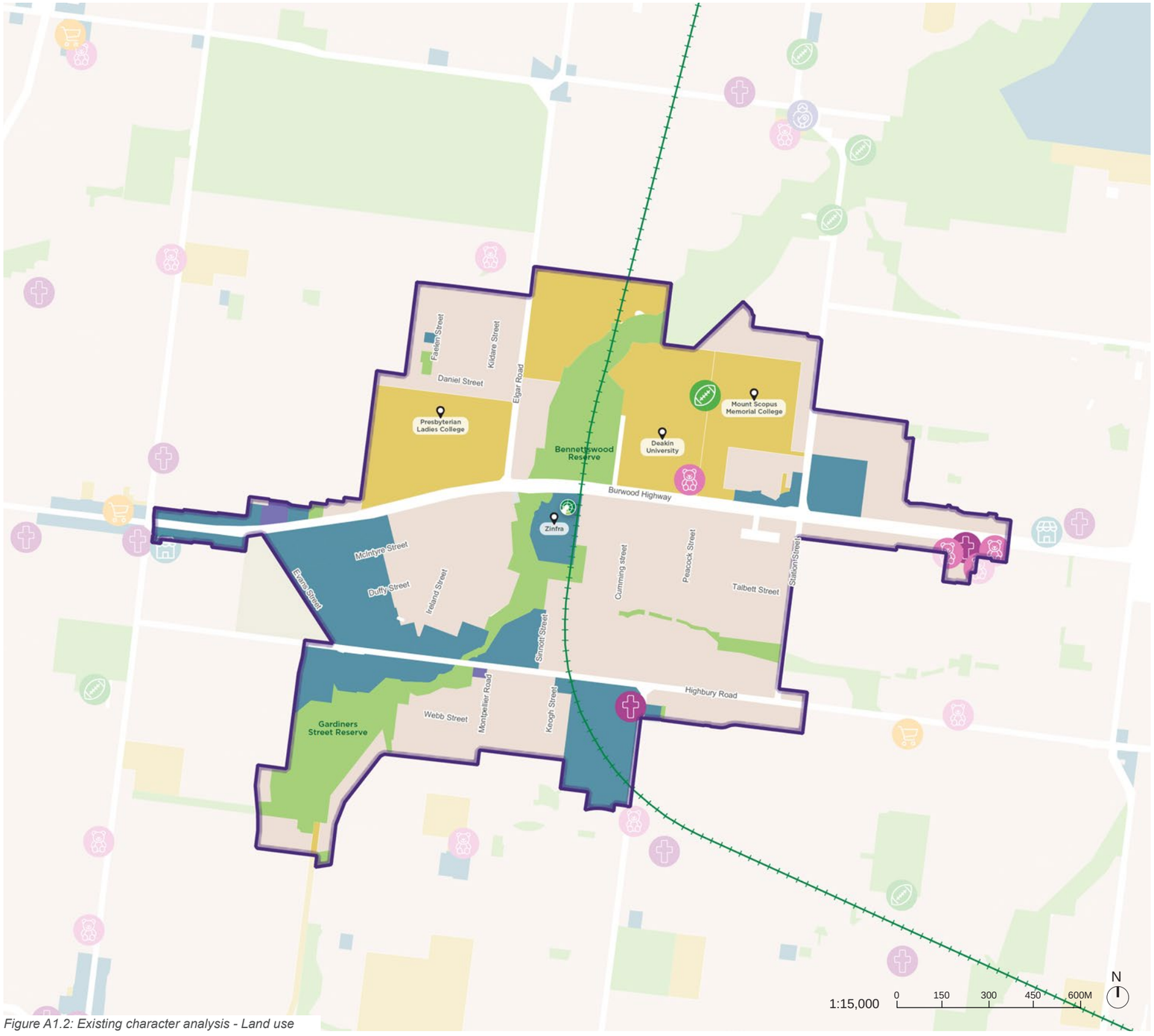


Figure A1.2: Existing character analysis - Land use

Legend

- SRL station
- SRL East alignment
- Structure Plan Area

Community facilities

- Supermarket
- Maternal and child health
- Child care
- Community centre
- Place of worship
- Sports and recreation facility

Existing land use

- Residential
- Employment
- Educational
- Mixed use
- Open space

Community facilities

The Burwood Structure Plan Area is well serviced by numerous community facilities including education uses, child care, community centres, places of worship, sport and recreation facilities. Community facilities include the following uses that are dispersed through the area.

Education uses include:

- Deakin University campus, centrally located in the heart of the Structure Plan Area, accessible from Burwood Highway and tramline, set in the landscape context of the Gardiners Creek Reserve
- High Schools including Mt. Scopus Memorial College, west of Deakin University
- The Presbyterian Ladies' College, north of Burwood Highway.

Sport and recreation facilities include:

- Reserves throughout the Burwood Structure Plan Area that provide space for informal and formal sport and active recreation, including leisure routes for active travel
- Reserves with large sports pitches for formal recreation including ovals (cricket, football) and tennis courts
- Children's' play areas in reserves and open spaces.

Other community facilities include:

- Child care
- Community centres
- Health services
- Places of worship
- Retail services including shops, services, Australia Post, supermarkets
- Traditional high street on Toorak Road at western boundary of Burwood Highway.

Figure A1.3: Presbyterian Ladies' College

Figure A1.4: Industrial precinct along Highbury Road

Figure A1.5: Commercial centre on Station Street

Movement and access

Burwood has movement networks for public transport, private transport and active travel, walking and cycling.

Key connectivity issues include:

- The street network ranges from highest-order (primary) streets (including Burwood Highway) through to residential streets. Lower-order streets through the Burwood Structure Plan Area are arranged in a regular grid pattern providing for ease of movement in all directions
- Whilst Burwood Highway provides efficient movement for vehicles moving through the Structure Plan Area, the scale of the highway (three lanes of in both directions with tramline in central median), presents a barrier to north-south movement, particularly for pedestrians and cyclists
- Pedestrian crossings are present at several intervals along the Burwood Highway, with four-way crossings at major intersections with Warrigal Road, Elgar Road and Station Street
- A pedestrian underpass provides access under Burwood Highway including to a tram stop in the centre of the road, south of Deakin University
- The Burwood Highway is bridged across the Gardiners Creek, with pedestrian movement along the creek required to cross at Elgar Road
- Gardiners Creek is a major landscape structure element through the Structure Plan Area. Landscape along the creek corridor, particularly to the north of Burwood Highway creates a reserve of public open space. The path of the creek undulates and is bridged in several locations, facilitating access for pedestrian and cyclists along the Gardiners Creek Trail that runs through the reserve adjacent to the water course
- To the south of Burwood Highway, the creek is largely contained in a concrete channel, a concrete channel, which is less natural than the reserve to the north. A pedestrian and cyclist path includes a bridge across the creek.

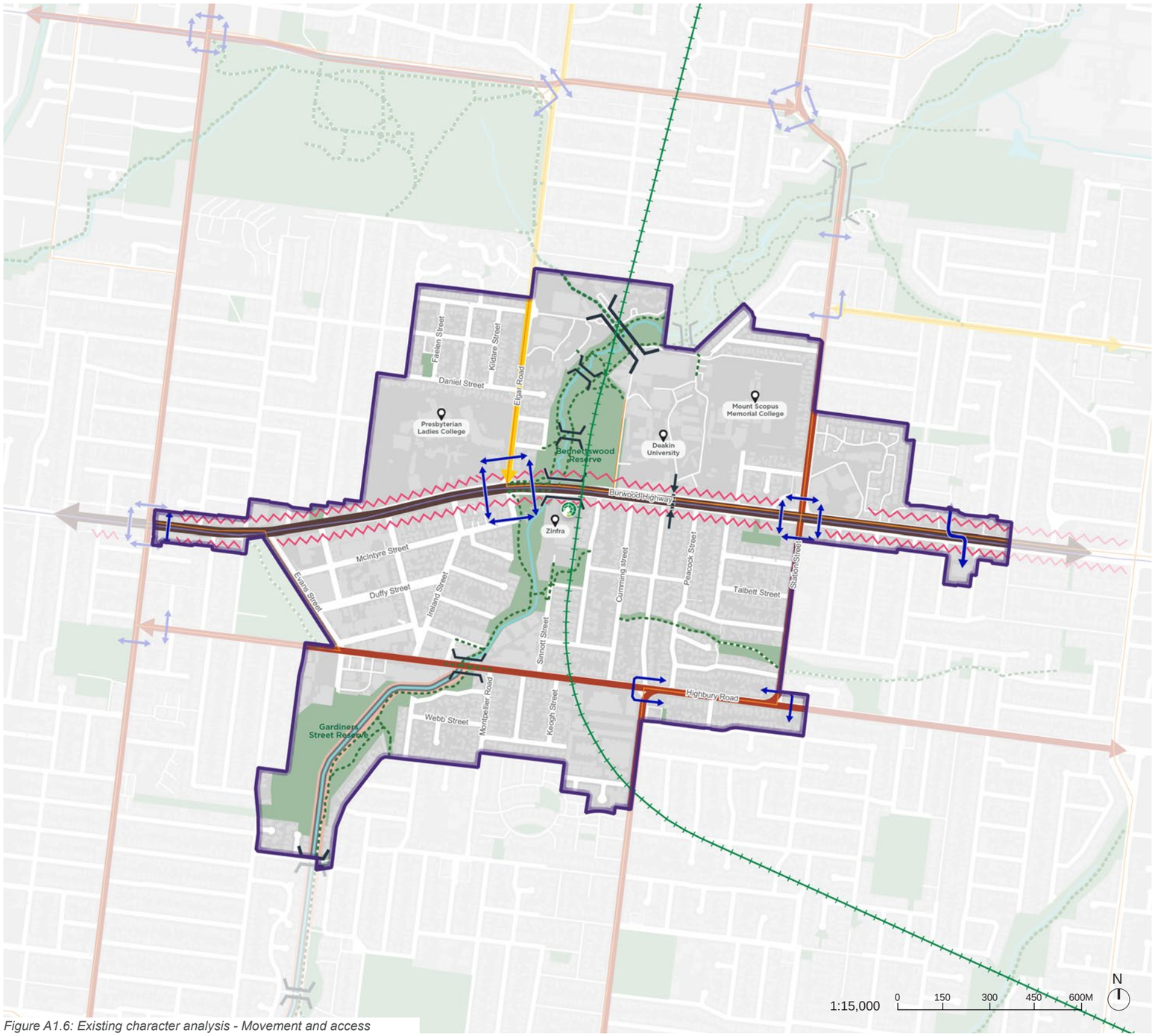


Figure A1.6: Existing character analysis - Movement and access

Legend

Public transport
- Existing bus route
- Existing tram route

Crossing points
- Bridge
- Bridge and underpass
- Crossing at grade (cross road, 4-way)
- Crossing at grade (staggered)

Landscape corridors
- Gardiners Creek - Concrete lined channel
- Pedestrian and cycling paths

- SRL station
- SRL East alignment
- Structure Plan Area
- Water
- Open space

Street types
- Highway (primary)
- Arterial (secondary)
- Connector (secondary, lower)
- Local (tertiary)
- Barriers to crossing

Figure A1.7: Tramlines and highway

Figure A1.8: Burwood Highway underpass

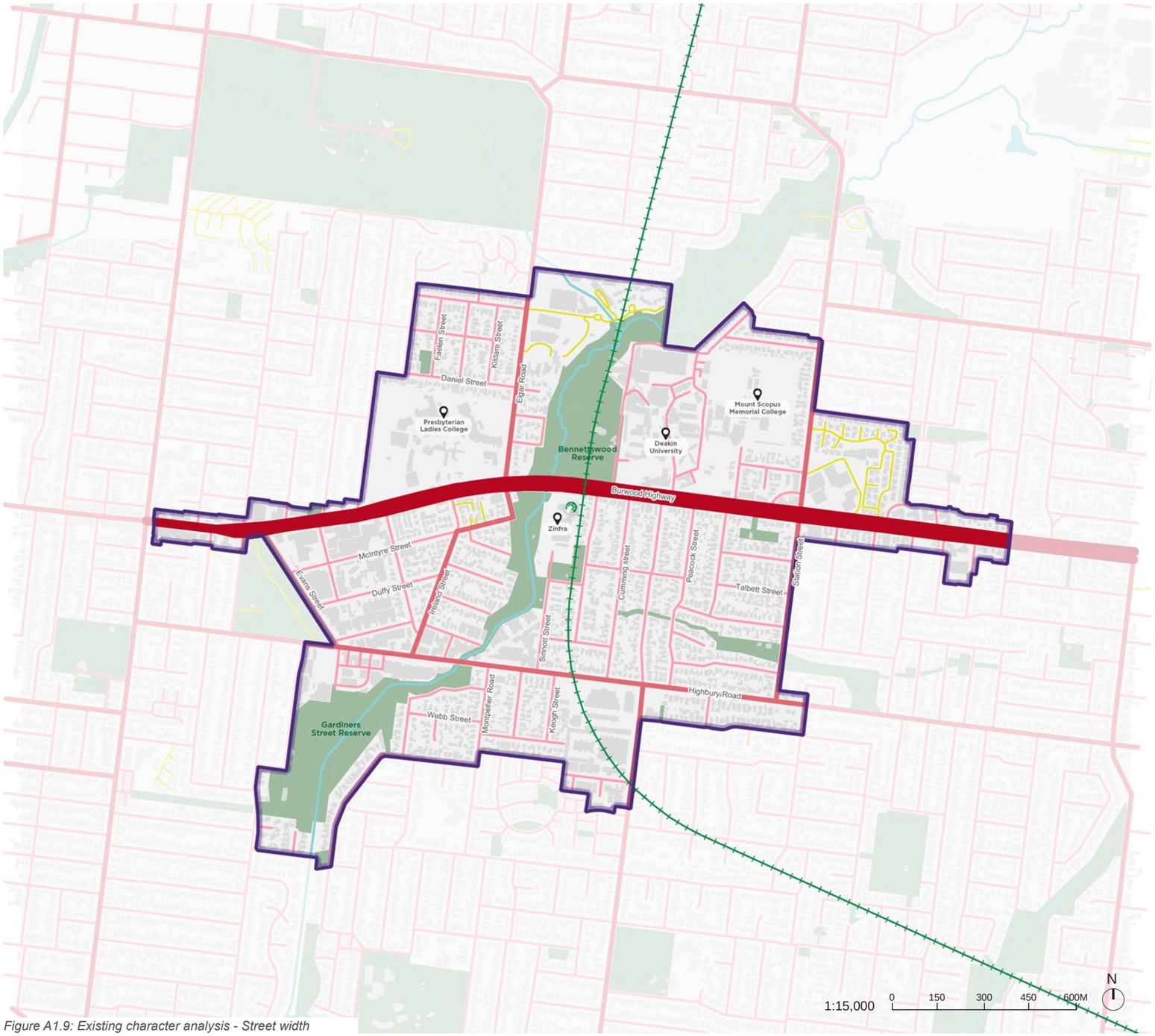


Figure A1.9: Existing character analysis - Street width

Legend

- SRL station
- SRL East alignment
- Structure Plan Area
- Water
- Open space
- Building footprint

Road widths

- Widest main road 30+ metres
- Wide main road 25 to 30 metres
- Main road 20 to 25 metres
- Local road 15 to 20 metres
- Minor road <15 metres

Key streets

The Burwood Structure Plan Area contains a relatively well-spaced grid of roads consisting of arterial, main roads and local/connector roads, summarised below.

- Burwood Highway is the highest order road that passes through the Structure Plan Area. It dissects the centre of the area in an east-west direction, past the SRL station site. Within the area, Burwood Highway has a generous (approximately 40m) reserve width, allowing it to accommodate a dedicated tram corridor in the centre median, along with three traffic lanes in each direction and footpaths on either side. Despite this width, it contains few trees. It also has little in the way of active frontages for much of its length. The resulting 'highway' character creates a relatively hostile environment and a barrier for pedestrians and cyclists. Notably, it narrows to a more 'urban' condition—approximately half the width—west of Warrigal Road. The undulating topography and abutting open spaces provide an attractively varied visual experience for road users
- Highbury Road is also a key east-west street. It has a similar character to Riversdale Road, resulting in a pleasant environment for pedestrians although, again, it has few crossing points
- Warrigal Road, Elgar Road and Station Street/ Huntingdale Road provide the main north-south roads through the Structure Plan Area. Elgar Road is central to the area, but does not continue south of Burwood Highway, whereas the other two corridors provide key regional connections to the south (and north). All of these streets have an urban character and undulating topography, not unlike that of Riversdale Road. Elgar Road and Station Street / Huntingdale Road provide a relatively pleasant environment for pedestrians. However, Warrigal Road appears to carry higher traffic volumes (particularly trucks, perhaps because of its four-way intersection with Monash Freeway), and is less well treed, resulting in a less pleasant environment for pedestrians. All these streets have few pedestrian crossings.

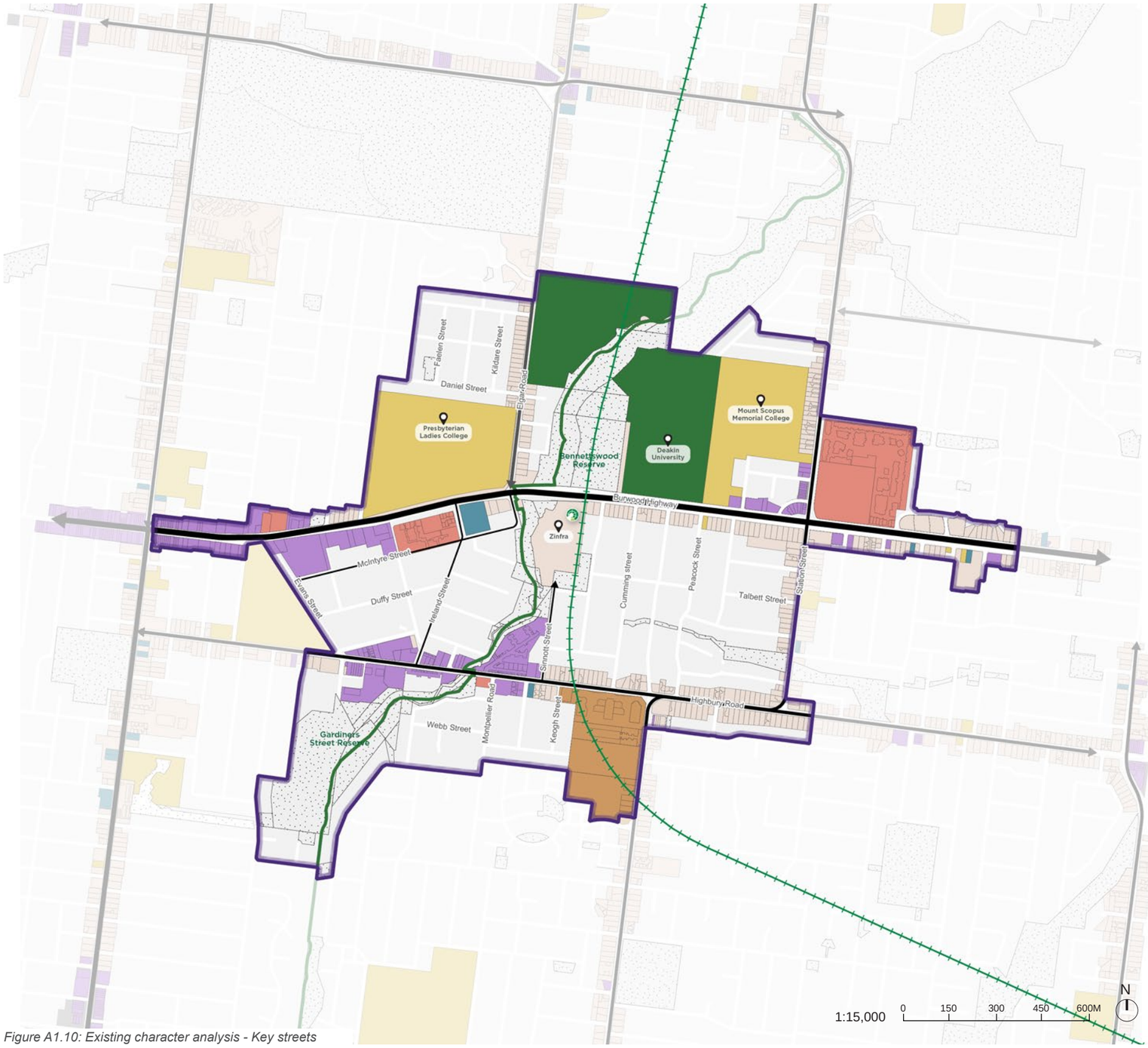


Figure A1.10: Existing character analysis - Key streets

- Sinnott Street is a local north-south street with a mixed character, generated by a combination of industrial uses, residential frontages and exposure to Gardiners Creek Reserve and Burwood Skyline Drive-In Playground. Sinnott Street is proposed to be extended to the north providing a link between the Burwood Highway and Highbury Road. The road reserve has one traffic lane in each direction, and footpaths and continuous canopy trees along both sides. The resulting character is pleasant for pedestrians
- McIntyre Street is a local east-west street just south of Burwood Highway that provides access to the industrial precinct and residential pocket south of Burwood Highway. The road reserve has footpaths on both sides and a relatively continuous tree canopy. The undulating terrain along the street provides views to the east at high points as well as Gardiners Creek at the eastern end
- Ireland Street provides another connection between Burwood Highway and Highbury Road, through a low-scale residential neighbourhood in the north and an industrial area that fronts Highbury Road. Continuous tree canopy, footpaths on both sides and relatively flat terrain make the street comfortable for pedestrians.

Figure A1.11: Burwood Highway

Figure A1.12: Sinnott Street

Figure A1.13: Duffy Street

Figure A1.14: McComas Grove

Figure A1.15: Highbury Road

Figure A1.16: Ireland Street

Topography and natural features

The topography and natural features in the Burwood Structure Plan Area contribute strongly to the character of Burwood and provide a diverse experience as one moves through the area. A defining feature of the area is the Gardiners Creek corridor and the surrounding low-lying valley, providing these areas with an added sense of enclosure and naturalistic sense of place. The edge of the area features a number of high-points which provide the surrounding residential areas with a sense of openness, and views to places beyond. The key natural features of the Burwood Structure Plan Area are:

- Gardiners Creek cuts a relatively steep valley through the middle of the Burwood Structure Plan Area between its north-east and south-west corners. The associated parkland is heavily treed, creating a highly attractive and pleasant green 'oasis' from the surrounding urban area. The creek has a natural form north of Burwood Highway and is within a concrete-lined channel to the south. Both sections of the creek feature native trees lining the corridor and within adjacent open spaces. South of Burwood Highway, the concrete lined channel is fenced off to restrict public access and the corridor is generally narrower than the naturalistic section. The fence obstructs views to the creek and adds an industrial quality which reduces the naturalistic feel of the corridor south of Burwood Highway
- The topography surrounding the Gardiners Creek corridor is relatively low-lying and gradually rises to high-points to the north-west and south-east. The topography subtly alters the character, as differences arise in view distance, sense of enclosure and the gradient of the ground plane
- The low-lying area surrounding the creek creates a valley which is characterised by short-range views, a strong sense of enclosure and generally flat ground plane. Views within the valley are limited and are often dominated by heavily tree-lined horizons. There is also a distinct feeling of being below the tree canopy, as the tree-lined streets are higher in the surrounding areas. As the horizon is filled with trees, the amount of visible sky is reduced and restricted to upward views. Across the low-lying valley, the ground plane generally feels flat, with a slight incline from Gardiners Creek.

Legend

- SRL station
- SRL East alignment
- Structure Plan Area
- Open space

Features

- Low lying area
- High lying area
- High point
- Key D'nong ranges views
- Views to CBD
- Views to Box Hill MAC
- Ridgeline
- Gardiners Creek - concrete channel
- Gardiners Creek - natural

Topography

- 35 to 40
- 45 to 50
- 55 to 60
- 65 to 70
- 75 to 80
- 85 to 90
- 95 to 100
- 105 to 110
- 115 to 120
- 125 to 130
- 135 to 140
- 145 to 150

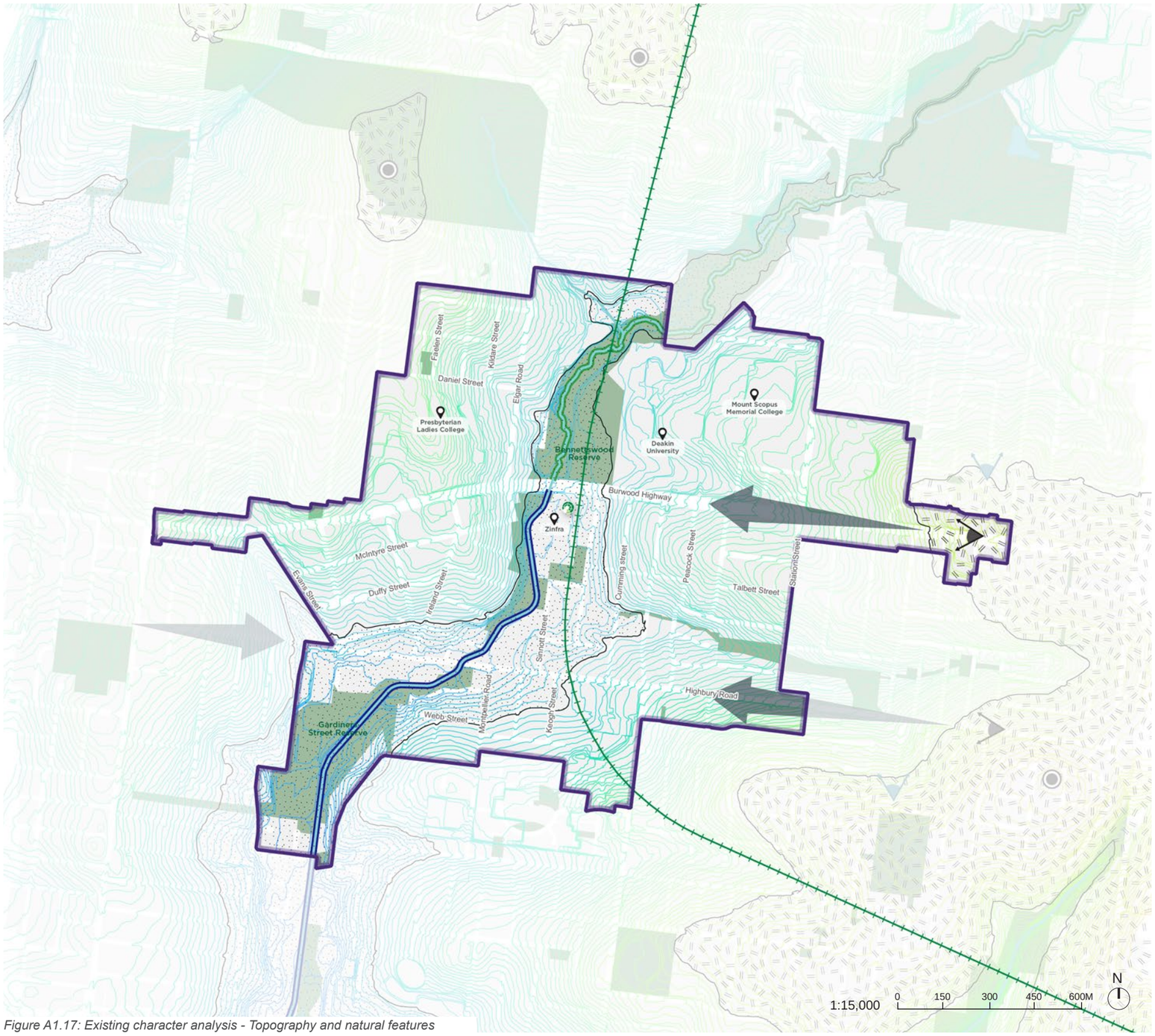


Figure A1.17: Existing character analysis - Topography and natural features

- The highest areas within the Burwood Structure Plan Area provide views and a strong sense of openness, with steep topography in some places. Within streets in the high areas, views to surrounding areas including Box Hill and Melbourne CBD are common. These views are often experienced in glimpses, between houses, or at intersecting streets. Views of the horizon are long distance, and the amount of visible sky is increased and often un-restricted. This creates a unique feeling of openness, distinct to that experienced within the low-lying valley areas. Additionally, the topography is visibly undulating and many streets feature a clear sense of moving downhill or uphill
- Between the high and low areas are a third type of topography area with distinct features that differ from the topographically high and low areas. These 'middle' areas provide views to the valley below and occasionally to surrounding neighbourhoods. They can also be characterised by undulating topography
- Due to the generally low-rise nature of the Structure Plan Area and the heavily tree-lined streets, there are few landmarks visible from within the area. The most distinct landmark is the Deakin Burwood Corporate Centre situated on Burwood Highway which is approximately 7 storeys high. This building is clearly identifiable when looking along Burwood Highway and provides a distinct landmark signaling the location of Deakin University.

Figure A1.18: Gardiners Creek naturalistic section

Figure A1.19: Midpoint within the Burwood Precinct.

Figure A1.20: Gardiners Creek concrete channel section

Figure A1.21: Looking east towards Gardiners Creek

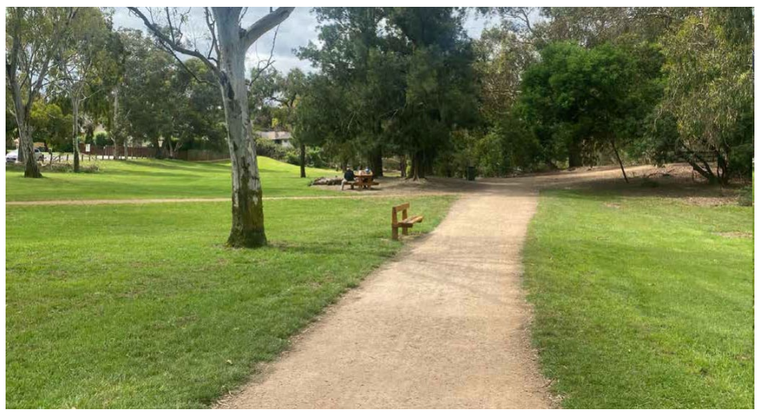


Figure A1.22: Gardiners Creek adjacent open space

Landscape character and tree canopy

As a whole, the Burwood Structure Plan Area has a relatively high level of tree canopy cover, creating a ‘leafy’ character. However, there is variation, as summarised below.

- A dense corridor of canopy cover runs through the Gardiners Creek reserve, on a broadly north-south alignment through the Burwood Structure Plan Area. Trees in this corridor, predominantly indigenous species, are planted throughout the public space adjacent to the Gardiners Creek water course. Landscape corridors spur out at intervals along Gardiners Creek, joining to other public open spaces, including a spur to the east that joins to Lundgren Reserve
- The open spaces, described previously, are where the highest level of canopy cover is found, with canopy widths of 8+ metres common. Many of these open spaces have an indigenous landscape character, with the exception of Burwood Reserve which has an exotic landscape character. However, some of the open spaces have large sporting fields, limiting canopy cover to their edges
- Other dense areas of canopy cover include pockets of trees in reserves and other public open spaces, including notably in Wattle Park. Wattle Park has dense areas of trees creating near continuous canopy cover over the eastern half of the park. Coverage thins to the west, correlating with a change in use to golf course and the adjacent Coopers Reserve
- The residential areas are also well treed, particularly in backyards, where larger trees are typically found. The residential areas have varied street tree sizes and distribution, resulting in an inconsistent canopy cover across the Burwood Structure Plan Area
- More recent subdivisions for townhouse developments on smaller lots generally have a lower level of canopy cover due to high building site coverage
- The education facilities tend to have patches without trees where their larger buildings and playing fields are found
- The retail, commercial and industrial areas have the lowest level of tree canopy cover, with some street trees but few on private properties.

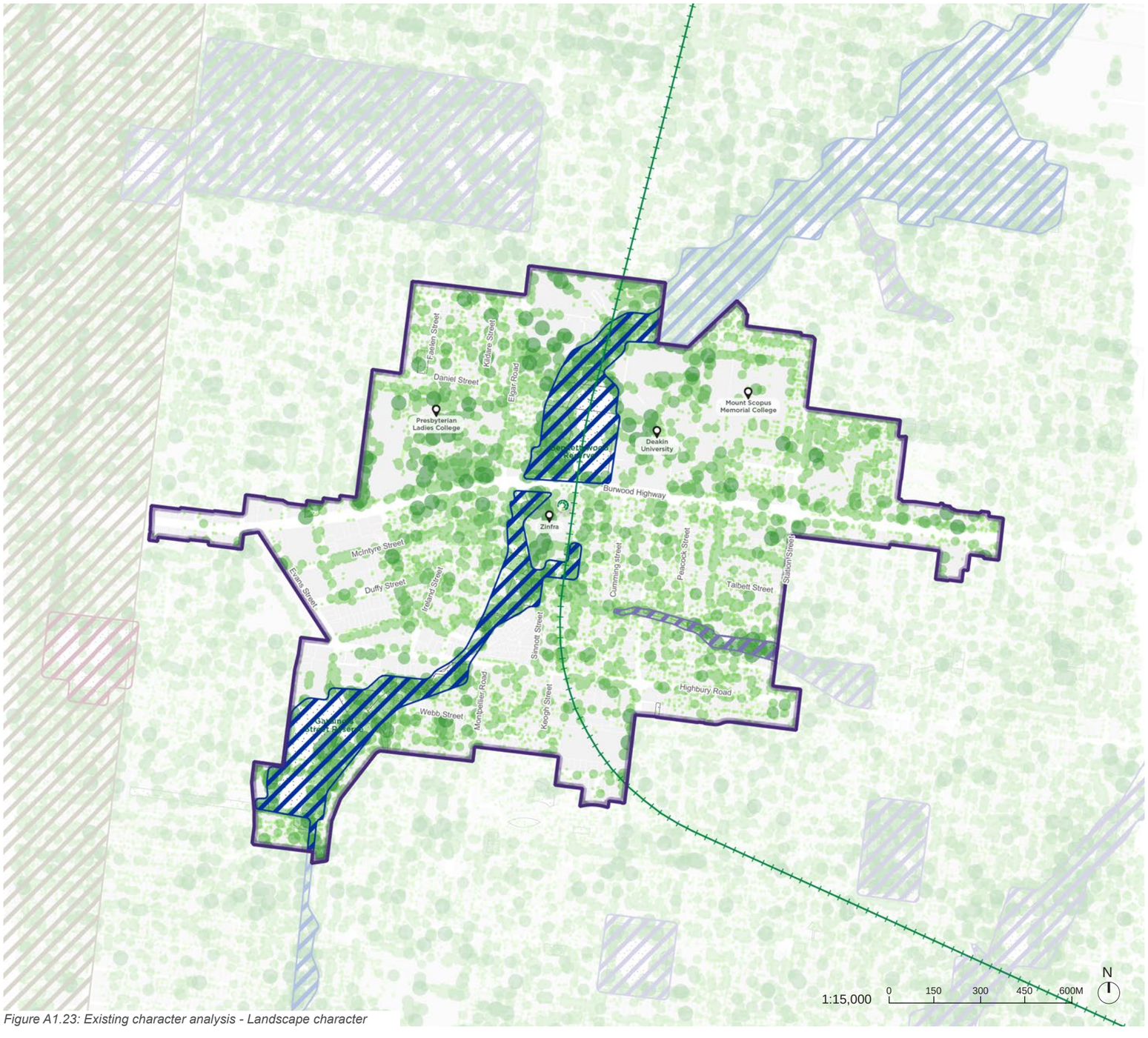


Figure A1.23: Existing character analysis - Landscape character

Landscape character tends to change from street to street in the Burwood Structure Plan Area, with subtle consistencies occurring in neighborhoods within the area

Footpaths and grassed nature strips with street trees are commonly found within the residential areas. However, the size and type of street trees differs across the Structure Plan Area, with some areas featuring large exotic and deciduous canopy trees, whilst other areas have smaller native trees providing less canopy coverage.

Figure A1.24: Minimal vegetation in commercial areas

Figure A1.25: Common residential street with inconsistent street tree species and tree sizes

Figure A1.26: High canopy cover in residential streets

Figure A1.27: Dense vegetation along Lundgren Chain Reserve

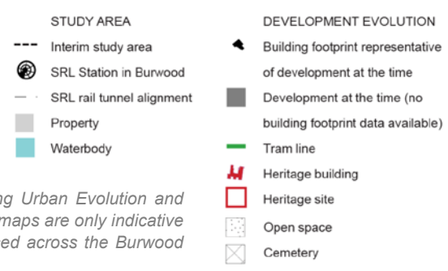
Figure A1.28: Dense vegetation along Gardiners Creek

Urban evolution and heritage

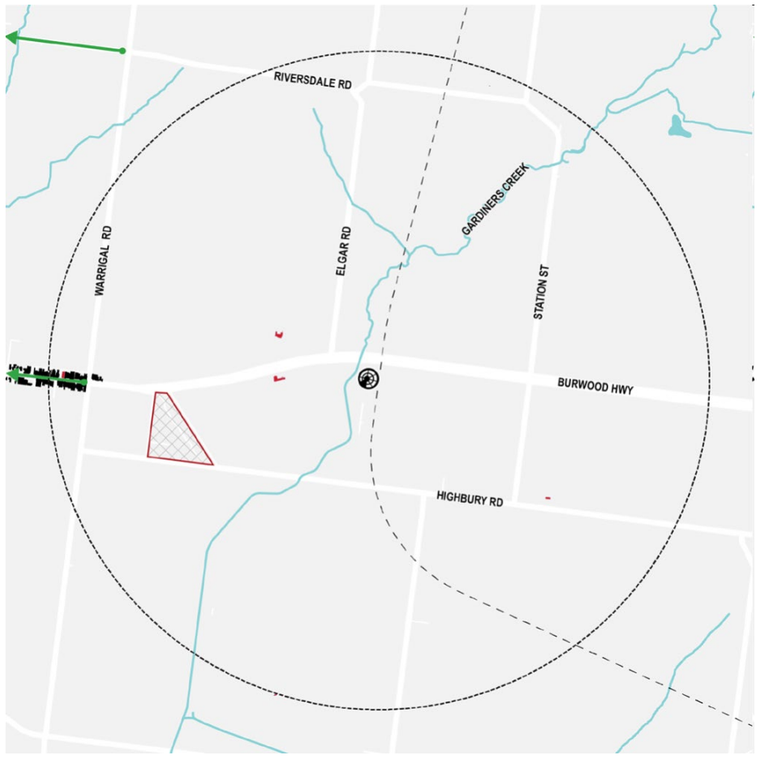
Pre-European settlement, the Wurundjeri Woi Wurrung people were the traditional custodians of the land for more than 40,000 years.

As Melbourne started to develop through the late 1800s, Burwood saw farmland turn into housing estates, spurred on by electrification of the Toorak Road (known as Norwood Road) tram and Riversdale Road tram. This development generally moved out from Camberwell in the west and Box Hill in the north, with the south-east area the last to develop. The majority of development in the area was in the form of housing estates, which predominantly occurred from 1951-1970. By 1978 when the Toorak Road tram was extended along Burwood Highway to Middleborough Road, but, the majority of the area was covered in single storey, detached dwellings.

The assessment on the following pages outlines the general urban development trends and key heritage buildings and elements, as they relate to character.



Use this legend above for the following Urban Evolution and Heritage maps. Note that the following maps are only indicative of the development patterns experienced across the Burwood Structure Plan Area.



PRE-EUROPEAN SETTLEMENT

The Traditional Owners have lived sustainably in the region for thousands of years, moving within their lands while making use of seasonal plant and animal resources and sharing similarities in speech, burial practices, initiation, kinship marriage ties and religious beliefs.

The Wurundjeri Woi Wurrung People are the Registered Aboriginal Party for Burwood (in accordance with the July 2021 determination of the Victorian Aboriginal Heritage Council). The Traditional Owners continue to be custodians of the region today, maintaining their connection to their Country.

Research into the culture and heritage of the Traditional Owners in the Burwood Structure Plan Area should be explored through a separate specialist report.

POST-EUROPEAN SETTLEMENT - 1920

By 1900, two horse omnibuses ran from Burwood into Camberwell, along Toorak Road. In 1916, the electric tram began running from Warrigal Road (known as Boundary Road), along Toorak Road to Camberwell. Land surrounding the new electrified tram began to be sold and developed into shops and housing. Around the same time, the Hawthorn tram was electrified and extended along Riversdale Road to Wattle Park. This tram catered for the growing residential population of Box Hill South and Camberwell to the north.

West of the Burwood Structure Plan Area is Burwood Station, the area around which began to increase in housing density when the Outer Circle train line was electrified in 1924. Many housing estates referred to the speedy trip to town using the electric tram in order to sell land. However, despite new connections to Melbourne, many housing estates were designed and auctioned more than 20 years prior to housing being built on site, if at all. One such example is the ‘Burwood Township Estate’ on the corner of Highbury Road and Warrigal Road which was sold in the late 1880s, but appears not to have been developed until the 1940s in a different lot configuration.

Key heritage sites include:

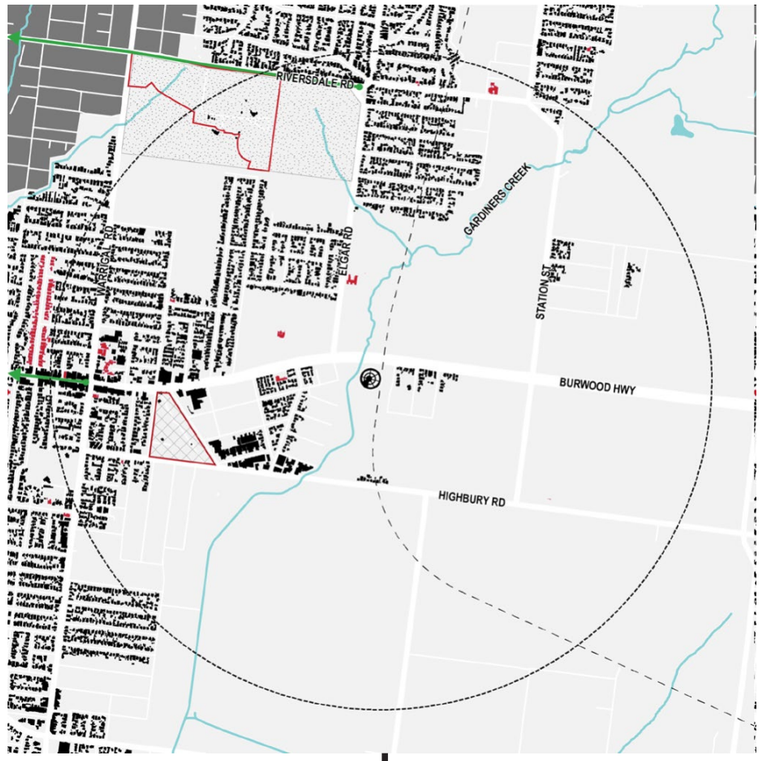
- Primary School No.461- Former Burwood School, Burwood Highway - Victorian Heritage Register
- Burwood Cemetery, 1859 - local significance.

1920 - 1945

Between 1920 and 1945, the area around the intersection of Warrigal Road and Burwood Highway began to transition from rural allotments to residential developments. This development occurred through housing estate land sales which laid out the urban structure of the area. Many of the estates sold at this time did not see housing construction until after 1945. Within this area, remnants of inter-war and post-war architectural styles still exist, although these are dispersed amongst more modern housing styles and unit developments.

To the north, the Hawthorn tram was extended from Warrigal Road to Elgar Road in 1928, encouraging new residential developments to occur following 1945.

Fairfield Avenue, to the west of the Burwood Structure Plan Area represents a 1930s, single storey character, with timber cladding, and Modern and Old English porches and windows. Fairfield Avenue has local significance within Boroondara for being a well preserved example of one of Melbourne’s fastest growing suburbs at the time.



1945 - 1951

Between 1945 and 1951 a number of post-war style residential developments began to occur further east of Warrigal Road. These pockets were concentrated around Burwood Highway and Riversdale Road, with a large residential estate appearing at the corner of Riversdale Road and Elgar Road, to the east. Interestingly, this estate, known as ‘Riversdale Heights Estate’ was originally advertised for sale in 1920, but substantial development didn’t occur until 1945. Many of these houses are still standing today and represent a post-war architectural style, and feature brick and weatherboard facades.

Within this period, the area bounded by Gardiners Creek, Burwood Highway, Highbury Road and Burwood Cemetery began to increase in residential density, with large estates facing the creek being subdivided into residential lots.

1951 - 1970

Between 1951 and 1970 Burwood experienced a large housing boom, with the majority of the residential development occurring after 1960. The architectural style from this time is not consistent, with a mix of styles and materials being used. Generally houses built during this time were a mix of single storey and double storey detached dwellings, with relatively low site coverage.

In 1954 the first drive-in cinema in Australia opened on the adjacent to Gardiners Creek. The site was chosen based on the rapid growth occurring in Burwood and functioned as a natural amphitheater.

Burwood Teachers College was established on the site of Deakin University in 1954, mainly training primary school teachers.

Key heritage sites include:

- Burwood Drive-In, established in 1954 - National Trust.

1970 - TODAY

From 1970, Burwood experienced an increasing number of subdivisions and multi-unit townhouse developments dispersed across the area. Single storey dwellings began to be replaced with 3-storey dwellings as land became more desirable.

In 1978 the number 75 tram was extended along Burwood Highway, from Warrigal Road to Middleborough Road, providing a much needed public transport connection to Burwood and surrounding suburbs.

Burwood Teachers College became Burwood State College in 1972 , and in 1981 it merged to form Victoria College. In 1991, Victoria College merged with Deakin University, transforming the Burwood campus of Victoria College into the Deakin University Burwood campus.

In 1983, the Burwood Drive-In closed, and the site electricity supply yard, and a large industrial site.

Built form

The Burwood Structure Plan Area is generally characterised by small, low-rise building forms, with a small number of pockets of larger buildings. The built form is varied in age and architectural style, with pockets of original housing still visible in some streets. The following are the key built form characteristics identified across the area:

- Housing developments before 1945 were mostly of the inter-war and post-war architectural styles and featured brick and weatherboard construction. These houses were single storey detached dwellings with generous landscaping. However, many of these original houses have been replaced or altered through the years
- Between 1945 and 1960, the post-war architectural style was dominant in the area and featured single-storey, brick and weatherboard homes with a double or triple front. Brick veneer became a popular material choice in the late 1950s
- Post 1960s houses began to grow in size and brick veneer was a common material choice. As land in the Burwood Structure Plan Area became scarce, single-storey detached dwellings were replaced with double storey multi unit developments
- There is a cluster of 4-storey apartment buildings along Burwood Highway east of Station Street. Taller buildings within the Structure Plan Area are more prevalent along the primary and secondary roads
- The retail areas are characterised by small, 2 storey buildings attached into rows. These commercial buildings are generally built to the front boundary and commonly have shop top dwellings or offices with windows facing the street. These buildings range in age, with some from before 1945, and some newer commercial buildings
- The education facilities (and associated student housing) tend to have larger footprint buildings ranging up to 5-storeys in height. However, the taller buildings are generally set back from sensitive residential areas, avoiding unreasonable impacts. The Deakin Burwood Corporate Centre provides a striking landmark in views along Burwood Highway
- In highway commercial and industrial areas, the buildings are both larger in footprint and often attached, but generally only rise to 3-storeys.

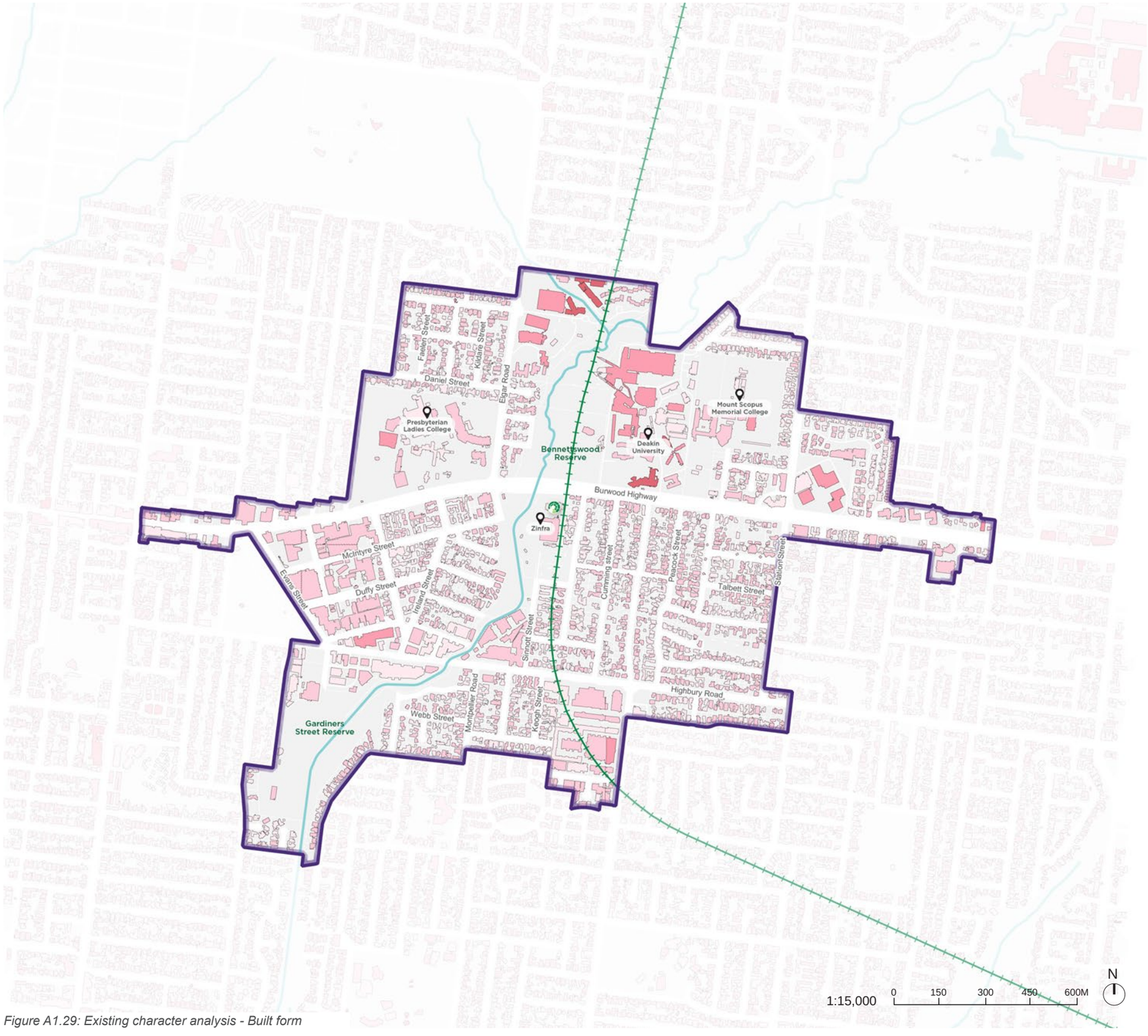


Figure A1.29: Existing character analysis - Built form

Figure A1.30: Low-rise residential

Figure A1.31: Greenwood Business Park

Figure A1.32: Deakin University Campus

Floor area ratio

The Burwood Structure Plan Area is generally characterised by low-scale built form with floor area ratio FAR mostly ranging between 0.2 and 1.

Commercial and industrial uses on the periphery the area, usually present 1-storey buildings with high site coverage leading to FAR close to 1.

Although higher built form is present north of Burwood Highway within Deakin University, Mount Scopus College and Greenwood Business Park, these large sites present low site coverage, which leads to low FAR.

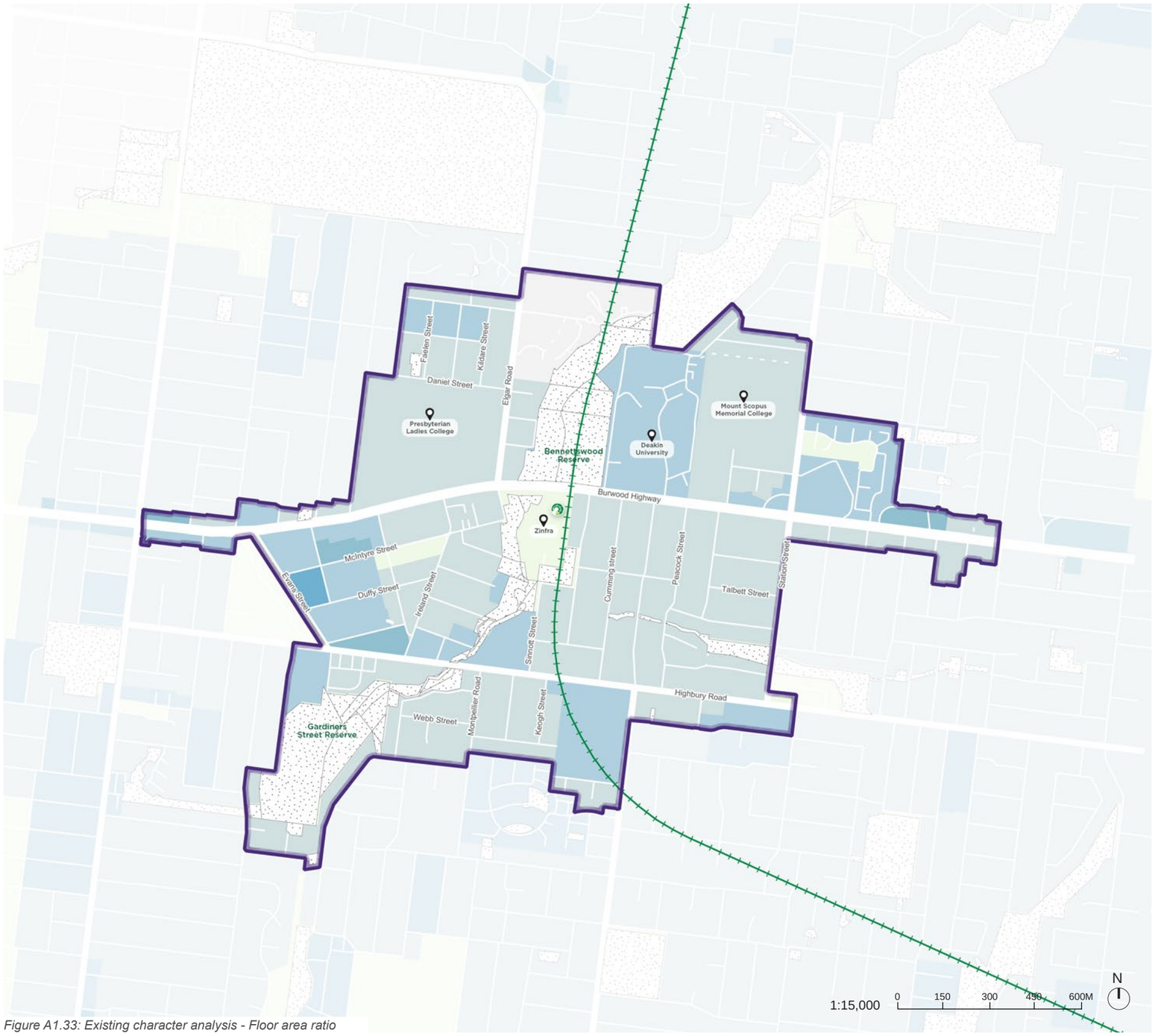


Figure A1.33: Existing character analysis - Floor area ratio

Legend

- SRL station
- SRL East alignment
- Structure Plan Area

FAR

- 0 to 0.2
- 0.2 to 0.5
- 0.5 to 1
- 1 to 2
- 2 to 3
- 3 to 5
- 5 +

Lot sizes

The Burwood Structure Plan Area presents two clearly distinct lot size conditions north and south of Burwood Highway.

To the north, several lots of size dominate the landscape, with a few pockets of small lots to the north-west and along Burwood Highway.

South of Burwood Highway the area is generally characterised by small lots, with exception to some large commercial and industrial lots to the west and along Highbury Road.

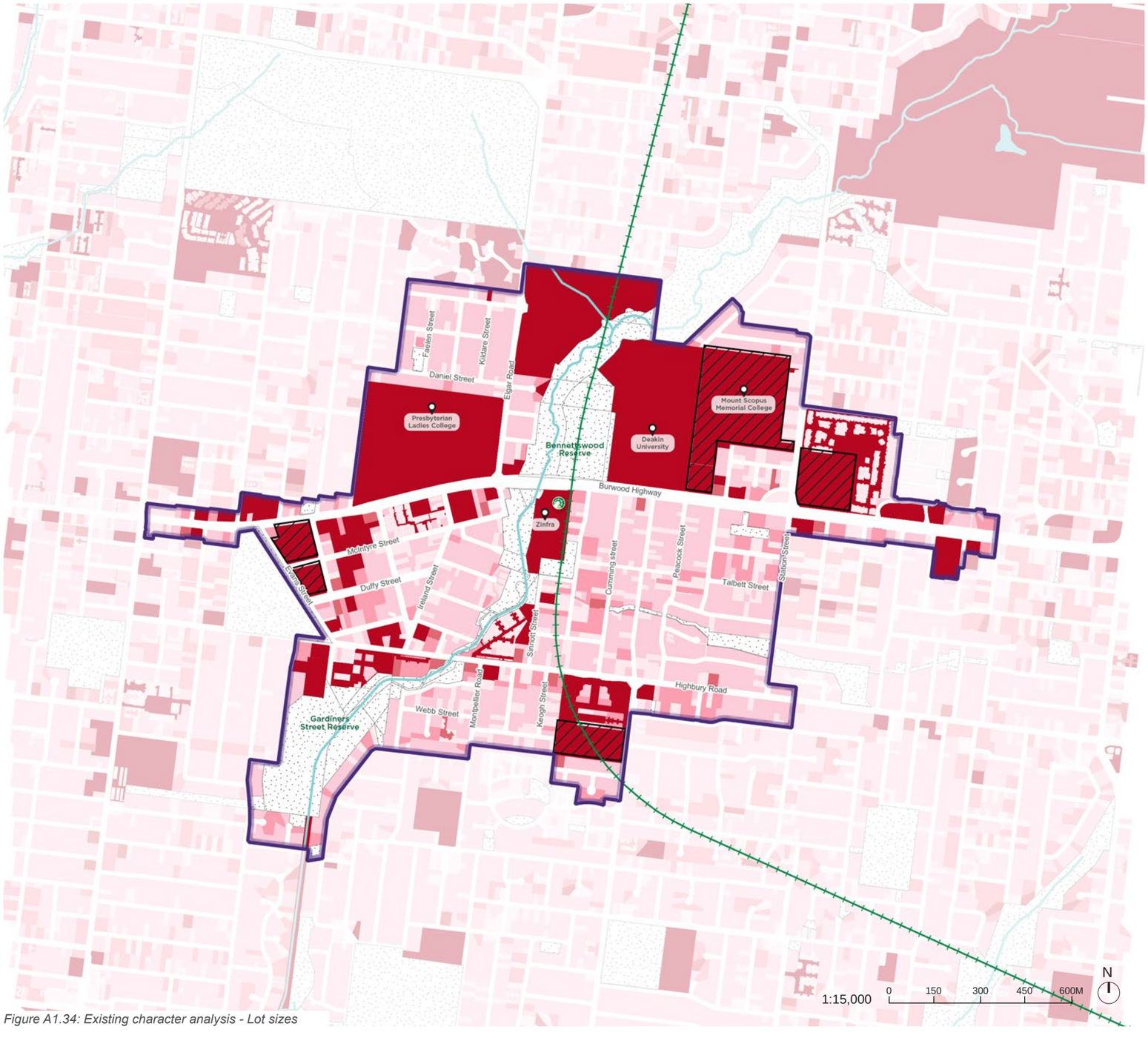


Figure A1.34: Existing character analysis - Lot sizes

Legend

- SRL station
- SRL East alignment
- Structure Plan Area
- Large opportunity sites for further investigation

Lot size

- 0 to 400 square metres
- 400 to 800 square metres
- 800 to 1200 square metres
- 1200 to 1600 square metres
- 1600+ square metres

Block structure

The block structure within the Burwood Structure Plan Area is varied and reflects the pattern of housing growth from the 1940s until today.

The majority of the residential area is in the form of regular blocks—some more than 200 metres long and some less. These support walking and cycling through a high degree of permeability and legibility, and minimise congestion by distributing traffic evenly. Regular blocks are more prevalent on the western side of the Burwood Structure Plan Area which was surveyed and developed in the 1940s-1950s, prior to the eastern side.

There are also some residential pockets with irregular blocks, including cul-de-sacs. These reduce permeability and legibility, and concentrate traffic on fewer streets. Some of these (shown in orange, in Figure A1.35) have the potential to be 'repaired' to form regular blocks. These block types are representative of developments that have occurred more recently, such as the cul-de-sac area (shown in yellow, on Block Structure map in Appendix), south of Wattle Park which was built in the 1980s.

The education facilities are large, inward-facing blocks that preclude or (explicitly or implicitly) discourage through movement. Burwood Cemetery, Greenwood Business Park and some industrial pockets—including the existing Zinfra site and the industrial estate on the corner of Highbury Road and Huntingdale Road are also large, inward looking blocks.

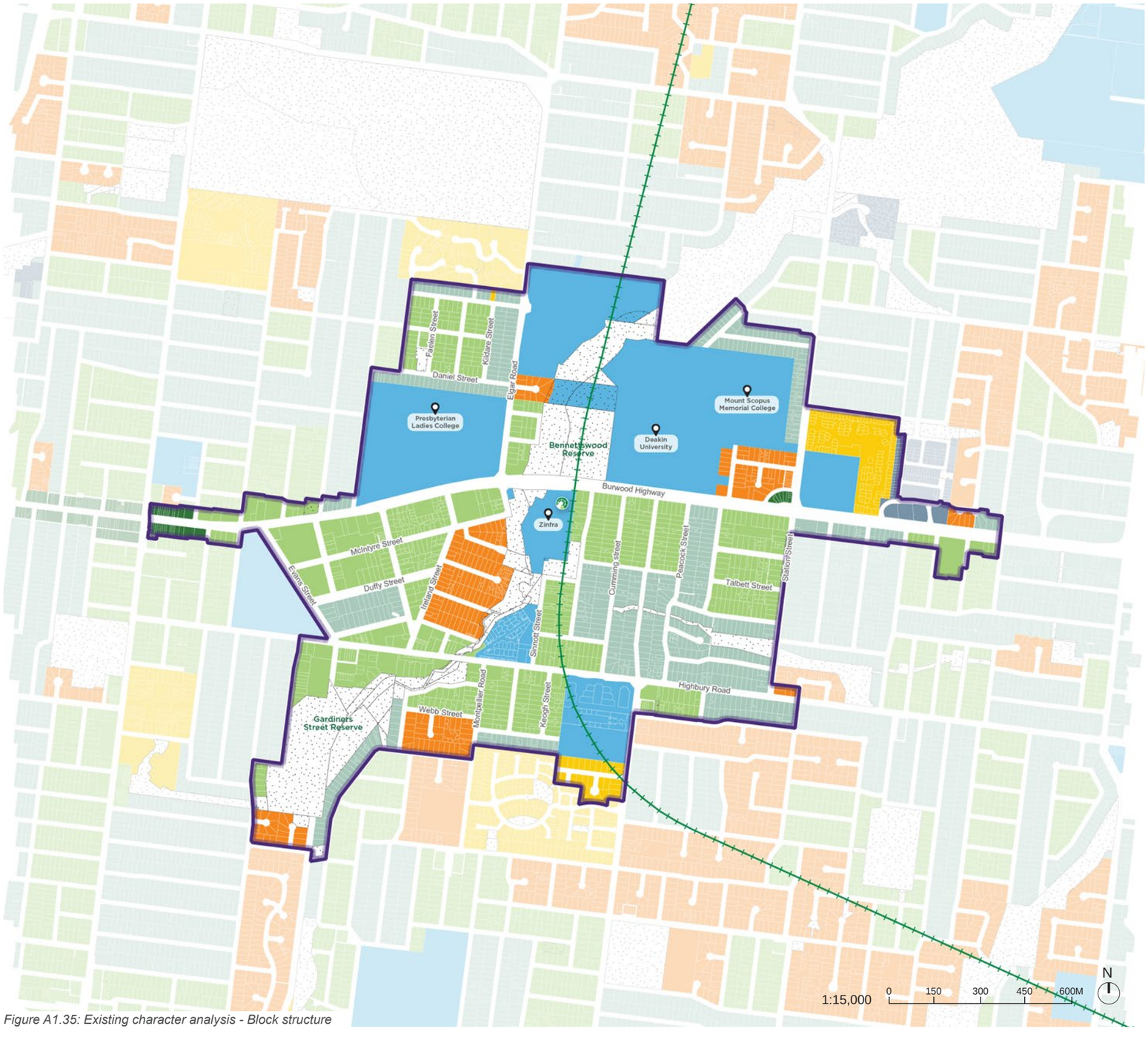


Figure A1.35: Existing character analysis - Block structure

Figure A1.37: Subdivision Pattern - Photo

Figure A1.38: Subdivision Pattern - Aerial Image

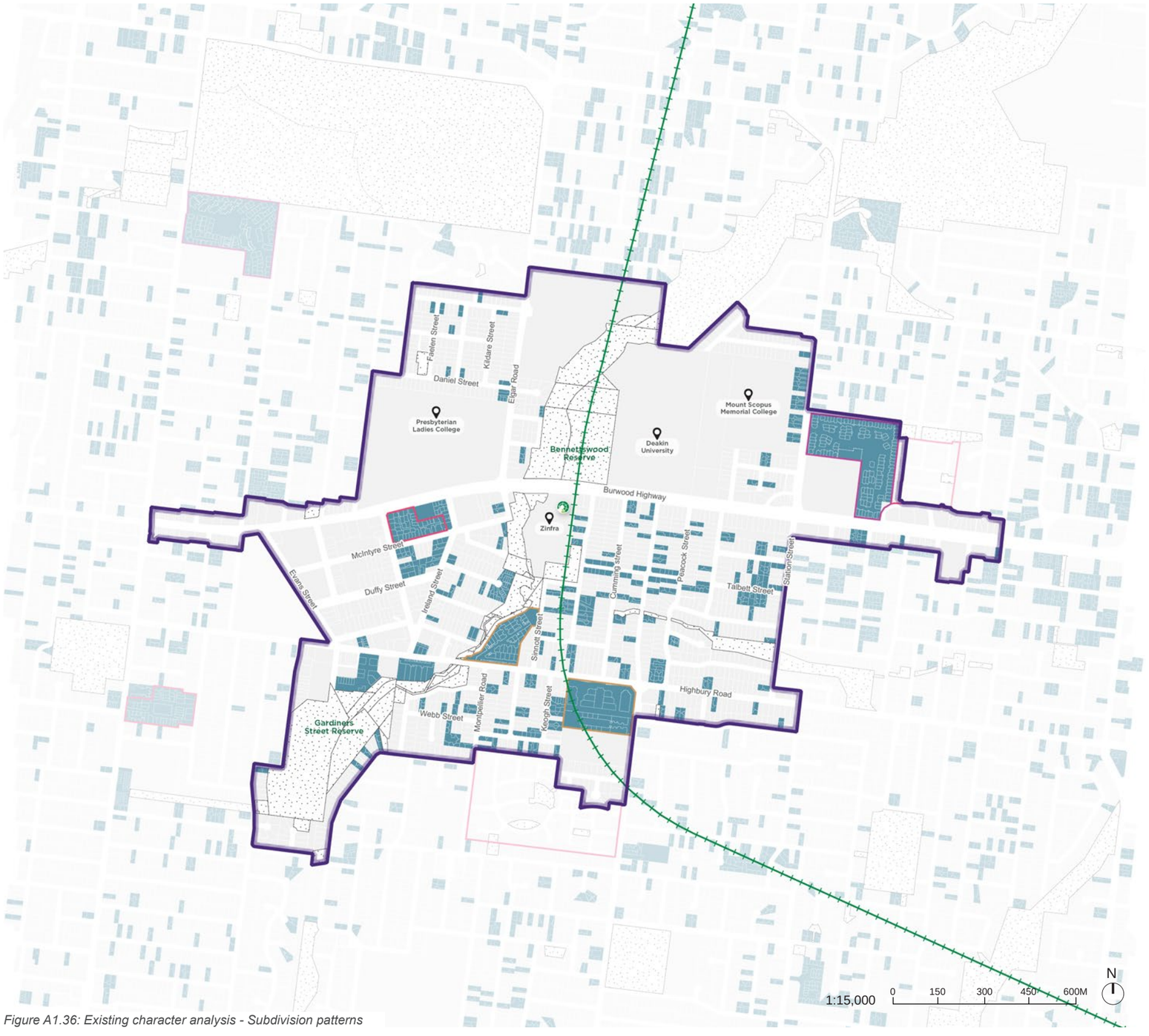


Figure A1.36: Existing character analysis - Subdivision patterns

Legend

- SRL station
- SRL East alignment
- Structure Plan Area
- Open space
- Strata titled sub-divisions
- Large inward looking residential development
- Large inward looking aged care development
- Large inward looking industrial/business development

Setbacks

The Burwood Structure Plan Area presents a wide variety of street setback, ranging from zero to above 15 metres.

Zero setbacks are predominant in industrial pockets to the west and the bookends of Burwood Highway. Whereas, above 15 metres are dominant within large sites to the north and industrial sites to the south.

Within residential areas, setbacks are more moderate, ranging mostly between 3 to 9 metres.

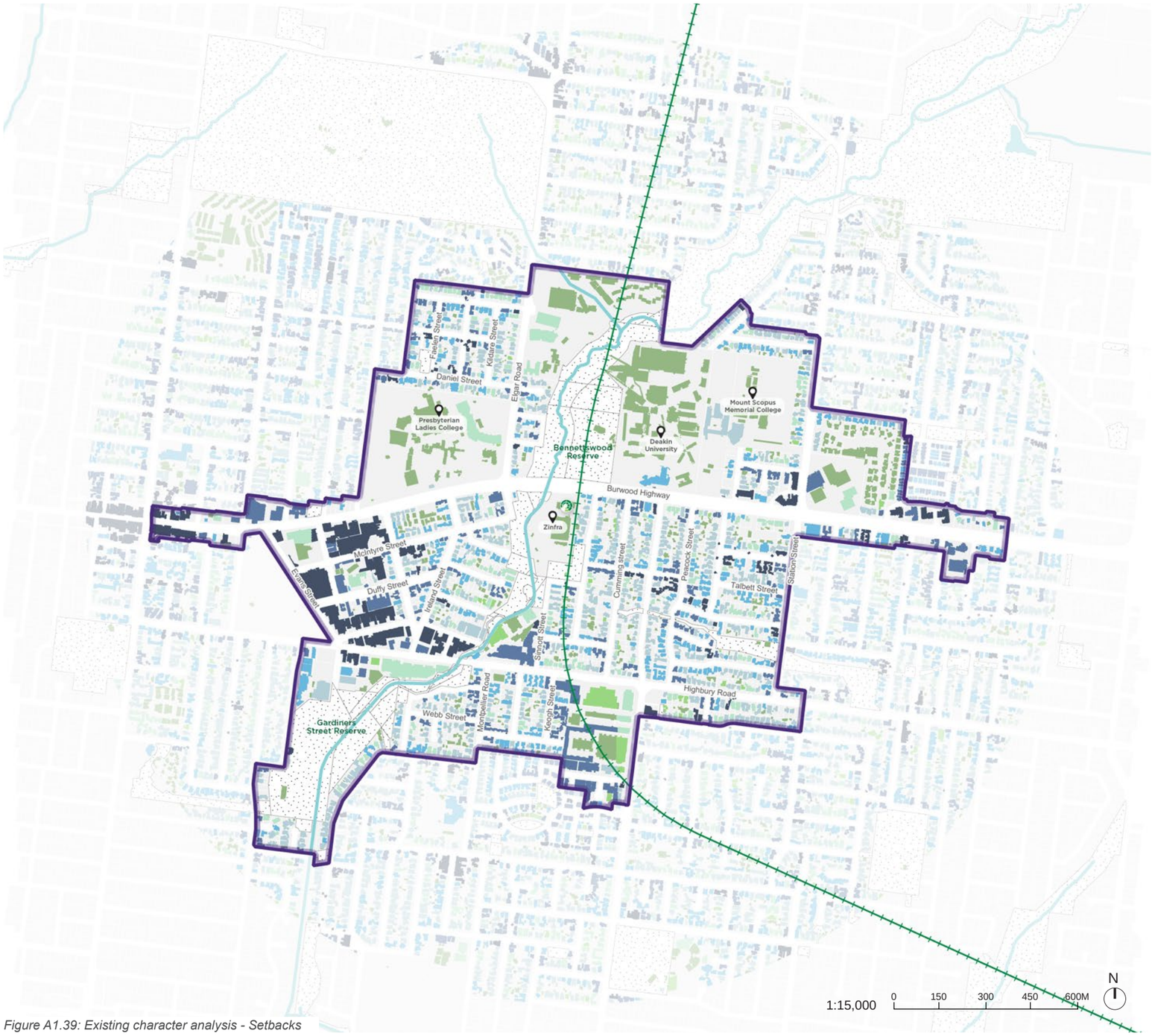


Figure A1.39: Existing character analysis - Setbacks

Figure A1.40: Buildings with no setback, immediate to footpath, Toorak Road

Figure A1.41: Area with large setbacks, landscape edge to Burwood Highway

Figure A1.42: Local streets, homes setback with front garden/driveways

Existing character areas

The existing character of the Structure Plan Area has been reviewed and existing character areas identified on the basis of their unique combination of topography, urban structure, main corridors, natural features, destinations, block and lot structure, tree canopy, landscape character, heritage and built form.

The existing character areas are summarised on the following pages, and are:

- Core Area
- Gardiners Creek West
- Deakin University
- Burwood Highway Corridor
- Station Street
- Highbury Road
- Residential Northwest
- Residential East
- Residential South
- Gardiners Creek Employment
- Mount Scopus South
- Mount Scopus College and Presbyterian Ladies College
- Aged Care

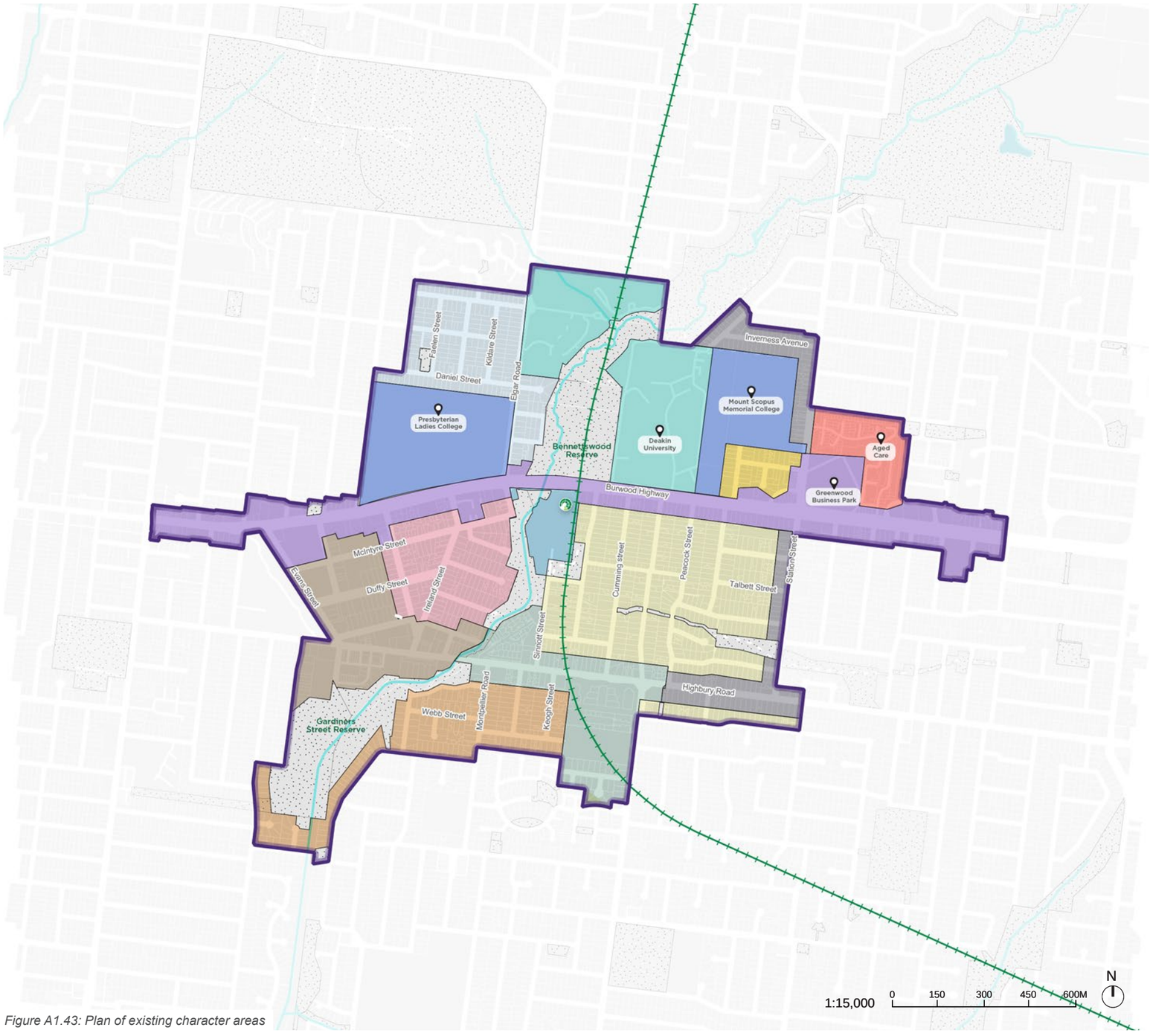


Figure A1.43: Plan of existing character areas

Core Area

The area which will accommodate the SRL station is currently defined by its interface with Gardiners Creek Reserve and Burwood Highway. It comprises a large light-industrial utilities facility, low-rise residential dwellings and open space, with mostly native street trees which visually connect nearby streets to Gardiners Creek.

Gardiners Creek West

This area is characterised by low-rise, detached dwellings within a native landscape character with large, native street trees regularly planted. The area is located west of Gardiners Creek and derives its native character from its proximity to the creek and surrounds. The area sits above Gardiners Creek and provides views into and across the valley.

Deakin University

The character of this area is defined by the Deakin University Burwood campus, Gardiners Creek and associated linear reserves north of Burwood Highway. The area has a mix of mid-rise, educational buildings, student housing and open spaces. The university campus presents features undulating topography and, for most part, sits above the level of Gardiners Creek Reserve.

Burwood Highway Corridor

The corridor runs east-west through the centre of the Structure Plan Area and creates a barrier to north-south movement. The character of the area is derived from the size and busyness of Burwood Highway, which influences the properties facing it. The lack of pedestrian crossings, volume of traffic and poor landscaping creates an uninviting pedestrian experience, with many dwellings featuring high fences and bushy gardens to minimise impacts from the road.

Station Street

This area is characterised by the convergence of two major road corridors with undulating topography and long-distance views to outer areas. Both roads present landscaped verges with consistent tree planting and are interfaced with low-scale residential dwellings of up to 2 storeys.

Highbury Road

Located east of Gardiners Creek, the Highbury Road environment is anchored by two low-rise, light-industrial precincts at its flanks. The area is characterised by a mix of residential and commercial uses along a major movement corridor. Wide street setbacks filled with car parking result in an overall car-centric environment.

Residential Northwest

Located east of Gardiners Creek and south of Burwood Highway, this area is predominately characterised by its residential use and landscape features, with recent infill development transforming some of the traditional front-landscaped setbacks by introducing low-density townhouse subdivisions.This residential area sits above the Gardiners Creek valley and offers views down to the creek and to nearby residential neighbourhoods. Lundgren Chain Reserve intersects this area, providing an unique natural landscape character to the neighbourhood.

Residential East

Located east of Gardiners Creek and south of Burwood Highway, this area is predominately characterised by its residential use and landscape features, with recent infill development transforming some of the traditional front-landscaped setbacks by introducing low-density townhouse subdivisions. This residential area sits above the Gardiners Creek valley and offers views down to the creek and to nearby residential neighbourhoods. Lundgren Chain Reserve intersects this area, providing an unique natural landscape character to the neighbourhood.

Residential South

Located east of Gardiners Creek and south of Highbury Road, this area is predominately characterised by its residential use, leafy streetscapes and interface with Gardiners Creek Reserve. Recent infill development has transformed some of the traditional front-landscaped setbacks by introducing low-density townhouse subdivisions.

Gardiners Creek Employment

This area derives its character from its industrial and commercial land uses. The area features primarily masonry and tilt up concrete warehouse buildings, which have a range of front setbacks. Car parking often dominates the street, with front setbacks generally providing on-site car parking for businesses.

Mount Scopus South

The character of this small residential pocket derives primarily from its well-defined interface conditions. Abutting major roads, Mount Scopus College and the back of retail uses, the area is severed from the rest of the Structure Plan Area, presenting a distinct lack of relationship with its surroundings. Residential uses are characterised by low-rise strata titles and detached dwellings.

Mount Scopus College and Presbyterian Ladies' College

These two private schools occupy substantial landholdings within the Structure Plan Area. Both schools feature open and well landscaped campuses with mature trees, particularly at the boundaries. Public access is restricted and interfaces with the public realm are primarily inactive.

Aged Care

This private community is characterised by single-storey, retirement-living dwellings and landscaped streets.

CORE AREA


Main drivers of character:

- Streets are approximately 15 metres wide which predominantly run north-south, and follow Gardiners Creek. The north-south streets undulate with the topography, whilst the east-west streets and pedestrian paths consistently slope downwards toward Gardiners Creek. The area sits below the tree-line, in the Gardiners Creek valley, and has short range and a dense tree canopy
- There is a native landscape character, that is driven by the open space surrounding the concrete-channeled Gardiners Creek. Street trees are mostly native
- Residential properties have a poor interface to the creek with rear fences backing on to the creek, resulting in limited accessibility. Dwellings are generally 1 to 2-storey, and feature a range of architectural styles from the 1960s to contemporary infill
- Front setbacks are generally more than 6m and feature a mix of exotic and native landscaping.

Considerations for change:

- Uniform low density character with many properties zoned NRZ may restrict development potential. They also back on to Gardiners Creek, creating a sensitive interface
- Gardiners Creek provides a strong landscape character which could be hard to maintain if density increases.

GARDINERS CREEK WEST


Main drivers of character:

- This mixed use area has mainly local streets at 15m wide, with Ireland Street, a main road at 20 metres dividing the area north-south. The streets slope down from Ireland Street, east to Gardiners Creek and west to Burwood Cemetery
- The area provides views to Gardiners Creek valley and occasionally views to surrounding neighbourhoods
- There is a native landscape character including native street trees, driven by the Gardiners Creek corridor, which stretches up to the edge of the residential area. This character becomes stronger closer to Gardiners Creek
- The built form includes dwellings of 1 to 2-storeys with a range of architectural styles. Lot sizes are predominantly 400 to 800 square metres. Front setbacks vary, but are generally more than 4 metres, and occupied by a mix of exotic and native landscaping
- Emergence of mid-density residential.

Considerations for change:

- Gardiners Creek creates a sensitive interface
- Properties in close proximity to the Burwood Business area have more potential for change, due to non-sensitive interfaces and different interfacing character.

DEAKIN UNIVERSITY


Main drivers of character:

- This mixed use area includes key educational institution such as Deakin University which have internal movement networks
- Deakin University sit below the tree-line, in the Gardiners Creek valley. Views are generally short range and feature a dense tree canopy
- There is a strong native landscape character, driven by the Gardiners Creek corridor. Street trees are mostly native and are generally newly planted and therefore have small canopies.

Considerations for change:

- The natural ‘urban oasis’ character of Gardiners Creek creates a sensitive interface
- Access is limited within the campus blocks due to many internal streets which are privately owned
- Sensitivity to taller buildings within the valley due to increased visual prominence
- High-rise development and urban intensification in this area is well underway. Ensuring that this development is sympathetic to the existing and historical character of the area should be an important consideration.

BURWOOD HIGHWAY CORRIDOR

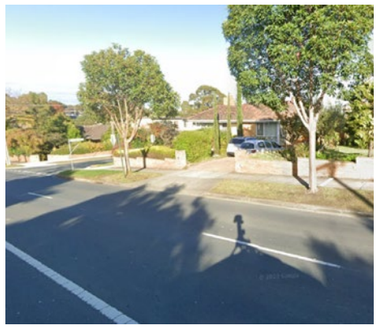

Main drivers of character:

- This area is dominated by Burwood Highway, which has 3 lanes in each direction with a central tram line. Burwood Highway presents a barrier to north-south pedestrian movement to the surrounding neighbourhoods
- Street tree planting is sporadic which has created a sparse tree canopy along the corridor. Landscape character is generally provided by properties facing Burwood Highway, which feature a range of exotic and native species, with native species becoming more prominent closer to Gardiners Creek
- The area has highly varied building types and sizes including large-footprint, 2 to 3-storey commercial buildings, 1 to 2-storey detached dwellings and occasional apartment buildings and unit developments
- Residential lots are predominantly 400 to 800 square metres, with commercial and education lots larger than 1600 square metres.

Considerations for change:

- The width of Burwood Highway and its zoning creates opportunity for redevelopment
- Future building mass and potential overshadowing to adjacent residential areas needs consideration.

STATION STREET




- High-speed/traffic-volume thoroughfare, characterised by consistent nature strips with sparse tree planting. Station street presents more consistent street planning
- Sloping topography sitting at a higher point above the Gardiners Creek valley
- The area offers long distance views
- Interfaces are primarily low-scale residential with front yards of 3 to 5 metres deep
- Access to Lundgren Reserve provides higher levels of amenity.

HIGHBURY ROAD


Main drivers of character:

- This area is a high-speed / traffic-volume thoroughfare, characterised by consistent nature strips with sparse tree planting
- The area offers long distance views
- This is a mix of residential and commercial / enterprise / industrial uses
- Business parks usually have wide setbacks with car parking facing the street and internal configuration. Some are fenced off.
- High opportunities for change, considerations to low-scale resi, especially to the south.

Considerations for change:

- There is significant opportunity for change, with consideration to current low-scale residential areas, especially to the south.

RESIDENTIAL NORTHWEST


Main drivers of character:

- This residential area features local streets approximately 15 metres wide which run east-west and north-south which undulate with the topography. The area provides occasional views to surrounding neighbourhoods
- Street trees are planted consistently, however the species and sizes are varied. Front setbacks are generous and feature a mix of exotic and native landscaping
- The area is characterised by single storey, detached dwellings and features a number of original dwellings from the 1950s. 1 and 2 storey dwelling contemporary infill and unit developments are common throughout the area. Lot sizes are predominantly 400 to 800 square metres, with 800 to 1200 square metres lots and 0 to 400 square metres lots peppered throughout the area.

Considerations for change:

- Strong landscape character may restrict level of change, due to increase in site coverage and loss of vegetation.

RESIDENTIAL EAST

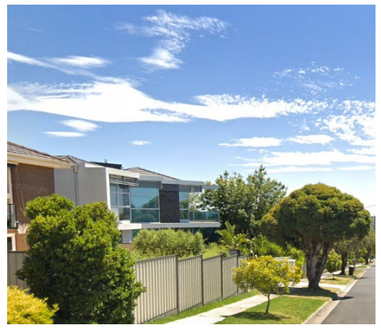

Main drivers of character:

- This residential area features local streets approximately 15 metres wide which run north-south and east-west. The north-south streets undulate with the topography, whilst the east-west streets generally slope downwards toward Gardiners Creek
- Dwellings are generally 1 to 2 storeys, and feature a range of architectural styles from the 1960s to contemporary infill. 2 storey dwellings and unit developments are common throughout the area. Lot sizes are predominantly 400 to 800 square metres, with 800 to 1200 square metres lots and 0 to 400 square metres lots peppered throughout the area.

Considerations for change:

- Uniform low-density character makes this area sensitive to substantial change
- A number of lots are already subdivided, restricting the potential level of change within the area.

RESIDENTIAL SOUTH

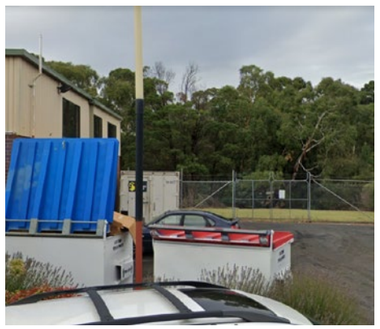
Main drivers of character:

- The area sits slightly above the tree-line of the Gardiners Creek valley. The area provides views to Gardiners Creek valley, between houses and along east-west streets, and occasionally views to surrounding neighbourhoods
- Street trees are planted inconsistently, and the species and sizes are varied within the streets. Front setbacks are varied, and feature a mix of exotic and native landscaping
- Dwellings are generally 1 to 2 storeys, and feature a range of architectural styles from the 1960s to contemporary infill. 2 storey dwellings and unit developments are common throughout the area. Lot sizes are predominantly 400 to 800 square metres, with 800 to 1200 square metres lots and 0 to 400 square metres lots peppered throughout the area.

Considerations for change:

- Uniform low-density character makes this area sensitive to substantial change
- A number of lots are already subdivided, restricting the potential level of change within the area.

GARDINERS CREEK EMPLOYMENT



Main drivers of character:

- This mixed use area includes industrial and commercial uses
- Streets are generally 15 metres wide and run east-west and gently slope down towards Burwood Cemetery
- The industrial buildings are mostly built to the front boundary, with some buildings set back for car parking
- Lot sizes are varied with some lots larger than 1600 square metres
- The area features a consistent nature strip and sporadically planted street trees which are generally native species
- Poor interface with Gardiners Creek
- Large sports fields lack in amenity, diversity, activation.

Considerations for change:

- This areas location and zoning (zoned IN1Z and IN3Z) create potential for intensification of employment uses
- This area has potential for substantial change, due to minimal sensitive interfaces, large lots and poor landscape character
- Interfaces to residential area will require a more sensitive transition.

L - Mount Scopus College

Mt Scopus is a very large site that may become available for redevelopment if the school relocates. If so, it offers a rare opportunity for a master planned development that provides a different offer to the surrounding Urban Form Areas. It is currently zoned SUZ.

N - Aged Care

The Fountain Court Retirement Village is characterised by detached dwellings in a leafy setting. It is a very large site that offers the potential for staged redevelopment for higher density buildings. It is currently zoned GRZ.

Appendix B
Development conditions analysis

Joint Venture

Heritage

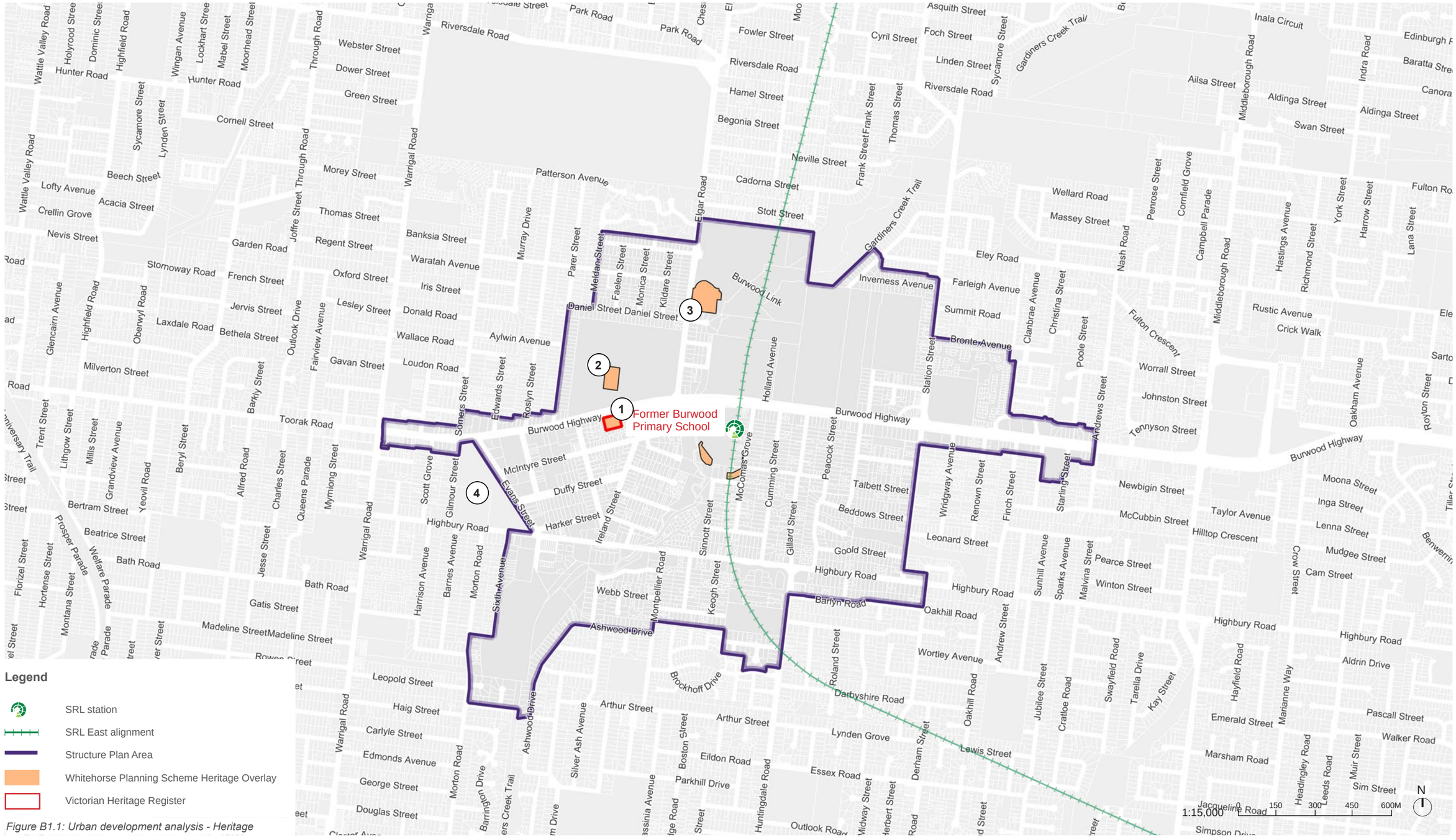


Figure B1.1: Urban development analysis - Heritage

Figure B1.2: Former Burwood Primary School

The Former Burwood Primary School is of outstanding aesthetic and historical significance. The school has unusual Gothic stylistic detail, and is an extraordinary example of a single room school established under the Commons Schools Board. The 1883 and 1906 extensions to the original classroom demonstrate a changing sequence of architectural styles, patterns of occupancy and function affecting school buildings and education in Victoria. The stepped floor of the 1906 classroom is a rare and important example of past teaching practice and classroom design. The school is also a rare surviving remnant from the original 1850s Ballyshanassy township.

Source: Whitehorse City Council

Figure B1.3: Hethersett - Residence at 141-169 Burwood Highway

Figure B1.4: Former Kildonan Children's Home

Figure B1.5: Burwood Cemetery

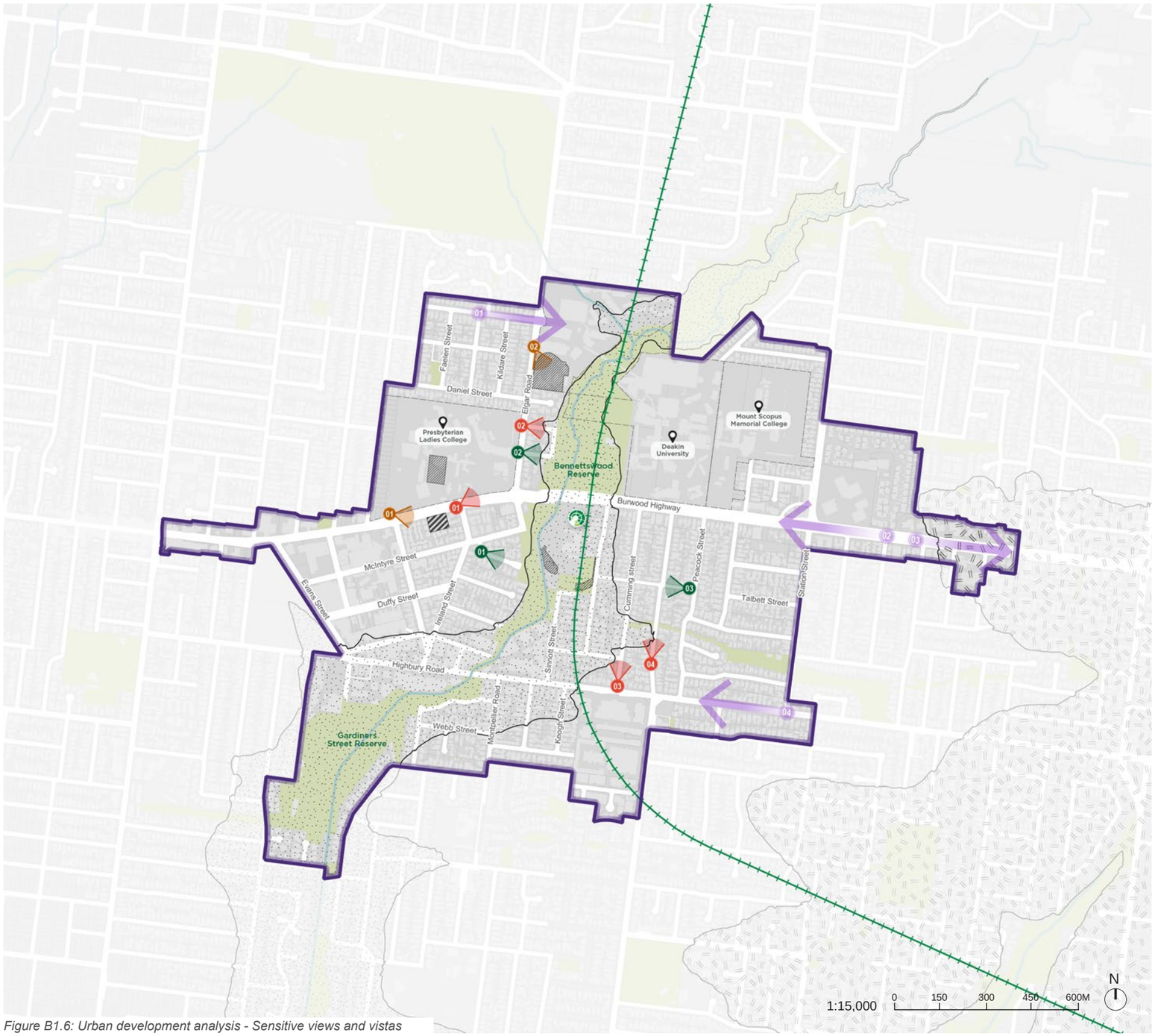
Views and vistas

Views and vistas have been recorded to assess any views which might constrain future development. Considering the primarily orthogonal nature of Burwood's urban fabric, views to key open spaces, heritage places and landmarks occur along existing streetscapes, not posing constraints to future development.

Although some Deakin University buildings along Burwood Highway play a role as landmarks for wayfinding, that doesn't have a impact on development opportunities. Future built form controls might enable other landmark buildings to appear in the Structure Plan Area.

Sensitive views:

No sensitive views that create development constraints.



Legend

- SRL station
- SRL East alignment
- Structure Plan Area
- High lying area
- Low lying area
- Heritage places
- Long range views
- Key landmarks
- Views to key open spaces
- View to key heritage places
- Views to key landmarks

Figure B1.6: Urban development analysis - Sensitive views and vistas

AJM
Joint Venture

Long range views


01 Views to Melbourne CBD

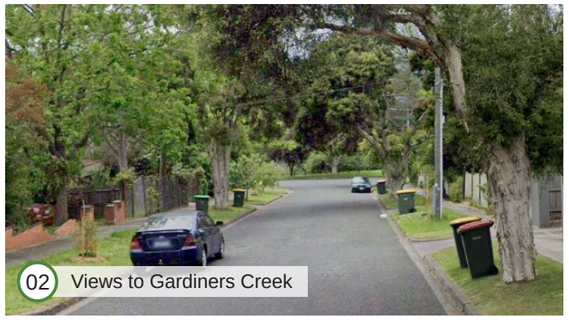

02 Views to Melbourne CBD


03 Views to Mountain ranges


04 Views to Mountain ranges

Views to key open spaces


01 Views to Bennettswood Reserve


02 Views to Gardiners Creek


03 Views to Gardiners Creek

Views to key heritage built form


01 Views to Former Burwood Primary School

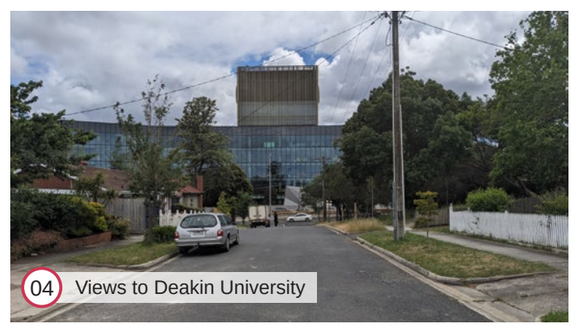

02 Views to Former Kildonan Children's Home

Views to key landmarks


01 Views to Deakin University


02 Views to Deakin University


03 Views to Deakin University


04 Views to Deakin University

Small lots (excluding strata titled lots)

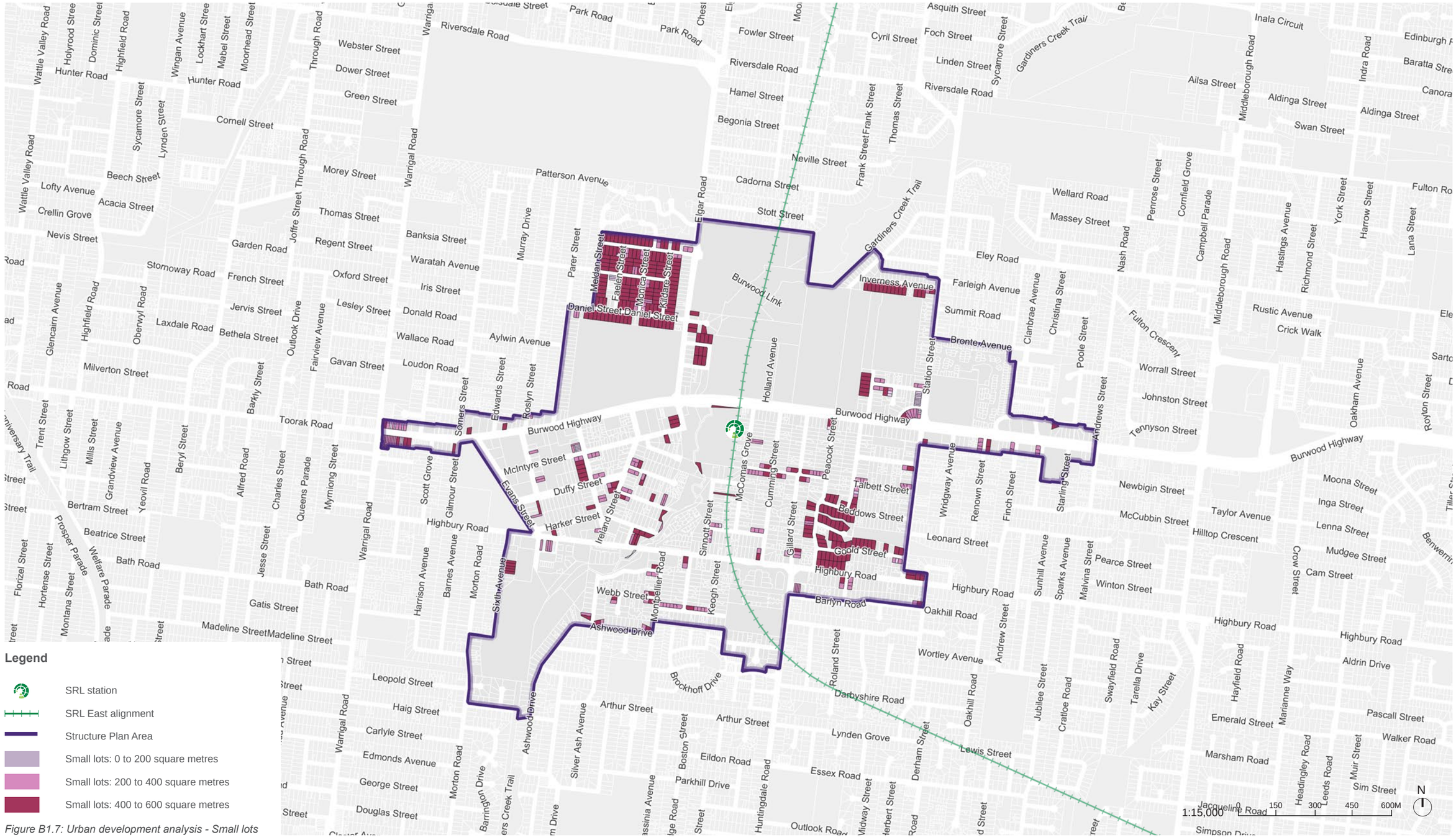


Figure B1.7: Urban development analysis - Small lots

AJM
Joint Venture

Strata-titled lots

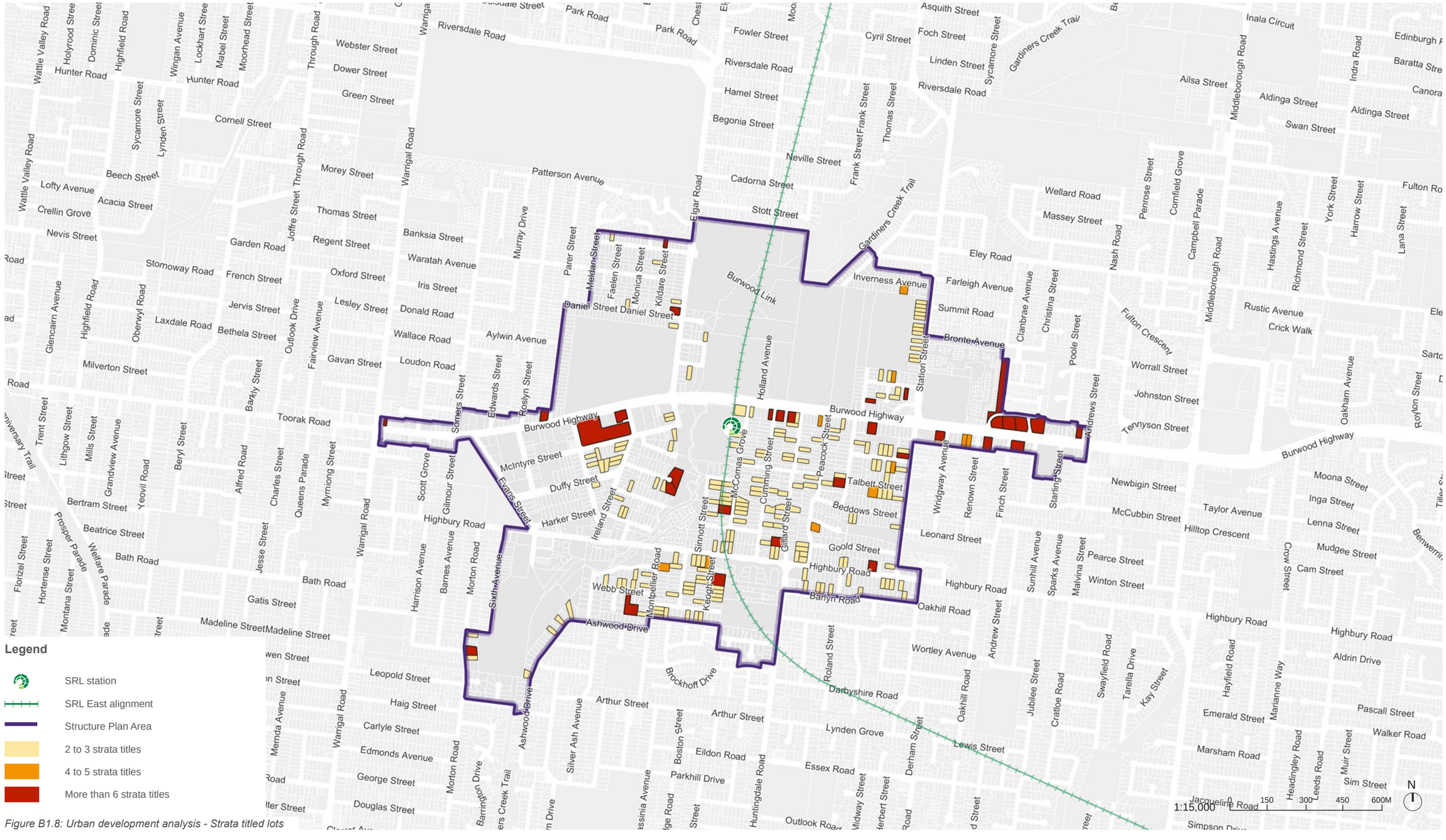


Figure B1.8: Urban development analysis - Strata titled lots

Areas subject to flooding

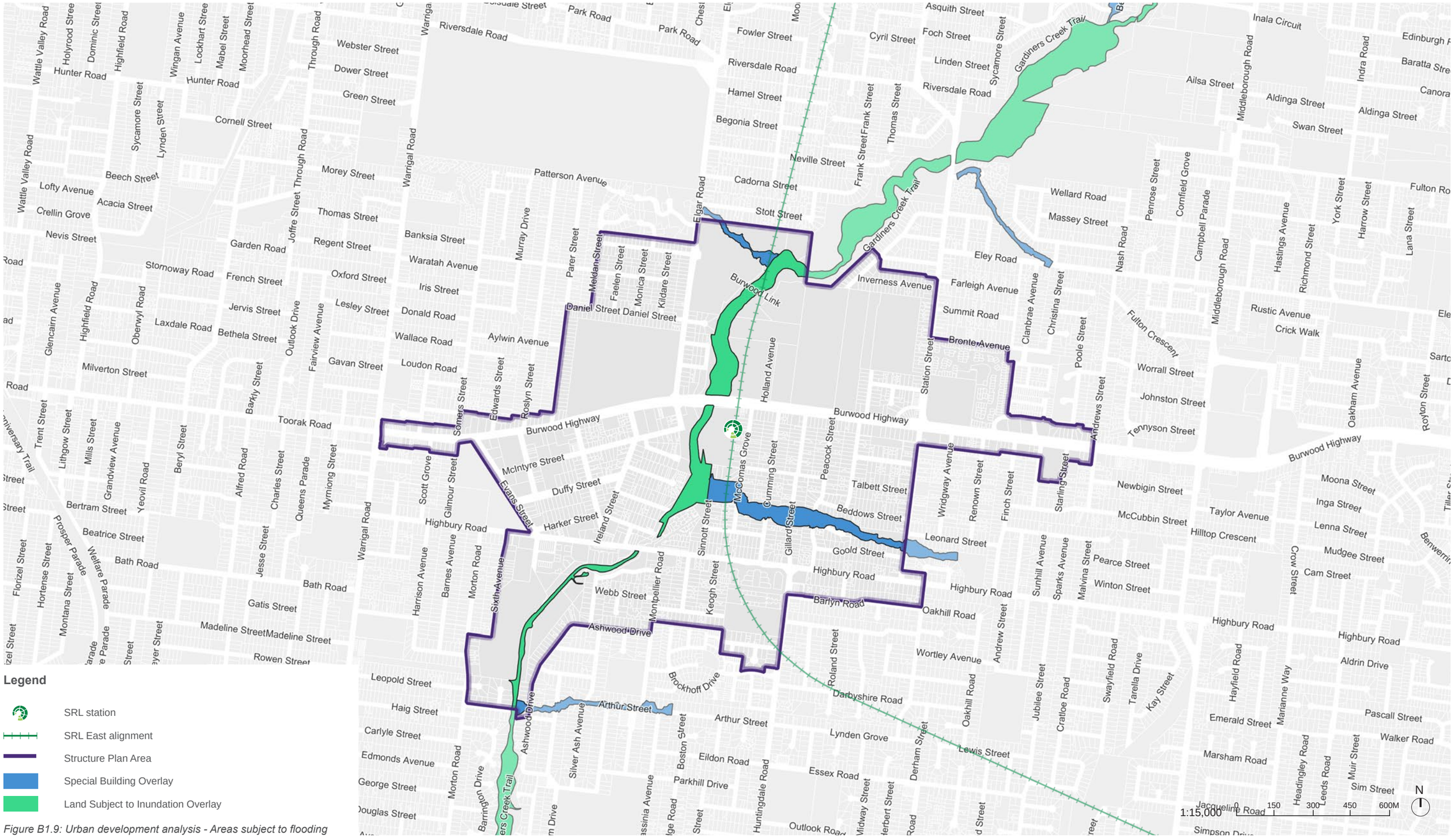


Figure B1.9: Urban development analysis - Areas subject to flooding

Valued landscape character

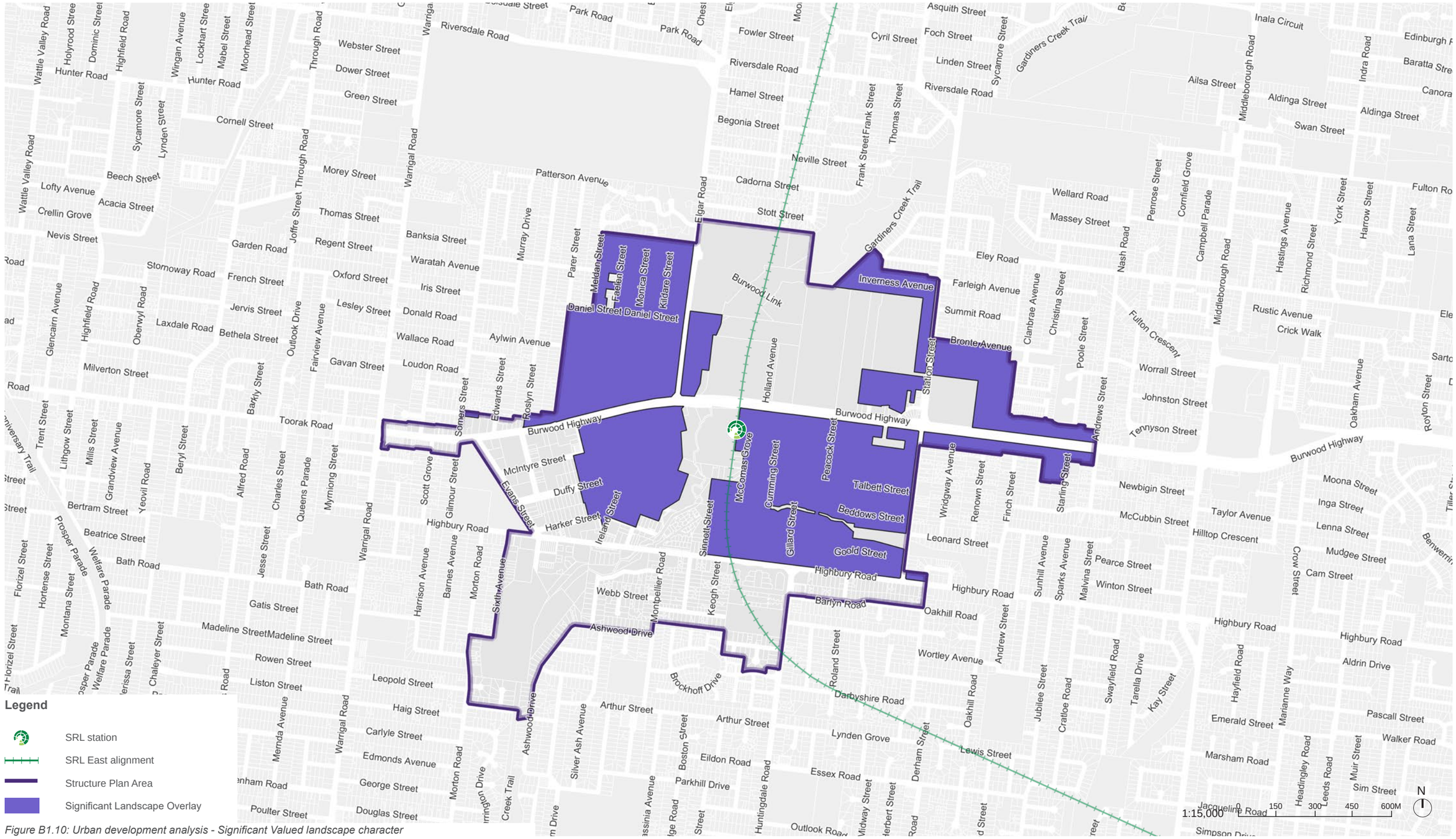


Figure B1.10: Urban development analysis - Significant Valued landscape character

Buildings heights

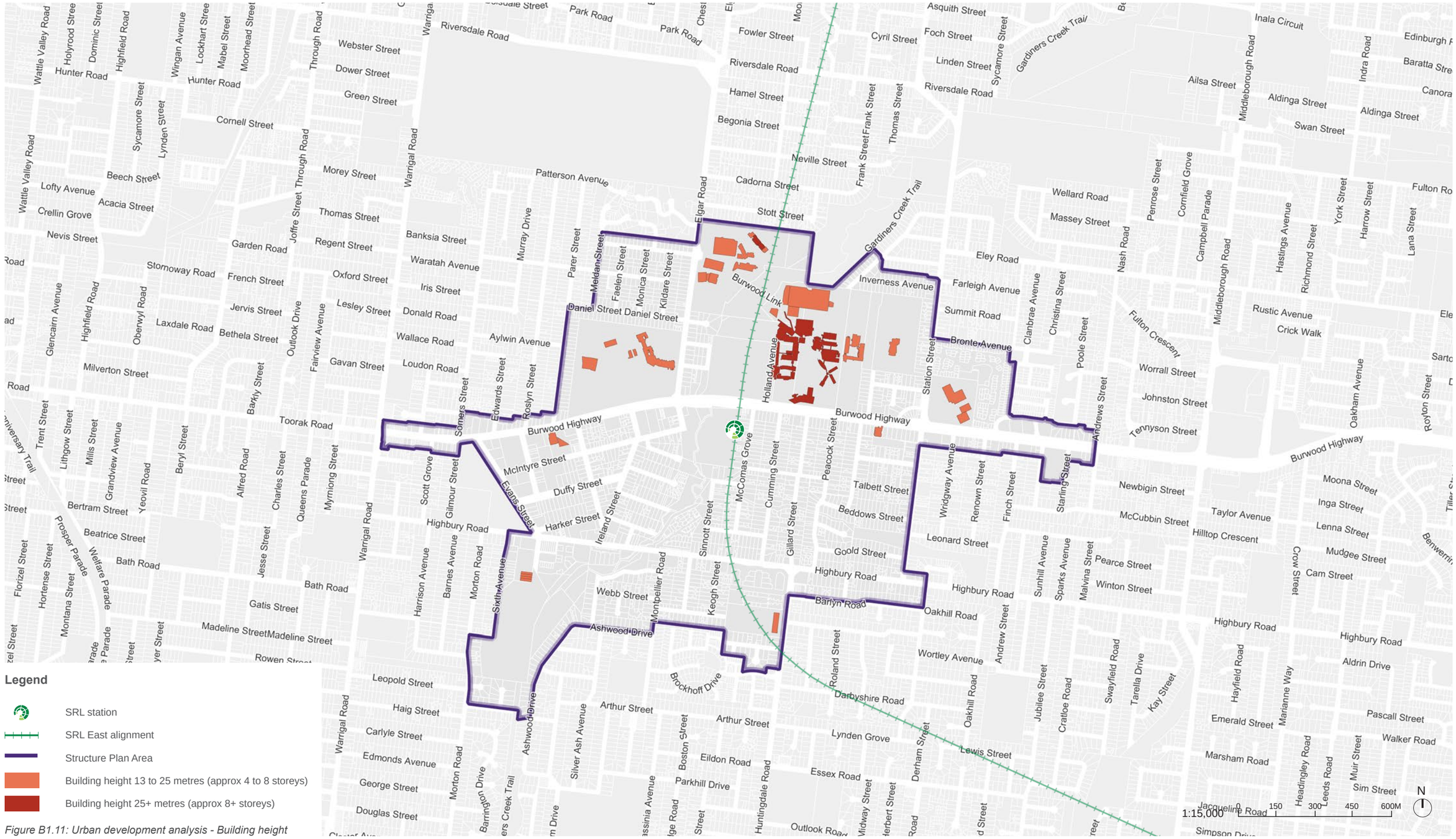


Figure B1.11: Urban development analysis - Building height

Recent building approvals

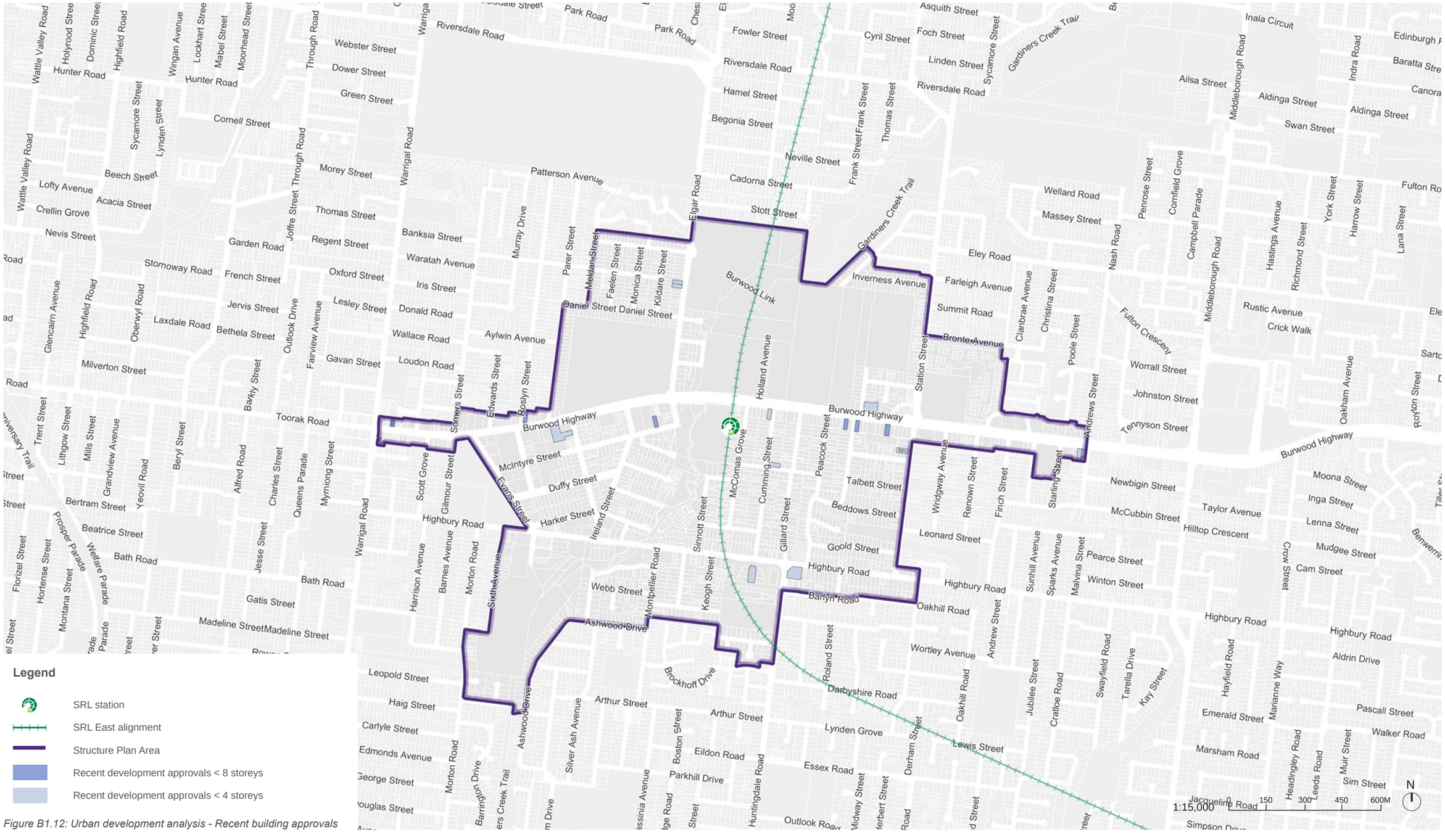


Figure B1.12: Urban development analysis - Recent building approvals

Slopes

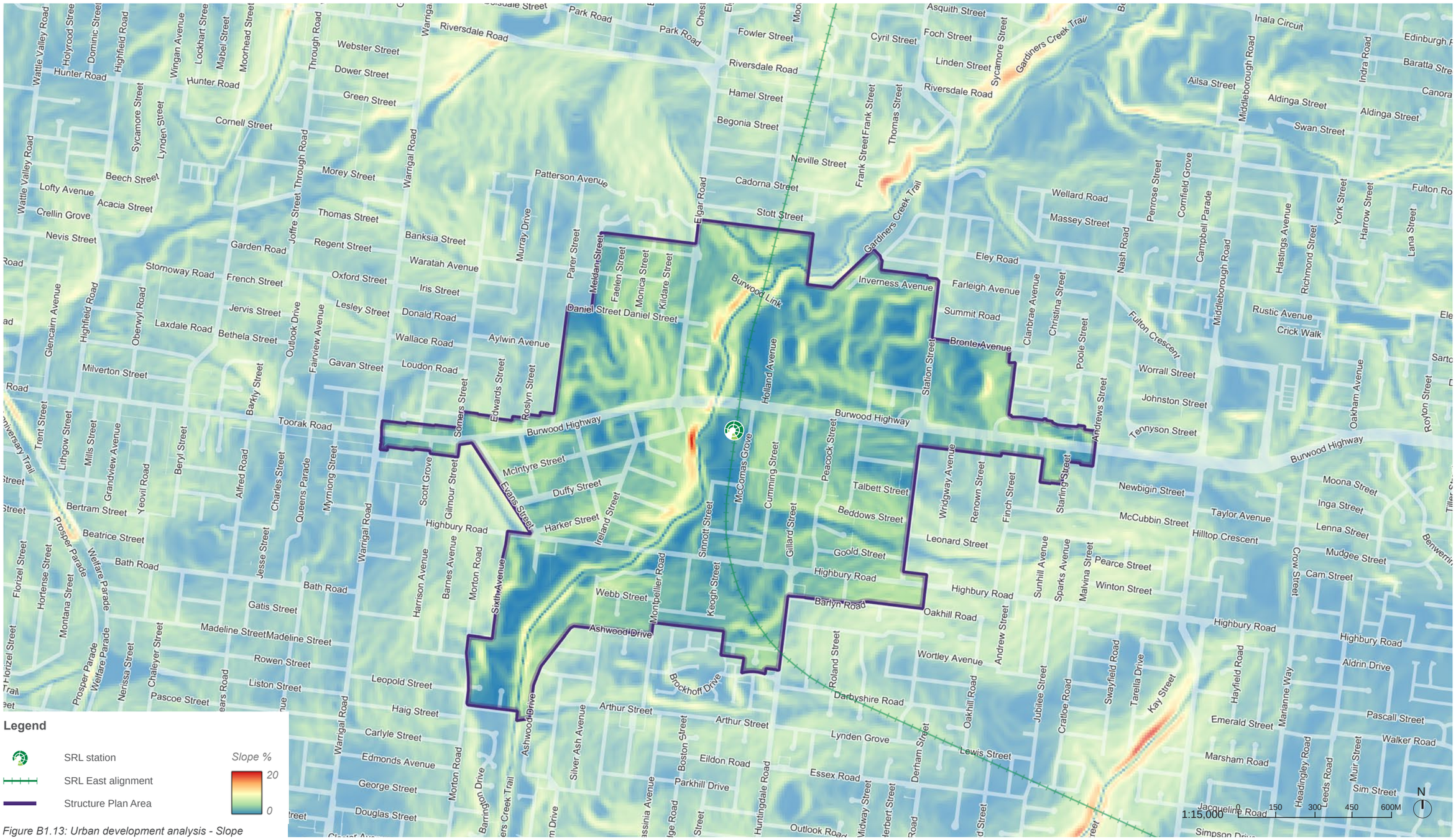


Figure B1.13: Urban development analysis - Slope

Appendix C

Street network and public realm quality analysis

Joint Venture

Street Network and Public Realm Quality Analysis to inform the Structure Planning Urban Design Report included:

- Public Space and Public Life Study - Urban Baseline Study (2023) (see SRL East Structure Plan - Gehl Public Space and Life Study -Attachment B)
- Open Space Assessment (prepared by AJM Joint Venture for Suburban Rail Loop Authority 2024)
- Structure Planning Urban Design Report – street quality assessment.

These are discussed more below.

Alignment with the Gehl 'Public Space and Public Life Study'

In 2023 Gehl, a globally recognised urban design and research consultancy, completed in-depth public space and public life analysis on selected streets and spaces in the SRL East Structure Plan Areas.

The Gehl study provided an understanding of the public space quality and people's experience of selected key public spaces through data collection and analysis using a tool with a 12-quality criteria rating system.

The findings of this study are in SRL East Structure Plan - Gehl Public Space and Life Study -Attachment B.

Open Space Assessment (prepared by AJM Joint Venture for Suburban Rail Loop Authority 2024)

The Open Space Assessment report was prepared to inform structure planning. This report included a quality assessment of existing open spaces within the 1600 metre radius of the SRL station which considered the Gehl study findings.

Structure Planning Urban Design Report – street network quality analysis

To inform the findings of this report, research was undertaken of various standards for permeability, along with analysis of the walkability, street block perimeters, and bock lengths of the Structure Plan Area. Further quality site assessments were also conducted to rate every street within the Structure Plan Area. As this assessment used different criteria to the Gehl study, the results differ in nuance, but generally align with similar levels of quality.

The summary research and analysis is outlined in the sections following.

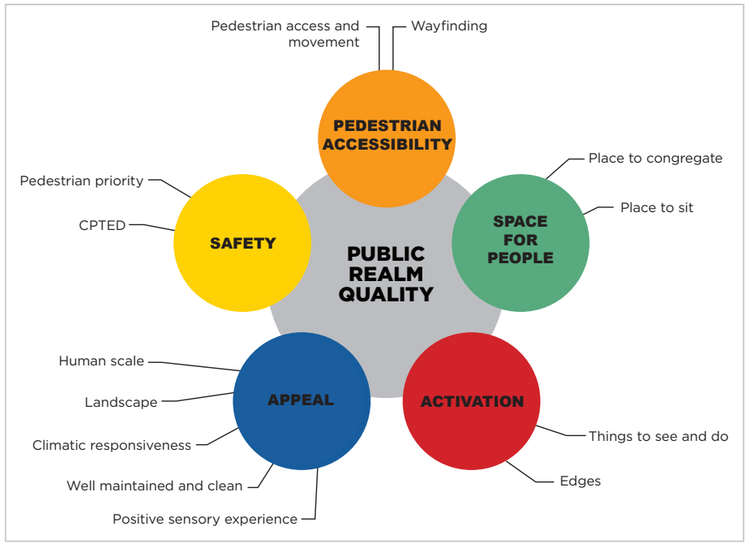


Figure C1.1: Streets and public realm quality assessment research for this report

Protection
Without this, most people will not come

Protection against traffic and accidents - *feeling safe*
- protection for pedestrians
- eliminating fear of traffic

Protection against crime and violence - *feeling secure*
- lively public realm
- eyes on the street
- overlapping functions day/night
- good lighting

Protection against unpleasant sensory experiences
- wind
- rain/snow
- cold/heat
- pollution
- dust, noise, glare

Comfort
Without this, most people will not stay

Opportunities to walk
- room for walking
- interesting facades
- no obstacles
- good surfaces
- accessibility for everyone

There are places to stand for a rest
- edge effect / attractive zones for standing / staying
- supports standing / staying
- facades with good details that invite staying

There are places to comfortably sit
- zones for sitting
- utilising advantages: view, sun, people
- Good places to sit
- Benches for resting

There are plenty of things to look at
- reasonable viewing distances
- unhindered views
- interesting views
- lighting (when dark)

There are opportunities to play or exercise
- physical activity, exercise
- play and street entertainment
- by day and by night
- in summer and winter

I could easily have a conversation
- low noise levels
- street furniture that provides 'talkscapes'

Enjoyment
The difference between a good place and a great place

The space relates to my (human) scale
- buildings and spaces designed to human scale

The space allows me to enjoy the positive aspects of climate
- sun/shade
- heat/coolness
- shelter from wind/breeze

I like the aesthetic qualities and sensory experiences
- good design and detailing
- good materials
- fine views
- trees, plants, water

Figure C1.2: Gehl Public Space and Public Life Study (2023) Criteria

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Permeability standards

The aspiration for walkability in SRL East station precincts is to:

- Support and enhance convenient and desirable access to everyday services, facilities and key destinations within a 20-minute walking distance from home including reducing walking distances to and from the station and within core urban zones.

This can be delivered through the following:

- Offering a fine-grain urban structure to provide a network of pedestrian connections
- Improving the current pedestrian linkages, streets and spaces in the station precincts and supplement these where required with high quality, activated and appealing linkages.

This will be achieved by identifying appropriate targets in terms of permeability and applying them with a practical lens by analysing current permeability in the Structure Plan Area.

Research has been undertaken into best practice permeability standards which is summarised in the table adjacent.

Source	Standard	Applicability to SRL Structure Plan Areas
Urban Design Guidelines for Victoria	Create a permeable block layout with block dimensions ranging from 120 metres to 240 metres long and 60 metres to 120 metres wide.	Provides overarching parameters and maximum block length as a generic approach. Consideration of best practice targets for urban conditions below provide more applicable targets for SRL Structure Plan Areas.
	A block perimeter of around 600 metres provides for good pedestrian and vehicular access and an efficient subdivision pattern of the block. Smaller blocks may be appropriate in more intense urban areas.	Perimeter of 600 metres is too large to ensure pedestrian permeability adjacent to new stations.
Melbourne Planning Scheme DD01	100 metres maximum block length Within 100 metres of rail station pedestrian connections less than 70 metres apart	Urban condition applicable to some areas within SRL East precincts subject to ultimate land use and density outcomes. A 100-metre maximum block length provides optimal outcome in areas surrounding rail station to maximise permeability.
City North Structure Plan and Melbourne DDO61	Pedestrian through block connections should be provided where the average length of a street block exceeds 100 meters. For street blocks exceeding 200 metres long at least two connections should be provided	Urban condition applicable to some areas within SRL East precincts subject to ultimate land use and density outcomes. 100-metre maximum block length provides optimal outcome in areas surrounding rail station to maximise permeability.
NSW Movement and Place – Network Planning in Precincts Guide	'Create a permeable network with a grid-like structure, short block length and high intersection density' Less than 250 metres block lengths with a recommended block length of 120 to 180 metres	A good benchmark for consideration within SLR East precincts which provides a range in block length to respond to desired outcomes and conditions.
Westbrook PSP (completed May 2022)	Street block lengths should not exceed 240 metres	Urban condition not comparable to SRL East precincts given provision of transit.
Case studies	**Dimensions**	**Applicability to SRL Structure Plan Areas**
Melbourne CBD	600-metre perimeter: 100 x 200 metres with minimum one pedestrian through connection.	Pedestrian through-connection increases permeability, but not consistently activated, resulting in some "back-of-house" pedestrian experiences and poor perceived pedestrian safety.
Fitzroy, VIC	Approximately 75 x 80 metres blocks	Fine-grain and highly walkable with a variety of land use and density outcomes.

Figure C1.3: Permeability research findings

Walkability analysis

The walkability analysis and measure has been derived from a comparison of the 800-metre walkable catchment vs an 800-metre radial catchment. For the purpose of this study the walkable catchment has been derived using GIS by measuring a 800-metre distance along walkable paths from station entrances. The 800-metre radius represents an 'as the crow flies' distance from the centre of the station. A comparison of these areas gives an indication of the level of permeability achieved within the station precinct. It is noted that a 100 per cent outcome is not achievable in a logical urban block arrangement that is comprised of a gridded system.

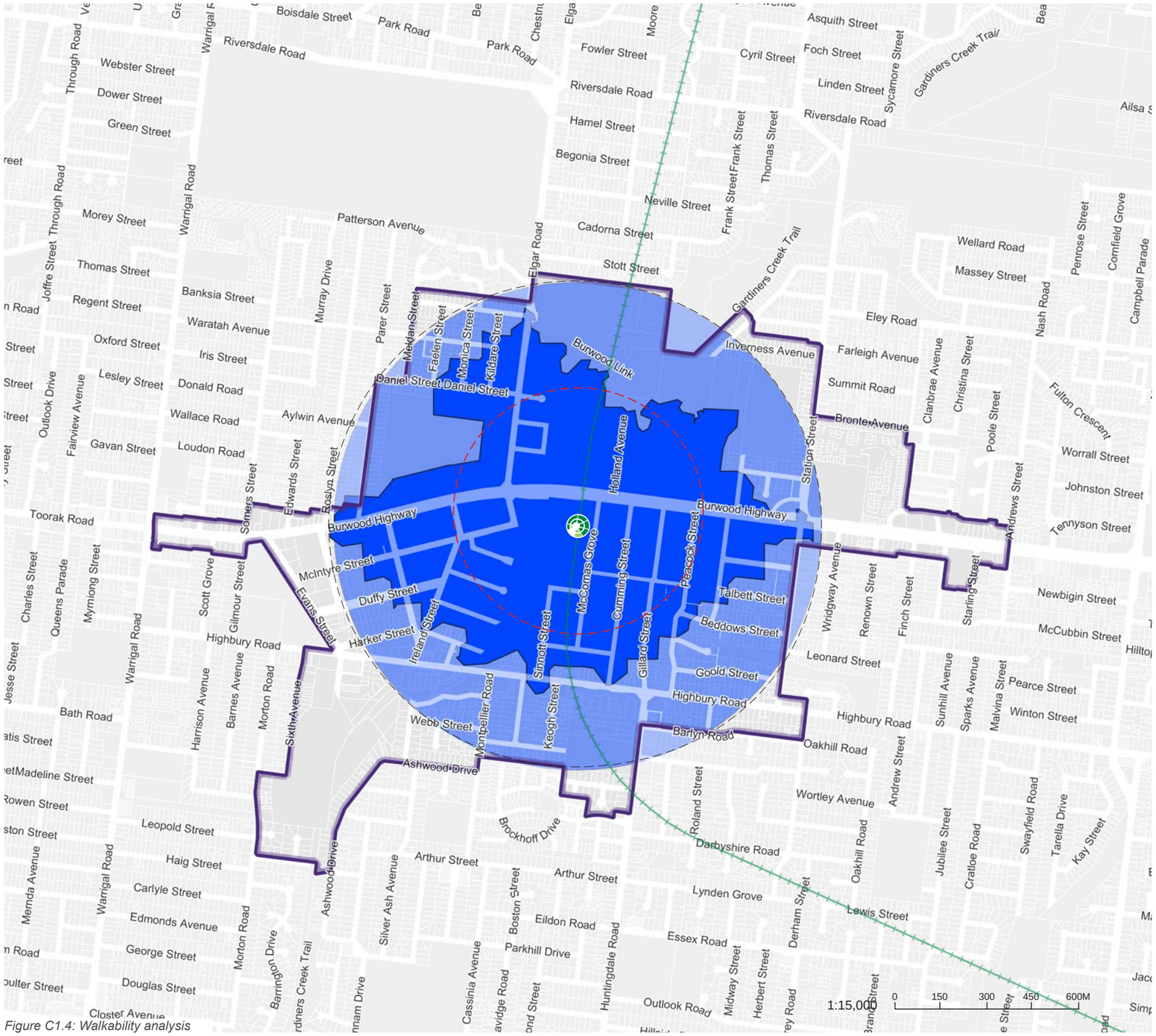

Figure C1.4: Walkability analysis

Legend

- SRL station
- SRL East alignment
- Structure Plan Area
- 400-metre radial catchment (from centre of station)
- 800-metre walkable catchment from station entries
- 800-metre radial catchment

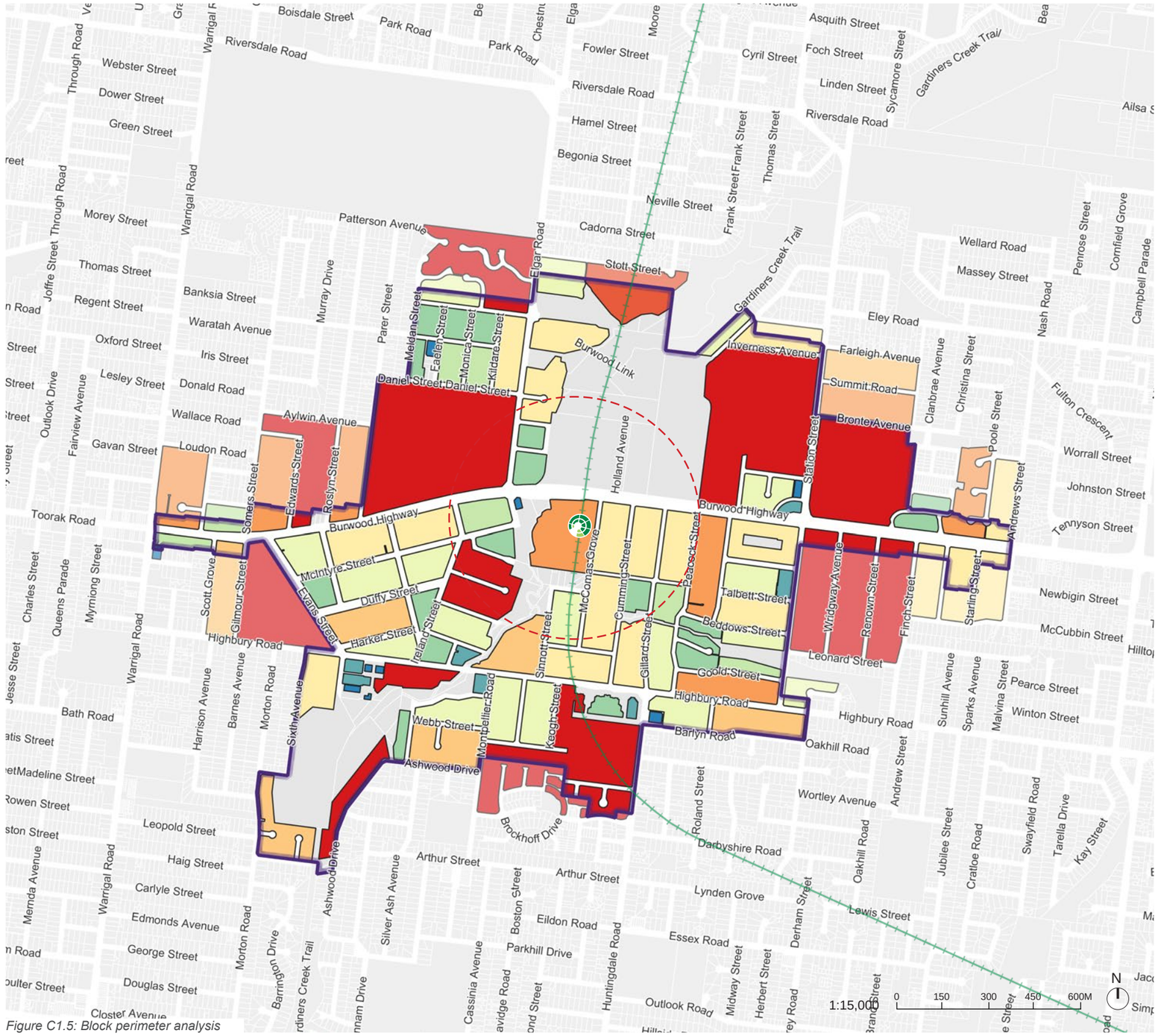

Figure C1.5: Block perimeter analysis

Legend

- SRL station
- SRL East alignment
- Structure Plan Area
- 400-metre radial catchment

Street block perimeter length

- 0 to 200 metres
- 200 to 300 metres
- 300 to 400 metres (5min walk)
- 400 to 500 metres
- 500 to 600 metres
- 600 to 700 metres
- 700 to 800 metres (10min walk)
- 800 to 900 metres
- 900 to 1000 metres
- 1000+ metres (>12min walk)

Block length analysis

The following analysis highlights the existing urban block length within the Structure Plan Area. Areas with urban block length in excess of the agreed targets present barriers to walkability and create issues to be considered within the public realm strategy.

Note: privatised / internal pedestrian linkages (not open 24 hours) exist currently which are not represented for the purpose of this mapping

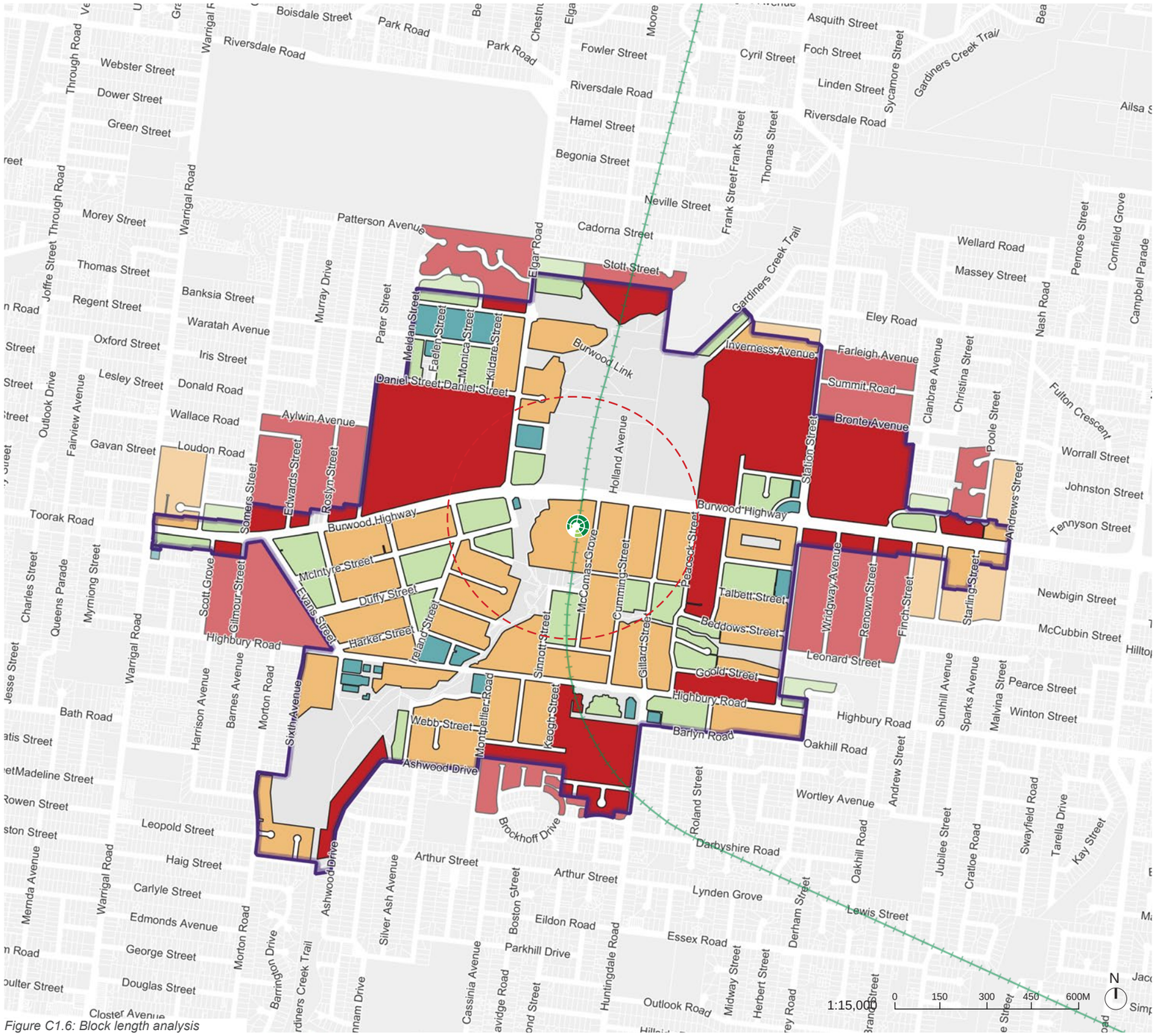

Figure C1.6: Block length analysis

Public realm quality standards

This public realm analysis assesses the quality of the public realm, with a focus on the pedestrian experience. This assessment provides the following:

- A rating against five themes with reference to 12 criteria for all streets and spaces within the Structure Plan Area that records performance under the assessment values identified below
- An overview of the current performance of streets and spaces within the context of the current land use pattern. It does not assess against the future intended use
- Land use factored into the assessment through the score provided. Retail streets will score a higher degree of activation than residential streets. It does not offer separate rating scales for street typologies
- Spaces that do not have a pedestrian function or are private were excluded from the assessment.

Functionality of open space does not form part of the assessment. Open space is assessed against the experience for a pedestrian, not performance against community needs.

Public realm quality criteria

A set of criteria were developed for this public realm study, based on established public realm quality criteria including those provided in:

- The Public Life Diversity Toolkit, Gehl Institute
- Public space site-specific assessment, UN Habitat
- Pedestrians first, Institute for Transportation and Development Policy.

The following pages spatially map the findings of the public realm quality assessment across a range of themes.

Methodology

Site visits were conducted in the Burwood Structure Area to evaluate the quality of streetscapes and public open spaces, based on the criteria established for the assessment. Every street, road, activity center and public open space in the Structure Plan Area was visited and assessed in Table C.3.

Streets and public realm quality assessment research

Figure C1.7: Streets and public realm quality assessment checklist

1. SAFETY

Pedestrian priority

- Are pedestrians protected from traffic?
- Are there safe opportunities for pedestrians to cross?

CPTED – perception of safety

- Is there adequate lighting?
- Are there 'eyes on the street/space' (windows / balconies / ground level entries / passing traffic)?
- Are there any entrapment points?

2. PEDESTRIAN ACCESSIBILITY

Pedestrian access and movement

- Is it easy to get around as a pedestrian?
- Are pathways clear from obstruction?

Wayfinding

- Is legibility intuitive and can people find their way around easily?
- Is their adequate provision of signage and wayfinding?

3. SPACE FOR PEOPLE

Variety of places

- Is there space to stand / linger / lean?
- Where appropriate, are there places to sit or gather?
- Are there opportunities for human interaction?
- Does the public realm support a diverse range of community activities and needs?

4. ACTIVATION

Activities / things to engage with / look at

- Are there engaging things to look at / public art?
- Where appropriate, are there things to do (play equipment in parks)?

Edges

- Are edges engaging (active frontage /lots of entries and elements / blank walls)?

5. APPEAL

Human scale

- Are there any overbearing structures? Appropriate street wall height?
- Is it a highly-exposed / over-scaled space?

Landscape

- Are there street trees and planting?
- Balance of hardscape and soft scape?

Climatic responsiveness

- Can you enjoy the positive aspects of climate?
- Is there protection from sun in summer / wind and rain protection?

Well maintained / clean

- Are there public rubbish bins? Is there a lack of rubbish in the public realm?
- Is the planting maintained / cared for (no weeds, lawn mowed)?
- Are the footpaths and surfaces in good condition?

Positive setting / sensory

- Are there no unpleasant noises dust, pollution or smells?

Streets quality assessment - Safety

The safety of streets is assessed through the lens of the pedestrian experience and includes factors such as the protection from traffic and provision of safe crossing opportunities. Safety also includes Crime Prevention Through Environmental Design (CPTED) factors such as the provision of adequate lighting and the degree of passive surveillance and lack of entrapment points.

Figure C1.8: Streets quality assessment - Safety

Streets quality assessment - Pedestrian accessibility

Pedestrian accessibility provides an assessment of the ease of pedestrian movement and the provision of adequate pedestrian paths and circulation. Pedestrian pathway widths are a factor as well as the inclusion of signage and intuitive wayfinding.

Legend

- SRL station
- SRL East alignment
- Structure Plan Area

Poor — Lacking — Satisfactory — Reasonable — Good

Figure C1.9: Streets quality assessment - Access

Streets quality assessment - Space for people

Space for people relates to the opportunity for people to sit, stand or gather, fostering human interaction and creating an environment for social engagement. This includes the provision of urban furniture items such as benches and chairs as well as providing areas where people can pause and interact without creating an obstruction in the street.

Figure C1.10: Streets quality assessment - Space for people

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Streets quality assessment - Activation

Activation relates to the presence of engaging things to look at, elements to interact with, and edges that help drive a sense of activity, such as retail frontages, building entrances and facades that have visual interest. Inactive edges and dead zones negatively affect activation.

Figure C1.11: Streets quality assessment - Street activation

Legend

SRL station

SRL East alignment

Structure Plan Area

Poor | Lacking | Satisfactory | Reasonable | Good

Streets quality assessment - Appeal

Appeal relates to attractiveness of built form, the presence of vegetation and street trees, the use of high quality and well-designed materials, and the maintenance and upkeep of a space. Appeal relates to the senses with poor amenity relating to smell, sound or sight negatively affecting the rating. The degree of human scale or sense of exposure also relates to appeal, which concerns the presence of overbearing structures, spaces of refuge, as well as protection from climatic factors such as sun, wind and rain.

Legend

- SRL station
- SRL East alignment
- Structure Plan Area

Poor — Lacking — Satisfactory — Reasonable — Good

Figure C1.12: Streets quality assessment - Appeal

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